Article

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Empirical Exploration of Customer Management Focus and Its Impact on Business Performance[1]

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Abstract

The aim of the study is to investigate the impact of different focus in customer management strategy on business performance. Strategies investigated in the paper are IT-focused strategy, data warehouse-focused strategy, and integration-focused strategy. The effect of the strategies is examined in relation to both short-term and long-term performance. Combination of questionnaire and individual interviews was used to explore the particular dimensions of strategy focus. The sample for empirical research consisted of 195 companies from seven industry sectors in Slovakia. The findings show that different focus in strategy may bring different effects in performance outcomes. We also find that combining certain management styles may generate performance advantage.

Keywords: *customer management, business performance, data warehouse, value creation, customer engagement and integration*

JEL Classification: M30, M10, M20

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Introduction

Customer management refers to management philosophy which is aimed at optimizing revenue and increasing customer value through understanding and satisfying customer needs (Maggon and Chaudbry, 2015). Development of strategies for a more effective management of relationships with customers is important to achieve greater efficiency and effectiveness of the organisation

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and to create superior value for the company and the customer (Lambert, 2010). Although CMS appears to be a simple and straightforward concept, there are many different definitions and implementations of it. At present, a number of different conceptual understandings are associated with the term "customer management strategy". These concepts range from IT-driven programs designed to optimize customer contacts (Josiassen, Assaf and Cvelbar, 2014) to comprehensive approaches for the establishment and design of long-term relationships (Khodakarami and Chau, 2014; Wang and Feng, 2012).

Although the idea of strategically managing customers is widely appealing, only limited evidence exists to support the assumption that strategic management of customers will yield performance benefits (Neslin et al., 2013). No clear consensus has been found also about which different strategies can be adopted to manage customers (Payne, 2006). In our paper we intend to contribute to this research area by exploring broader questions of customer management strategies and determining their effect on firm performance. In particular, we examine two different, but related questions: a) what are the different strategies to manage customers, and b) what is the effect of different CM strategies on firm performance.

To explore the research questions this study drew upon the literature from business management and organizational learning (Peltier, Zahay and Lehmann, 2013; Kumar and Reinartz, 2018; Kaplan and Norton, 2007) to develop three distinct types of customer management strategies: information technology-focused strategy, data warehouse-focused strategy and integration-focused strategy. Information technology-focused strategies arise when firms view customers as an object that can be managed with IT infrastructure such as internet, intranet and document-processing systems (Chuang and Liu, 2013; Rouholamini and Venkatesh, 2011). Data warehouse-based strategies arise when firms build special data repositories, where all customer data are centralized in one data warehouse to be exploited by every employee and used to identify customer profiles (Hall, 2006). Integration-focused strategies arise when firms emphasize customer's integration / engagement into value creation processes and enhance interactions between customers and company employees (Christopher, Payne and Ballantyne, 2002; Kumar and Reinartz, 2018).

This paper introduced performance at two distinct constructs: short-term performance and long-term performance. While the former refers to goal attainment reflected in financial and market performance of a firm (Reinartz and Kumar, 2005), the latter refers to such aspects as innovations, flexibility or market forecast (Krasnikov, Jayachandran and Kumar, 2009; Chaw and Van der Stede, 2006). Based on the analysis of questionnaires and interview data, this research finds that each of the CM strategies affects a different dimension of firm performance.

While the integration-focused CM strategy impacts the long-term performance, the IT-focused CM strategy affects achieving short-term benefits. Further, the study demonstrates that these three strategies are based on different assumptions about customer management. The IT-based CM strategy and data warehouse-based CM strategy share similar assumptions about customer management. They both emphasize using ex post the data about customers to extract benefits for the firm. In contrast, the integration-focused CM strategy emphasizes a mutual relationship, interaction and developing data and concepts ex ante based on customer integration in organization processes.

Our research study is distinct in that it introduced the idea of different focus in customer management. The study contributes to customer management research by: a) integrating the insights from business management and organizational learning literature to propose specific approach to the customer management research and to open new ways for investigation; b) distinguishing between three types of CM strategies and examining their effect on firm performance; c) shifting attention from the focus on technology and data systems to integration processes; d) determining which CM strategies and practices could be employed to guide CM efforts; e) explaining various activities in CM that support short--term and long-term performance.

The paper is organized into three sections. Section 1 provides a theoretical framework on customer management and develops the concept of customer strategy focus. Section 2 presents the goals, research methodology and proposes a model linking the strategies with short-term and long-term performance. Section 3 presents the summary of the results, discusses the findings, limitations of the study and directions for future research in CRM.

1. Theoretical Framework of Customer Strategy Focus

Academic literature offers various approaches to customer management (Kumar and Reinartz, 2016; Payne and Frow, 2005; Stone and Woodcock, 2001; Barnes, 2000). Most of the existing concepts were focused on a special particular aspect, because they were rooted in different disciplines (computer science, business management, library and information sciences, knowledge management, behavioural science, etc.).

At the beginning of customer management formation computer science played a key role, with computer science contributing a major share and business strategy contributing a minor share. Customers were viewed as an “object” that can be managed with the help of information technology tools (Buttle, 2009; Barnes, 2000). Information technology discipline regarded CM to be a technical

activity of providing IT with its principal role of processing the information (Chuang and Liu, 2013; Bhatt, 2001). IT companies used the term CM to describe the software applications adopted to support marketing, selling and service functions of business. This equates CM with technology (Rouholamini and Venkatesh, 2011; Buttle, 2009).

Organizations following IT-focused CMS install technical infrastructure and rely on technology to deliver CM. Such organizations expect that processing customer data automatically leads to customer management. However, providing technological tools is a somewhat passive approach to customer management. So is appointing chief customer manager. IT-focused firms believe that providing technology and creating customer roles will ensure that customers are managed. In other words, firms following this strategy, implement CM in a tangible and visible manner, that is providing technology and creating a customer manager role.

However, this approach neither makes customer data accessible to everyone in the organization, nor gives it any possibility to active customer engagement (Jayachandran et al., 2005; Easterby-Smith and Crossan, 2000). Information technology can only inspire, but cannot create effective customer management because this requires all three elements of a triad: technology – people (both customers and employees) – processes (Palmatier and Steinhoff, 2017).

In the expansion stage, there was a shift in customer management from IT as an adoption of individual technological tools to IT as a collaborative technology based on collecting all customer data in one central place. Such efforts gave rise to data warehouse-focused customer management strategy with emphasis on codifying and storing all customer data in central repositories, to be accessible to all company departments. Repositioning CM from an "IT concept" to CM as a "data-sharing process", which was presented mainly in business strategy literature, emphasized the sharing aspects in customer management (Payne, 2006; Vera and Crossan, 2011).

Development of data warehouses was oriented on the collection of customer data in one data store, from which customer profile and behavioural aspects could be deduced by anyone in the company and the customer accurately targeted. CM in this context is understood as an integrated information system that is used to plan, schedule and control the pre-sales and post-sales activities in an organization (Venters and Ferneley, 2009; Jayachandran et al., 2005). The warehouse data made it possible to learn the customer, to track customer preferences and have been used as a basis for providing a product or service customized to the consumer's behaviour. Accordingly, it can be concluded that company adopted here its activities to customer's wishes ex post (Palmatier and Steinhoff, 2017; Payne, 2006).

In a data warehouse-focused CMS, the organization focuses on collecting data in order to be accessible and reused by all employees. Firms that use a data warehouse-focused CMS, view CM as a tool to exploit their existing customer knowledge to retain their existing customers and to develop an organizational memory (Hall, 2006). The effort is to centralize all customer documents and customer data or images in a data-store where they would be useful in the next time (Neslin et al., 2013; Renzi, 2008). However, in all the repositories only the explicit component of employee's knowledge and their experience can be recorded (Zyglidopoulos and Schreven, 2009). The data warehouse-focused CMS does not manage tacit knowledge, because tacit dimensions of knowledge are present only in social interactions. The aspects of tacit knowledge transfer are managed in the integration-focused CMS.

An integration perspective of CM argues that integration is a process that creates and develops long-term relations between company and its customers, and integrates customers into the value development processes of an organization (Kumar and Reinartz, 2018; Jayachandran et al., 2005). Developing such interactions is an integral part of an integration-focused CMS. Here both parties, customers and employees, are encouraged to interact with each other to initiate solutions. Integration occurs when customers interact directly with company employees, express their views on value-chain activities and are deeply engaged in the value creation processes (Nooteboom, 2006). There is a maximum emphasis on customer commitment, contact and building trust.

The true customer integration management relies on customer's engagement into the value-creating activities in the process of value development (Peltier, Zahay and Lehmann, 2013; Gummesson, 2002). Hence, the company ex ante creates and adapts its activities to customer wishes. The integration / relationship manager takes a long-term view of the customer relationship. The key point is to have a continuous dialogue with customers and to act upon – and to be seen to act upon – customers wishes (Schiuma, 2012; Schiffman and Kanuk, 2010). All contemporary evidence suggests that customers favour to speak directly their views and wishes to employees in a company as oppose to use merely automated information systems. Customers can present their suggestions with more ease and speed, when they are integrated directly into the value creation in the company. There is maximum emphasis on customer commitment. Contact happens at multiple levels in the organisation (Boulding et al., 2005; Seybold, 2001).

Integration focused approach puts an emphasis on mutual benefits that arise from mutual interaction between customers and the organization (Pozza, Goetz and Sahut, 2018). By creating appropriate culture, this management focus

stimulates the process of creating partnerships and networks by involving customers and company employees in a direct dialogue. Further, integration focused strategy enables to look beyond what is known and create new solutions to customer problems (Prahalad and Ramaswamy, 2004).

Each of the three examined categories emphasize different component of customer management strategies. Technology is a prerequisite for data warehouse and data warehouse facilitates integration with effects of mutual benefits. Integration processes become more effective when technological infrastructure facilitates the transfer of information and communication between customers and organization. As a result, these three management approaches can be considered as complementary.

Business academic literature employs the term customer management strategy in rather broad context as a business strategy that maximizes profitability, revenue and customer satisfaction (Buttle, 2009; Elkordy, 2014; Lambert, 2010).

Payne and Frow (2005) point out that CM is widely seen as a rounded methodology of handling customer relationships and to generate shareholder value. Additionally, CMS is viewed as a commercial process in the industrial marketing environment, which prepares the company to improve and survive in trading and is a strategic process of support against the competitors, providing value for the buyers and sellers in gaining benefits (Mehrdad and Mohammad, 2011). CRM focuses on the need of the organisation to understand the customer behaviour patterns. Kasim and Minai (2009) argue that CMS enables to establish and maintain relationship with customers and other stakeholders at a profit, so that the objectives of all parties involved are met.

For the purpose of this research, CMS relates to how a company approaches customer management as the activities of identifying and satisfying customer expectations, facilitating organizational operations and creating value. We consider the CMS to be a process and practice of integrating internal processes and external networks to create and deliver value to customers rather than a system that contains customer data. In our view CMS is not merely about systems of identifying, capturing, storing, retrieving and managing customer data but also includes social aspects, tacit knowledge, interaction and engagement activities.

2. Goals and Research Methodology

The goal of our paper is to explore the effects of different types of customer management strategies on company performance. In contrast to the general views assuming that CM automatically generates better business performance

(O'Sullivan, Abela and Hutchinson, 2009; Reinartz, Kraft and Hoyer, 2004; Coltman, Devinney and Midgley, 2011; Mohammad, Rashid and Tahir, 2013) we limit ourselves merely to the assumption that CM could facilitate and simplify company activities, without direct performance gains. The question of CM impact on company performance is the core of our research.

We hypothesize variation in the effects of different CMS that firms employ and the differential impact of those strategies on performance. Therefore, it is best suited for a cross-sectional, survey-based method, because data can be collected from a larger number of organizations across industries. The proposed variations in CM strategies can only be seen in a larger cross-sectional sample, not limiting the generalizability of the findings. To determine the effects, we formulate relevant research hypotheses assumptions.

Several authors (Zack, McKeen and Singh, 2009; Peltier, Zahay and Lehmann, 2013) document that a mere focus on technology is not sufficient to manage customers and thus create performance benefits. IT-focused CM focuses primarily on delivering infrastructure and does not develop systems and processes to use effectively the customer data.

Therefore, we state following hypotheses assumptions:

HA1: *IT-focused CMS does not have a significant positive impact on short--term performance.*

HA2: *IT-focused CMS does not have a significant positive impact on long--term performance.*

Organizations that emphasize development of data warehouse and collecting customer data create repositories in order to codify, store and distribute them and to develop customer profiles to benefit of them in the future. By emphasis put on data warehouse organizations can benefit from accumulated experience/expertise and eliminate the costs of repeated creating data. However, because of fast business development and changing customer's behaviour, these performance benefits may be only short-term.

Therefore the hypothesis assumption is stated:

HA3: *Data warehouse-focused CMS has a significant positive impact on short-term performance.*

Although exploiting current customer data is important, exploitation alone will not provide an organization with long-term success. Relying on exploitation of ready available information may weaken development of new ideas by hindering experimentation and exploration. Mere reliance on data warehouse and use of existing information prevents companies frequently from pro-active behaviour and innovations that are necessary for growth.

Therefore we state the hypothesis assumption:

HA4: *Data warehouse-focused CMS does not have a significant positive impact on long-term performance.*

By providing suitable conditions and processes, the integration-focused CMS facilitates not only mutual understanding, but also deepens relationships and provides performance benefits. However, because customer's integration into value creation of a company demands significant time and costs, we assume that the performance benefits may only be long-term. Generating performance gains through deep customer relationships and turning value co-creation into performance is resource-demanding and time-consuming process.

Therefore following assumptions will be examined:

HA5: *Integration-focused CMS has a significant positive impact on long-term performance.*

HA6: *Integration-focused CMS does not have a significant positive impact on short-term performance.*

In view of the fact that each of the three investigated strategy categories emphasizes only one distinct aspect of customer management, it will be useful to examine also their combined effect. As suggested in hypothesis assumption 1, information and communication technology alone does not provide performance benefits. However, IT-tools can support performance in combination with integration focused style (Venters and Ferneley, 2009).

Therefore the hypothesis assumption is:

HA7: *The positive significant impact of integration-focused CMS on long--term performance is increased when integration- focused CMS is complemented with IT-focused management.*

Similar combination of effects can be assumed when integration-focused strategy is complemented with data warehouse-focused customer strategy. While the focus on data warehouse enables the exploitation of only explicit knowledge, integration-focused approach concentrates on tacit knowledge and thus deeper understanding of customer wishes. Organizations that adopt both approaches simultaneously, benefit from the results of both (Kumar and Reinartz, 2016).

Therefore following hypotheses assumptions are stated:

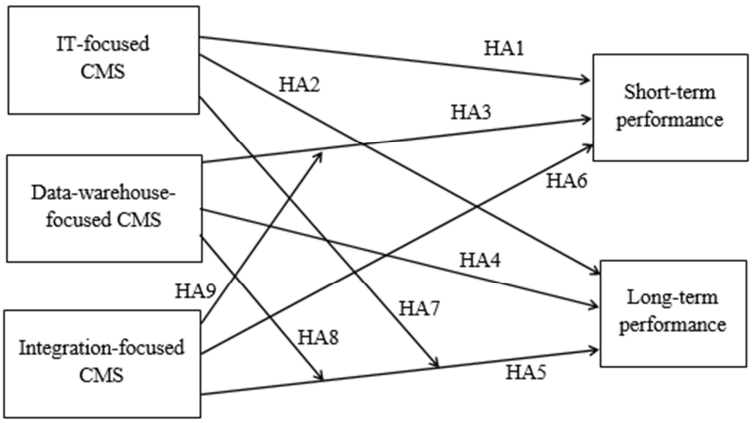
HA8: *The positive significant impact of integration-focused CMS on long--term performance is increased when integration-focused CMS is complemented with data warehouse-focused CMS.*

HA9: *The positive significant impact of data warehouse-focused CMS on short-term performance is increased when data warehouse-focused CMS is complemented with integration-focused CMS.*

The assumed relationships presented in hypotheses assumptions 1 to 9 are depicted in Figure 1.

F i g u r e 1

Model of Hypotheses Assumptions



Source: Own development.

Two performance measures were used in the research: long-term performance and short-term performance. The term long-term performance is used here to indicate organizational processes that yield long-term effects and survival rather than actual financial performance over a longer time period. Therefore the items indicating the domain of long-term performance should reflect ability to respond to changes and capability to secure future performance.

A review of business literature (Chaw and Van der Stede, 2006; Venturini and Benito, 2015; Coltman, Devinney and Midgley, 2011; Kasim and Minai, 2009) provided support for the subjective firm performance measures that guided the operationalization of the variable. Day and Wensley (1998) argue that objective measures should be supplemented by other subjective measures for a comprehensive representation of performance. According to Chaw and Van der Stede (2006) the non-financial subjective indicators show a causal link to the company's long-term strategic goals and performing well in these metrics must be one of the goals. The main problems connected with using only financial indicators is that they show consequences rather than causes, particularly with respect to negative aspects. Moreover, previous studies have suggested that top management's evaluation of subjective measures is highly correlated with objective measures (Kirca, Jayachandran and Bearden, 2005). Accordingly we use a multi-item measure of long-term performance enabling to capture quality of organizational processes, adaptation capabilities and customer behaviour. There are six items selected to measure long-term performance. They were operationalised using previously developed multi-item scales or modifying theoretical concepts from related research (Kaplan and Norton, 2007; Tseng and Wu, 2014; Tsang,

2002). Following the trend in strategy research (Kaplan and Norton, 2007; Liu, 2007) all items in the construct are rated on a 5-point Likert scale with 1 = strongly disagree and 5 = strongly agree.

Short-term performance refers to goal attainment, reflected in the current financial and market performance. It was evaluated by asking managers to compare the performance of their company against competition over last two financial years in sales volume and net profit on a five-point scale (from 1 = much below to 5 = much above).

IT-focused-CMS was operationalized using items capturing the extent to which an organization has developed technological infrastructure as a CM tool. Further, the measure also expressed whether a firm had introduced special positions as responsible for implementing CM initiatives.

Data warehouse-focused CMS was operationalized using items indicating the extent in which an organization has developed central data-warehouses, storing data, developing customer profiles and making it all accessible to every employee in the organization.

Integration focused-CMS was operationalized using items that indicate the extent to which employees and customers interact between themselves and co-operate in value creation.

Items used to operationalize the constructs of IT-focused CMS, data warehouse-focused CMS and integration-focused CMS are given in Table 1. Companies were asked to express the strength of their agreement with the items on a 5-point Likert scale.

To test the theoretical model proposed in the research, it was important to capture a range of customer management strategies in the sample. In other words, it was needed to conduct the study in a context where both customer management strategies and variations in them could be captured. Therefore organizations of various industries and various size were included in the research. The study adopted random convenience sampling that targeted firms with a minimum turnover of 2 million EUR, enabling the participation of different size companies. In total, 655 businesses were asked to participate in the survey, representing manufacturing industries, transport, wholesale and services. The primary database of 655 companies from seven industry sectors of Slovak Republic was developed with the help of Slovak Business Agency and sectorial analyses of Slovak Investment and Trade Development Agency. For the purposes of the currently presented research it was decided to obtain the data and responses with the help of an extensive on-line questionnaire. The questionnaire was distributed to CEO or a senior executive who were requested to forward the questionnaire to the senior executive most responsible for customer

management in the company. It was sent in two consecutive rounds. In the first round only 71 questionnaires were completed and therefore a second round (supported with mail and telephone calls) was organized, generating additional 124 usable questionnaires. Relatively low return was due to the reluctance of businesses, lack of time, lack of interest, scepticism towards research and so on. Nevertheless we consider the size of the research sample – 195 companies as being sufficient for the purpose of the study. The sectoral structure of the sample consisted finally of machinery (39 firms; 20.0%), chemical industry (18 firms; 9.2%), food processing industry (43 firms; 22.1%), transportation/logistics (16 firms; 8.2%), electronics (31 firms; 15.9%), wholesale (12 firms; 6.1%) and services (36 firms; 18.5%).

In order to support the results from the questionnaire analysis, semi-structured interviews were conducted with eight companies. The common themes of the interviews covered four areas: focus of the CM adopted by the company; application aspects; benefits of CM, and performance issues. Following paragraphs presents some broad observations, based on the interview data about CMS and performance.

Two of interviewed firms appeared to follow the IT-focused CMS. These firms approach CM in a very simple manner; they believe that providing information on computers enables to respond and monitor customers reasonably. Both firms operate with moderate surplus. Part of the reason behind this doing well is in small and stable customer circle and in employees who are "knowledgeable" about when to sell and when to buy. They both believe that it is important to "play the margins".

The activities discussed by other four firms reflected a data warehouse-focused CMS of collecting and storing customer data in central repositories. The efforts were to store all experience with different customers so that each person, each department and each region could access the data directly and be more efficient the next time. Two of the firms following data warehouse-focused strategy have been making losses for the last few years. However, they argue to be resilient enough to bear the losses. The reasons behind this resilience appear to be different: one firm has been innovating and has the support of major automotive company, while the other company is a subsidiary of foreign company and operating in growing market.

Two firms of the eight firms interviewed appear to follow an integration-focused CMS. They both focus on developing a culture where "customer's participation, engagement and direct interaction" is appreciated. Consequently, the firms that follow integration-focused CMS have performed well and are expected to continue to do so.

When asked about the benefits of their CM efforts, the firms following an integration-focused strategy mentioned aspects like “developing common knowledge-base”, “common goals and vision”, “employee satisfaction”. These aspects reflect long-term performance. In contrast, firms following data warehouse-focused CMS mentioned benefits in “access to data”, “retain knowledge”, “better search”. The aspects reflect using the existing knowledge and the possible short-term performance benefits associated with it. The firms that followed an IT-focused CMS suggest that they benefit because “computer connectivity brings transparency” and “everyone has a special responsibility”. These aspects do not have any apparent link to performance.

In summary, the interviews provided insights into the issues surrounding customer management and its relationship with performance. The interview data is used in discussing the questionnaire findings in next parts.

3. Results and Discussion

Partial least squares (PLS) path regression analysis was used to explore the relationships between variables in constructs. Construct reliability was assessed with the help of two mechanisms. The first mechanism was to examine the loadings of the items on their respective constructs. In order to be reliable, each item must load on 0.7 or more on its respective construct. The second mechanism was to examine composite reliability or internal consistency. The measure of composite reliability should be over 0.7 to verify the reliability of the construct. Reliability analysis of the constructs and the items used for measuring them is presented in Table 1.

The IT-focused strategy construct aimed to express the extent to which a firm believes that technology is central to managing customers and employs technology to manage customers. The construct of IT had an internal consistency of 0.772, which was acceptable but one of the items loaded at less than 0.7. This item did not load on the construct significantly and it was excluded from subsequent analyses. It appears that firms may have different perceptions about the extent to which technology was associated to one customer manager.

The construct data warehouse-focused CMS had an internal consistency of 0.730, which was acceptable. One item loaded at less than 0.7 and therefore excluded from subsequent analyses. It reflected the construct but does appear to capture also other dimensions as well.

The construct integration-focused CMS had an internal consistency of 0.860, but two items with loading less than 0.7 were removed from the subsequent analysis. They both seem to emphasize very general components related to

managing customers in the organization. In contrast, the items that loaded over 0.7 reflect the extent to which the CMS efforts are focused upon interaction and customer's integration in the organization, which is the essence of an integration--focused CMS.

T a b l e 1

Reliability Analysis (initial)

Constructs and items	**Loading**	**Loading square**	**Internal consistency**
IT-focused CM			
IT implementation ensures customer management	0.769	0.591	
IT-focused CM is the responsibility of specially appointed customer manager	0.528	0.279	
Technology is used as a principal instrument for managing customers	0.767	0.588	
Sum	2.064	1.458	0.772
Data warehouse-focused CM			
Emphasis on recording and collecting customer data	0.493	0.243	
Customer feedback stored for future use in central repositories	0.716	0.513	
Data warehouse prevents the company from problems when employees leave	0.749	0.561	
Sum	1.958	1.317	0.730
Integration-focused CM			
Employees share their experience with customers	0.639	0.408	
Introduction of systems motivating relationship development between customers and company employees	0.653	0.426	
Customers participate in decisions made by the firm	0.728	0.530	
Employees gain new information from interactions with customers	0.764	0.584	
Sum	3.548	2.532	0.860
Short-term performance (current market and financial results in last two financial years)			
Sales volume	0.909	0.920	
Net profit	0.950	0.902	
Sum	1.859	1.822	0.916
Long-term performance (processes ensuring long-term success and survival)			
Ability to respond quickly to market changes	0.812	0.374	
Potential of fast innovations	0.644	0.415	
Ability to adapt to technological and environmental changes	0.795	0.632	
Ability to identify continuously new business opportunities	0.788	0.621	
Loyalty of customers	0.401	0.161	
Potential to ensure future performance	0.769	0.591	
Sum	4.810	3.436	0.912

Source: Own calculation.

The construct short-term performance had an acceptable internal consistency (0.916) and the construct long-term performance had an acceptable internal consistency (0.912). Four items in long-term performance loaded at more than 0.7 while two loaded at less than 0.7. These two items were excluded from subsequent analysis since they were general in nature.

A subsequent reliability analysis was performed on the accepted items with final results presented in Table 2. All the items exhibit now adequate reliability with respective loadings over 0.70. Also the constructs achieved acceptable reliability with internal consistency over 0.75.

T a b l e 2

Reliability Analysis (final)

Constructs and items	**Loading**	**Loading square**	**Internal consistency**
IT-focused CM			
IT implementation ensures customer management	0.938	0.880	
Technology is used as a principal instrument for managing customers	0.825	0.681	
Sum	1.760	1.561	0.806
Data warehouse-focused CM			
Customer feedback stored for future use in central repositories	0.756	0.572	
Data warehouse prevents the company from problems when employees leave	0.812	0.659	
Sum	1.568	1.231	0.778
Integration-focused CM			
Customers participate in decisions made by the firm	0.759	0.576	
Employees gain new information from interactions with customers	0.818	0.669	
Sum	2.387	1.901	0.879
Short-term performance (current market and financial results in last financial year)			
Sales volume	0.960	0.922	
Net profit	0.953	0.906	
Sum	1.913	1.828	0.916
Long-term performance (Processes ensuring long-term success and survival)			
Ability to respond quickly to market changes	0.829	0.687	
Ability to adapt to technological and environmental changes	0.815	0.664	
Ability to identify continuously new business opportunities	0.802	0.643	
Potential to ensure future performance	0.798	0.637	
Sum	3.243	2.630	0.911

Source: Own calculation.

The hypotheses assumptions were tested using PLS regression analysis with beta coefficients (βis) that can be interpreted as the regression coefficients. Testing for the significance of the βis was done by using t-tests, where the positive sign of the β-coefficients (path coefficients) indicates positive relationship. To find a combined effect of different customer strategies, the interaction effect was computed by multiplying each item of one construct with each item of the other constructs.

For example, if construct A has two items (A1, A2) and construct B has two items (B1, B2), their interaction result A*B will have four items (A1*B1, A1*B2, A2*B1, A2*B2).

The hypotheses assumptions were tested by examining the direction, size and significance of the paths from independent variables to dependent variables. The process of testing delivered the results presented in Table 3.

T a b l e 3

Results of Testing Hypotheses Assumptions

Hyp.	Hypothesis Formulation	Hypothesis assumption	β-coefficient and t-value	Hypothesis test result
HA1	Impact of IT-focused CMS on short-term performance	Non-significant positive effect hypothesized	0.049 (t = 0.34)	supported
HA2	Impact of IT-focused CMS on long-term performance	Non-significant positive effect hypothesized	0.063 (t = 0.67)	supported
HA3	Impact of data warehouse-focused CMS on short-term performance	Significant positive effect hypothesized	0.038 (t = 0.25)	not supported
HA4	Impact of data warehouse-focused CMS on long-term performance	Non-significant positive effect hypothesized	0.092 (t = 1.14)	supported
HA5	Integration-focused CMS on long-term performance	Significant positive effect hypothesized	0.674 (t = 7.98)	supported
HA6	Integration-focused CMS on short-term performance	Non-significant positive effect hypothesized	0.198 (t = 1.62)	supported
HA7	IT-focused CMS complementing impact of integration-focused CMS on long-term performance	Significant positive effect hypothesized	–0.186 (t = 1.12)	not supported
HA8	Data warehouse-focused CMS complementing impact of integration-focused CMS on long-term performance	Significant positive effect hypothesized	–0.265 (t = 2.07)	not supported
HA9	Integration-focused CMS complementing impact of data warehouse CMS on short-term performance	Significant positive effect hypothesized	0.203 (t = 0.96)	not supported

Source: Own calculation.

The hypotheses assumptions examining the impact of IT-focused strategy on performance stated no significant effect on short-term or long-term performance. The path coefficient between IT-focused CMS and short-term performance ($\beta = 0.049$; $t = 0.34$) was not significant. Also, the path coefficient between IT-focused CMS and long-term performance ($\beta = 0.063$; $t = 0.67$) was not significant. These results support both hypotheses assumptions HA1 and HA2 and indicate that there is no significant effect of information technology focused CMS on firm performance.

Interviews with firms supported this finding and suggested that the role of IT in the customer management and thus in the performance benefits is limited. Technology is merely an instrument. IT focus in customer management does not provide any significant short-term or long-term performance benefits, because the activities that are implemented in this context lack direct specified focus.

As IT systems do not focus on the mechanisms that result in performance, IT-focused CMS does not affect directly performance. Facilitating the information flow mentioned by companies to be the main benefit of IT-led management, does not directly influence performance, but may enhance organization effectiveness (Reinartz, Kraft and Hoyer, 2004). Therefore, the non-significant and small coefficients in the statistical analysis are in line with the existing literature and appear to be more a true picture of the relationship than a consequence of lack of statistical power.

The hypothesis assumption in this research supposed that data warehouse-focused CMS will have a significant positive effect on short-term performance, because it promotes utilization of existing customer data. However, relying on adoption of past solutions undermines an organization's ability to generate new ideas and offer new solutions. Therefore data warehouse CMS strategy will have no effect on long-term performance. The path coefficient between this type of strategy and short-term performance ($\beta = 0.038$; $t = 0.25$) was positive, but not significant. This does not support HA3, that predicted a significant relationship between data warehouse-focused CMS and short-term performance.

It is possible that we could not find a significant positive relationship between data warehouse CMS and short-term performance, because we did not consider how effectively the data were captured by an organization and how much of the stored data was utilized.

The path coefficient between data warehouse-focused management style and long-term performance ($\beta = 0.092$; $t = 1.14$) was not significant, and thus supported the arguments made for HA4. It was proved that reliance on adoption of past information and past solutions weakens the flexibility, understanding and ability to create new solutions. Therefore, data warehouse- focused strategy has no effect on long-term performance.

Organizations following management oriented on building data warehouses mentioned in interviews benefits like: openness in access to databases, fast response or retaining of customer data. These are, however, no long-term performance aspects like innovations or level of firm's adaptation. Both the questionnaire data and interviews suggest that data warehouse-focused CMS has no significant effect, neither on short-term performance, nor on long-term performance.

Hypothesis assumption HA5 stated that integration-focused CM will have a positive effect on long-term performance. The path coefficient between integration focused management and long-term performance ($\beta = 0.674$; $t = 7.98$) was positive and significant, which provides strong support for HA5. This result confirms that customer's engagement and participation in value creation of an organization enhances performance and firms motivating customers towards

long-term cooperation benefit from creating such partnerships. These organizations make concrete efforts to develop common decisions and solutions directly with their customers (Kumar and Reinartz, 2018). As a result, they build with their customers the "common identity".

The path coefficient between integration-focused CMS and short-term performance ($\beta = 0.198$; $t = 1.62$) was not significant, confirming HA6. The data from both the questionnaires and interviews suggest that the benefits of focusing on partnership developing management appear after a longer period of time. However, during the interviews we found that interaction/integration processes bring several indirect benefits such as better working relationships and rise of common vision. Although integration focused customer strategy does not significantly influence short-term performance in a direct manner, it appears to influence short-term performance in an indirect manner by improving organizational processes that generate long-term performance.

Hypothesis assumption HA7 predicted that IT-focused CMS strengthens the positive impact of integration-focused CMS on long-term performance. However, the path coefficient was negative ($\beta = –0.186$; $t = 1.12$) and not significant, indicating that IT-focused management style may even weaken the positive relationship between integration-focused CM and long-term performance. It may be assumed that the reliance on IT tools could reduce rich, personal interactions necessary for integration and knowledge exchange. Therefore HA7 was rejected.

Interviews revealed that customer management focused on IT gives priority to communication through technology and messaging, rather than to personal face-to-face communication. In case of impersonal communication it may happen that employees fail in understanding customers correctly. Business argues that performance declines when decisions that are incorrectly understood, are applied (Chakravarthy et al., 2011). The results from both the interviews and questionnaires suggest that IT-focused CMS does not enhance integration-focused CMS.

Hypothesis assumption HA8 predicted that data warehouse-focused CMS strengthens the positive impact of integration-focused CMS on long-term performance. The path coefficient was negative ($\beta = –0.265$; $t = 2.07$) and not significant. Similar to HA7, it indicates that data warehouse CMS may dilute the effect of integration-focused CMS on long-term performance. Therefore HA8 was rejected. A possible reason for that was revealed in interviews, indicating that mere reliance on data warehouse may reduce the initiative of employees to create new solutions and original concepts and could become a "trap" for a company (Levitt, 2004). In this situation, when data warehouse based elements are present in common with the integration-focused CMS, they may interfere with

the positive atmosphere that is developed by an integration-focused approach. In other words, the lower order CM strategy may evoke processes that counteract the performance benefits of an integration-focused CM strategy.

Hypothesis assumption HA9 predicting that integration-focused CMS strengthens the positive relationship between data warehouse-focused CMS and short--term performance was not supported. The path coefficient ($\beta = 0.203$; $t = 0.96$) was positive, but not significant, indicating that in contrast to IT-focused and data warehouse-focused management styles, that have a negative impact on the benefits of integration-focused customer management, the integration-focused management may not negatively affect the relationship between data warehouse based customer management and performance. The non-significance of the coefficient indicates that integration-focused CMS may not significantly complement data-warehouse strategy. This was not expected, but it is possible that in fact the effects may be small and could not be revealed by this research.

The results from the above analysis indicate that developing partnerships in customer management has a significant positive effect on long-term performance. Neither IT-focused CMS, nor data warehouse-focused CMS have a significant positive effect on short-term performance. Integration-focused CMS has no significant positive effect on short-term performance, however it complements positively, though not-significantly, the customer management focused on data warehouses in short-term performance benefits. In contrast to our expectations, data warehouse-based CMS weakens, though not significantly, the effect of integration-focused CMS on long-term performance. The same was found for IT-focused CMS, suggesting that IT-centred management weakens the impact, although not significantly, of integration-focused management on long-term performance. In summary, the lower order strategies moderate the performance benefits that result from integration-focused CMS. However, the reverse does not appear to be true, that is integration-focused strategy does not negatively influence the effects of data warehouse strategy on performance. This may be because integration-focused strategies counteract some of the negative aspects that may be linked to data warehouse strategy. The findings provide strong support for the conclusion that integration-focused CMS has a significant positive effect on organizations' performance.

The limitations of this study concern measurement and analytical issues. The study used organizational level constructs, but collected data from individual managers who were expected to be knowledgeable about the customers and the organization as a whole. In particular, this study used "the seniors that are most responsible for customer management" as the key respondents. It may be argued that using a single individual manager to collect data may cause measurement errors and reduce the reliability of construct.

The second limitation was that the research used a cross-sectional research design whereby the managers were questioned just once to assess the items in study. The choice of a cross-sectional design was due to the advantages it offers in terms of time and control as well as the fact that some previous studies on customer management strategy (Coltman, Devinney and Midgley, 2011; O'Sullivan, Abela and Hutchinson, 2009) used this method. Whereas CM and firm performance in general have a dynamic nature, this study presents a cross-sectional view. There is a likelihood that different results would be obtained if longitudinal research design is adopted in measuring the relationship between the variables.

Arising from this research some recommendations for future research can be made. Further studies should explore the antecedents of CMS allowing for better understanding various determinants of particular strategy. This would permit companies to make more informed decisions with regard to CM investments. Secondly, with the cross-section research design that was used in this study, only assumptions may be made about long-term profitability implications. Therefore, future studies could use a longitudinal methodology as it could be more powerful in defining the causality relationship particularly in investigations that are generally dynamic and long-term in nature. Thirdly, forthcoming research may combine information from both internal sources (senior managers) and external sources such as customers, competitors or distributors on the focus of customer strategy instead of relying only on internal sources. Fourthly, the outcomes of this research are grounded on the constructs adopting both objective and subjective measures. Further research should seek to establish measures of CM practices enhancing a better understanding of the CM implementation aspects and performance context. Finally, it may be interesting to explore variables that are likely to moderate or intervene the connection between customer strategy and performance.

Conclusion

The paper examined the impact of different types of customer management strategies on firm performance. The analysis of the three different strategies for managing the customers confirmed their hierarchical nature. On the lowest level is the IT-focused CMS, delivering IT tools in the organization with the expectation that it will facilitate and foster information flow. On the middle level, the data warehouse-focused CMS encourages all employees to codify the customer data and store it in the central database. At the highest level, the integration-focused customer strategy encourages partnerships and long-term relations between company and customers. Both the IT-focused CMS and data warehouse-focused CMS can be implemented by a small group of people without the involvement of

the entire organization. The efforts to interact and integrate the customers are difficult to undertake, require participation of the whole organization and take a long time to bring fruit. In the integration-focused CMS the value is created in a common process of an organisation and customers. Here both the parties contribute to each other, whereas the lower level strategies (IT strategy and data warehouse strategy) consider the customers to be a passive part of the relation.

The hierarchical effect was identified also in the impact of the three strategies on firm performance. The IT-focused CMS has no documented effect on performance, the data warehouse-focused CMS has only moderate positive effect on performance, and the integration-focused CMS has a high positive effect on performance. Mere focus on technology and data warehouse does not generate benefits from customer management. The lower level management styles (IT-focused and data warehouse-focused management styles) negatively influence the effect of integration-led management on performance. This effect was demonstrated in negative path coefficients. Although these path coefficients are not significant, the interviews with managers indicated that adoption of data warehouse-focused management does not support the flexibility and creativity of employees. Relying on IT tools can reduce the face-to-face social interactions that are necessary for customer relation development. As a result the lower level customer management styles do not enhance the performance benefits resulting from integration-focused CM. On the contrary, integration-focused management does not negatively influence the effect of data warehouse CM on performance. The reason explaining this finding may be in the fact that focusing on integration and interaction in management can eliminate some of the negative aspects associated with impersonal and technocratic data warehouse-focused CM. Our research found that integration processes have the potential to yield performance benefits by developing mutual understanding and by creating a common vision and shared goals.

Systematic attention to the customer management can help organizations to achieve competitive advantage through mutual learning and knowledge, which are the crucial resources of growth and competitiveness in fast changing world.

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