

THE COMPARISON OF CUSTOMER RELATIONSHIP MANAGEMENT (CRM) IN CZECH SMALL AND MEDIUM ENTERPRISES ACCORDING TO SELECTED CHARACTERISTICS IN THE YEARS 2015, 2010 AND 2005

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Abstract

STARZYCZNÁ HALINA, PELLEŠOVÁ PAVLÍNA, STOKLASA MICHAL. 2017. The Comparison of Customer Relationship Management (Crm) in Czech Small and Medium Enterprises According to Selected Characteristics in the Years 2015, 2010 and 2005. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 65(5): 1767–1777.

The aim of the article is to present the results of the research in 2005 and 2015, respectively 2010, in the field of Customer Relationship Management (CRM). The subject of the research is CRM knowledge, CRM definition preference, customer contact level, and CRM results. The object of the research are the SMEs in the Moravian-Silesian Region. A method of comparison of selected characteristics was used. Starting point is a brief theoretical discussion based on selected studies, including a brief genesis of research. Recent primary research using questionnaire survey addressed 736 respondents. Comparing the results of the research confirmed the growth of CRM skills between 2010 and 2015. In 2015, the first place in the preferences of the definition of CRM won the option A, meaning the creation of lasting relationships with customers, which delivers long-term value to both parties to the relationship. The share of respondents who voted for it, was higher than in 2005. To compare the level of contact with customers, 4 ways of contacting them were selected. Adverse developments showed up for the customer records, higher was its randomness, which was not expected. More sophisticated ways of contacting customers confirmed a positive change, though not very significant. The most important result in 2005 and 2015 was the increase in the number of loyal customers, which contributes to the growth of profitability. In the end of the article, hypothesis about the relationship of the size of SMEs and CRM knowledge is confirmed by using logistic regression, and premises are verified about the comparison of results in various years. It turns out that the CRM can be beneficial for SMEs, so it should be implemented in its management system.

Keywords: relationship marketing, CRM concept, perception of CRM definition, customer contact, the results of CRM, small and medium enterprises (SMEs).

INTRODUCTION

Marketing is not a static thing, it changed concurrently with changes in the business environment. It went from transaction marketing to relationship marketing, which includes customer relationship management, which is applied at the consumer market. Consumer market is a part of the 6 markets model created in 1991 by Christopher,

Payne and Ballantyne (2002). Marketing and Customer Relationship Management developed in established market economies between 50s and 90s of the last century, although the time frame is debated by some experts. In the Czech Republic, it wasn't until the early 90s that people began to speak publicly about marketing and consumer orientation, which is related to the commencement of the transition period and the country's transition

to a market economy. In the meantime, marketing and its related disciplines and concepts, including customer orientation, haven't been perceived positively. But it wasn't easy for marketing activities and relational marketing even after the start of the transition process. In some companies, practical application was narrowed to marketing communication with customers, which is of course important, but does not include a comprehensive view of relationship marketing and CRM. Kotler *et al.* (2007, p. 557) were also thinking about the suitability of practical use of transactional and relationship marketing. Sophisticated and systematic customer orientation and utilization of CRM can be a significant competitive advantage on the market. SMEs have a specific position in the market (Veber, Srpová *et al.*, 2012). From an economic point of view, it is not easy for them to compete with larger firms. However, they have the possibility to strengthen their competitiveness. They can utilize the full potential of CRM to better understand their customers, their needs and desires in order to build relationships with their customers and even manage them long-term. Customer Relationship Management can thus help to stabilize the market position of SMEs. Using CRM can be beneficial to businesses, but also the society and the customer, and the level of satisfaction of their needs.

The aim of the article is to present the results of the research in 2005 and 2015, respectively 2010, in Customer Relationship Management. A comparison method of selected CRM features has been used, namely CRM knowledge, CRM definition preferences, customer contact level, and CRM results. The objective of the research are the SMEs in the Moravian-Silesian Region. Partial goal is a brief theoretical debate about the issues examined. Further, we present a brief genesis of the research in this field at our faculty. The hypothesis of a relationship between the size of SMEs and knowledge of the CRM concept is also related to the latest research, verified by logistic regression. At the end of the article, premises related to comparison of the various researches were evaluated.

The current state of knowledge in the field of CRM in SMEs

Chapter aims to bring substantial outline of the definition of customer relationship management and the position of CRM in SMEs. CRM can be an opportunity for SMEs how to improve their market position and competitiveness, based on their main advantage that is the proximity to the customer. Do SMEs, however, know the term CRM? Theoretical approaches will be linked with examples of studies of domestic and foreign authors.

Definition of CRM and the reasons to introduce the system

Many marketing professionals deal with definitions of CRM and relationship marketing,

whether in the context of professional marketing publications containing a complete view of modern marketing or specialized publications focused solely on relationship marketing and customer relationship management. The theoretical basis of customer relationship management is viewed as a simplified version of relationship marketing, which in addition to the consumer market includes other markets (Christopher, Payne, Ballantyne, 2012). CRM doesn't have to be unfamiliar to SMEs. Conversely, it may be a competitive advantage in all areas of business, although the introduction of CRM can cause problems, especially with regard to financial requirements. The pioneer of ideas on customer relationship management is Levitt (1960), which emphasizes that companies should focus on fulfilling customer needs and not only try to hard sell their products or services. The early beginnings of "customer relations" are mentioned in the book by Storbacka and Lehtinen (2002), where the authors go even to pre-industrial era. The former craftsmen passed their craft to their sons and told them their experience. They knew their local customers, their needs and wishes. Customer information was carefully kept in mind. Today's situation is bit more difficult, companies have greater scope and radius and thus more customers. At the same time, companies have technical support for the implementation of their activities. The aforementioned authors in their other publications focus on the entire issue of current CRM, especially its operative part.

Origin of the term CRM can be traced back to the 90s of the 20th century, when the concept of marketing has changed from transactional to relational (Dohnal, 2002, p. 31). From the beginning, there were many definitions, and sometimes even different meanings of the CRM acronym, which ranged from Customer Relationship Management to Customer Relationship Marketing (Buttle, 2009, p. 3). It is not easy to verify who the first to define CRM was. Some sources claim that Lehtinen (2007, p. 18–19) and colleagues were among the first who described and explored CRM. Definitions range from the narrowest, where the concept only means utilizing information technology and CRM software (Payne, Frow, 2005), to much broader, where it is connected with the strategy of selecting customers that a company can serve, and the formalization of the interaction between the enterprise and these customers. The goal of CRM is to optimize current and future customer value for enterprise (Kumar, Werner, 2006). A different view of CRM is as a business strategy that is focused on the development of lasting, mutually beneficial relations, it works on IT infrastructure, and provides a well-defined and controlled processes (Peelen, 2006). Process approach to CRM based on differentiated value management is covered by Lošťáková *et al.* (2009). The authors focus on value management consisting in identifying, creating, delivering and improving value for

customers' differentiated approach according to the contribution of individual customers for the company.

Also important is the idea concerning the status of workers in the CRM system, especially in SMEs, which most prefer personal contact with the customer over other communication channels (Čemerková, 2016). Our latest research also confirms this notion. The basis of good sophisticated CRM system is the correct choice of workers who act on behalf of the company with customers, and in their hands is clients' satisfaction or dissatisfaction (Kozák, 2011, p. 9). A satisfied customer is also spreading the good name of the company and is not considering leaving to the competition. Similar opinion has Simová (2008, p. 183), who says that customer satisfaction is affected by the value for the customer and customer value for the company, as a result of customer-perceived value. It can be assumed that a satisfied customer will make additional purchases and there is a chance to build loyalty, which in turn increases the profitability and overall results and benefits of CRM. The relationship between customer satisfaction and loyalty was the centre of attention of Melovic *et al.* (2014) in their study in the service sector. And according to Kotler and Keller customer lifetime value (CLV) is based on the requirement to maximize the long-term profitability (Kotler, Keller, 2013, Ryals, 2005). But some authors argue that CRM is not a new way of marketing. They believe that successful customer relationship management requires that each employee has a customer as their primary objective (Tomek, Vávrová, 2012).

The main reasons for the introduction of a CRM system is the effort to reduce costs, streamline processes and increase revenue through satisfaction and customer loyalty, having the consequence of repeated purchases, increased number of customers, and increase turnover. The influence of the performance level of CRM according to selected criteria was dealt with by Rainartz, Kraft and Hoyer (2004). The relationship of costs and profitability in the implementation of CRM in banking was examined by Krasnikov, Jayachandran and Kumar (2009). Marketing indicators expressing the productivity of marketing and efficiency of CRM can have a diverse structure, but in essence those are the performance metrics associated with customers and performance metrics related to other interested parties (Kaplan, Norton, 1996).

The level of customer relations and processes related to it

It is not easy to characterize how CRM works in a company and what is the level of customer relationships, which we build through supporting processes. Buttle (2009) calls these processes as 'types' of CRM. Dohnal (2002) talks about parts of application architecture of CRM: analytical, operational and collaborative. We can't, however, leave out the strategic concept of CRM and its

longevity, as was apparent in our previous studies. Therefore, it is necessary to add the strategic part of CRM to the 3 main parts (Starzyczná, Kaučerová, Pellešová *et al.*, 2007).

The aim of analytical CRM is the customer data analysis, evaluation and prediction of future customer behaviour and identification of key customer groups and their preferences (Reicher and Szeghegyi, 2015). Consistent data should be available to all employees of the company and should support their decision making. But not all SMEs can follow through with this requirement. We cannot just respect the needs of our customers, but we also have to actively meet them. To do this, we must know our customers, analyse their behaviour and identify our segments. Only then it is possible to successfully target our offer and differentiate from our competition (positioning, targeting).

The contact between customers and first line employees is pivotal for operational CRM that supports business processes, including sales of products and marketing. The company creates a database that captures all customer communication. Data from the database are provided for users, i.e. employees, allowing the company to enhance the performance of workers, who are then able to serve more customers (Dohnal, 2002). Customer communication is not a new issue. Historically it evolved with the development of trade. This process manifested in a simple form of contacting customers, up to the use of technological support. Current SMEs are serving a variety of local customer segments. Their range can be much broader, throughout the EU, or even further. Enterprise size affects the way it performs all operations and processes. Personal approach to customers, as has been said, is why it is important for SMEs and to use the philosophy of CRM in their management (Starzyczná, Kaučerová, Pellešová *et al.*, 2007). Many experts warn against overestimating the role of IT in the CRM system and its major force in the implementation process (Kozák, 2007). At the same time there may be some obstacles to implementation of CRM system, if we proceeded with CRM conjunction with IS / IT. According to Alshawi *et al.* (2015), there are different results of SMEs introducing CRM solutions. The main problems relate to operational, organizational and technical factors and data quality. Their study confirmed some problem similarities that SMEs are facing.

Collaborative CRM enables businesses functioning around one distribution channel, as well as all departments in the enterprise, to collaborate and share information about customers (Dohnal, 2002, p. 66–64). Buttle (2009, p. 11) speaks about the so-called management of partner relationship. Cooperation within the CRM aims at the maximum information sharing across departments. Emphasis is placed on improving the quality of services that are provided to customers. The final result of the process should be to increase customer value

and loyalty. Specifically, use of CRM (iPodnikatel, 2017) lets you perform activities focused on providing access to collected information to all interested employees (management, traders, etc.).

Due to the orientation of companies on processes and providing value to customers, the transactional view on marketing is becoming obsolete and is forced out by relational approach. It is therefore beneficial for SMEs to implement CRM in their strategic marketing management to improve their business results. (Starzyczná, Kauerová, Pellešová *et al.*, 2007).

Primary research methodology in 2015

The goal of primary research is to identify CRM knowledge, CRM definition preference, customer contact level, and CRM results in SMEs in the Moravian-Silesian Region. The following chapter briefly presents the genesis of the research at our faculty and methodical approach of recent primary research.

A brief outline of the genesis of research

The Marketing Department of our faculty has been dealing long-term with issues of Customer Relationship Management, also in collaboration with colleagues from other departments and faculties. CRM has become one of the major research topics. The object of the research were companies of all size categories, but mostly SMEs. We have monitored selected sectors, namely manufacturing, services and trade, without further detailed structuring. The research has started in 2005, within our projects and unspecified research carried out for teaching.

Relationship marketing and CRM were the focus of GAČR 402/05/01/0140 'Methodology of relationship marketing and its position in strategic marketing and customer relationship management (CRM)', in 2005–2007. The main outcome of the project was a monograph (Starzyczná, Kauerová, Pellešová *et al.*, 2007).

More extensive research work was carried out in 2010 and 2012 during the project OP Reg. No.: CZ.1.07/2.3.00/20.0016 'Through targeted research in the field of small and medium businesses to achieve a competitive knowledge economy'. The main goal of the research was focused on the current status of CRM in SMEs and comparison of selected issues with previous research done at the faculty. All results of the research project were summarized in a monograph dedicated to the use

of relationship marketing in SMEs (Stoklasa, Starzyczná, Pellešová *et al.*, 2013). Recent research (see following subchapter) was conducted in the framework of sustainability of this OP VK project.

Methodology of the primary research in 2015

A random choice questionnaire survey was used. The data were gathered through multiple channels, such as our partners, partner companies, agencies, online, and students.

The extent and characteristics of the sample

The research took place mostly in the Moravian-Silesian region. The sample consisted of 736 respondents (see Tab. I). It included micro (up to 10 employees), small (up to 50 employees) and medium-sized enterprises (up to 250 employees). According to official statistics, the share of Czech companies using CRM increases with their size (CSO, 2016). CRM implementation can be challenging for micro-enterprises. Micro-enterprises accounted for the majority in our sample, with 301 (40.9%), small enterprises with 230 (31.3%) and medium-sized enterprises with 201 (27.9%).

According to the Czech Statistical Office, in 2015 there were 25 831 companies in this region. Unfortunately the statistics are severely skewed because more than half of companies have Prague as their place of residency although they are doing their business else-where.

Methodical approach

According to the content focus of the article, essential respondents' answers were selected regarding the following main areas: knowledge of CRM, the appropriateness of CRM definition, levels of customer contact, and CRM results. When evaluating the research, descriptive and causal research was used. Individual questions were evaluated using both the relative and absolute frequency, and valid percent. Relative frequency (in further tables as 'percent') in the tables is calculated from the total number of respondents, and also the total number of responses (valid percent). Subsequently, the results of the latest research are compared with research from 2005, respectively 2010. Comparison was evaluated by differences in relative frequency calculated from the total number of respondents (expressed in percentage points). For

I: Structure of sample according to company size

Company size	Frequency absolute	Frequency relative (%)
Micro	301	40.9
Small	230	31.3
Medium	201	27.9
Total	736	100

Source: own research

II: *Knowledge of CRM in SMEs in 2015*

		Frequency	Percent	Valid Percent
Valid	Yes	537	73.0	73.4
	No	195	26.5	26.6
	Total	732	99.5	100.0
Missing	System	4	0.5	
Total		736	100.0	

Source: own research

statistical computing, MS Excel and IBM SPSS were used.

Statistical hypothesis was formulated relating to the latest research, focusing on the relationship between knowledge of CRM and size of SMEs. This hypothesis was tested using binary logistic regression. The aim of regression analysis is to find the best, most economical, while substantively meaningful model that describes the relationship between a dependent variable and a group of independent variables. If the explained variable is continuous, linear regression is used, if it is not continuous, then logistic regression is used.

Logistic regression was used with regard to the nature of the variables. Logistic regression can also be used to describe the relationship between several independent variables on a dichotomous dependent variable (Kleinbaum, Klein, 2010). Logistic regression can be used when a dependent variable gets a limited number of values. The dependent variable may be one or zero (yes/no, dis/satisfied etc.). It is monitored and analysed whether the event occurs or not under the given conditions (Hendl, 2009). Valečková (2013) used logistic regression when assessing the impact of demographic identifiers on customer satisfaction. The independent identifying characteristics of the respondents were, for example, age structure, economic status etc. The dichotomous dependent variable was a variable yes/no satisfaction. Independent variables in our research are the SME size categories and dependent dichotomous variables will have the character of categorical answers yes/no about the CRM knowledge.

H_0 – Knowledge of CRM is not dependent on the size category of SMEs.

Premises were formulated in the light of previous experience of the research team and long-term research results:

- P1 – The share of SMEs preferring the option A of the CRM definition has increased in 2015 compared with 2005.
- P2 – The share of SMEs performing a complete evaluation of customer contacts and forming database has increased in 2015 compared with 2005.
- P3 – The share of SMEs showing a certain randomness in their relationship with customer has decreased in 2015 compared with 2005.

- P4 – SMEs applying a long-term CRM confirm an increase in the number of customers in 2015 compared with 2005.
- The next chapter will present the results of research and evaluated premises and hypothesis.

The research results in 2015

With regard to previous research, some of the questions were used the same or formulated slightly differently, to better reflect the nature of the issues.

Knowledge and awareness of CRM in SMEs

Respondents were asked if they know the concept of CRM (see Tab. II). Most respondents (73%) said they already heard the term CRM. Only 26.5% of respondents responded negatively. Some respondents didn't know this abbreviation, but when it was explained to them, they claimed that they know the concept.

Perception of CRM definition

The largest proportion of responses (see Tab. III) was acquired by the option A (64.8%). Most respondents felt that CRM is the establishment of lasting relations with customers, which delivers long-term value to both parties in this relationship. The second position belongs to option C (15.5%), which reflects the shift of the company from a product-oriented business strategy to a strategy oriented on customers and their needs. The third position belonged to option B that states that CRM is a software solution that supports communication with customers (6.8%).

The level of customer contact

The largest share (28.6%) of respondents perform a complete evaluation of the level of customer relationship and form a database of key customers (option D). Only slightly smaller share (26.1%) of SMEs confirmed that anyone who is dealing with customers records the contacts for their own needs (option B). While this is a lower level of contact, it still is a positive development towards successful customer relationship management. In 24.3% of the companies, there are special departments (option C), which record the customer feedback, which is carried out within a certain division of labour in small and medium-sized companies. Micro companies usually don't have developed

III: *Perception of CRM definition in 2015*

		Frequency	Percent	Valid Percent
Valid	A: Creating lasting relationships with customers, which delivers long-term value to both parties in this relationship	477	64.8	69.7
	B: Software solution that supports communication with customers	50	6.8	7.3
	C: Shift of the company from a product-oriented business strategy to strategy focused on customers and their needs	114	15.5	16.7
	D: Providing the necessary information to workers who are in direct contact with the customer	23	3.1	3.4
	E: Fashion issue	20	2.7	2.9
	Total	684	92.9	100.0
Missing	System	52	7.1	
Total		736	100.0	

Source: own research

organizational structure. Significant proportion of companies (17.7%) admitted that their level of customer contact is very low, as it has merely incidental character (option A). Polls and surveys were not a popular option (see Tab. IV).

CRM results and benefits

About the CRM results were interviewed only those respondents whose CRM system was implemented long term, in our sample it was 494 respondents out of all 736 (see Tab. V). Respondents who have implemented CRM system in their company in a complex form and long term, had to choose the most important CRM result for them. Other respondents were not allowed to answer this question because they utilized CRM only in partial activities aimed at consumers and didn't record the changes and results. Shares are commented out of the total number of respondents, otherwise

they would be obviously higher (see column valid percent). The most significant share gained the increase in number of loyal customers (option B, 40.6%). Other shares are substantially lower. A competitive advantage in introducing CRM sees 8.8% of respondents (option G). Worth mentioning are also the increase in overall profitability (option A, 6.9%) and the fact that CRM didn't manifest the desired effect (option E, 6.3%). Very low shares were recorded for the cost increase / decrease of the overall number of customers (options C, D), or dissatisfaction of employees (option F). The failure of CRM (option H) accounted for less than one percentage point (0.8%), which is positive.

We shall now proceed with discussion of the latest research in comparison with research results from 2005 and 2010.

IV: *The level of customer contact 2015*

	Frequency	Percent	Valid Percent
Valid	A: Customer contact is random, previous contact is not recorded	130	17.7
	B: Customer contact is recorded individually by everyone who gets into contact with customers. Records are kept individually.	192	26.1
	C: Through customer feedback recorded by one department	179	24.3
	D: Through a complete assessment and database creation	211	28.7
	E: Through polls and surveys	17	2.3
	Otherwise	7	1.0
	Total	736	100.0

Source: own research

V: CRM results in 2015

		Frequency	Percent	Valid Percent
Valid	A: Increase in overall profitability	51	6.9	10.3
	B: Increase of number of loyal customers	299	40.6	60.5
	C: Increase of costs on the overall number of customers	8	1.1	1.6
	D: Decrease of costs on the overall number of customers	17	2.3	3.4
	E: CRM has not brought the desired effect	46	6.3	9.3
	F: CRM provoked dissatisfaction of employees	2	0.3	0.4
	G: Gaining competitive advantage	65	8.8	13.2
	H: CRM failed	6	0.8	1.2
	Total	494	67.1	100.0
Missing	System	242	32.9	
Total		736	100.0	

Source: own research

Discussion and comparison of research results

Comparison of CRM knowledge

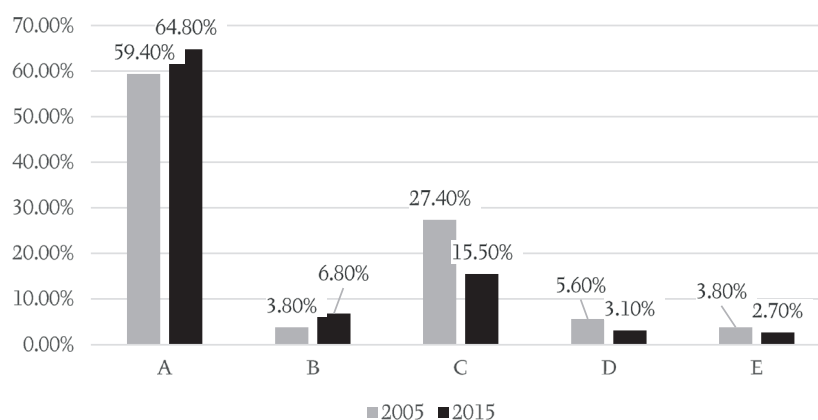
In 2005 the questionnaire didn't include the question of CRM knowledge in identical form as in 2015, but respondents were asked directly to express their degree of CRM awareness, which proved difficult to answer, so in subsequent years we have asked more simply and categorically. In 2005, low knowledge of CRM was admitted by 39.6% of respondents, good awareness by 50.9%, and excellent by only 7.5%, 2% didn't answer. Most probably because we didn't offer the possibility of a negative response, leading us to speculate that they had no CRM awareness.

In 2010, respondents were asked the same question as in 2015. Positively responded 39.0% of respondents. With regard to present results in 2015 (73.0%), we can record a growing trend in the last 5 years. Raising awareness of customer relationship management can be evaluated positively, as it can bring benefits both for customers and for businesses.

Comparison of perception of CRM definition

The latest research included the question that was first posed to respondents in 2005, to assess how the opinion on the CRM definition developed. The question was also answered by respondents who have heard about the concept for the first time (explained to them by interviewers). The results of the research in 2015 (Tab. III) are structurally very similar to the 2005. Option A was chosen by 64.8% of respondents in 2015 (+5.4%), option C by 15.5% (-11.8%), option D reached significantly smaller share with mere 5.6% (-2.5%). Option D is understood too narrowly, only in terms of procedure ensuring the partial phase of CRM. Software solution (option B), that is currently necessary to support the CRM system, has, in an isolated and inadequate use of this form, only a form of partial CRM activity. Share of this answer in 2015 was 6.8%, which means a growth of 3% compared to 2005. A visual comparison of responses in 2005 and 2015 in terms of types of definitions is in Fig. 1.

The increase in percentage points in 2015 for option A was secured mainly by moving points from Option C, which expressed "shift of the company from a product-oriented business



1: Comparison of perception of CRM definition in 2005 and 2015

Source: own research

strategy to a strategy oriented on customers and their needs.” We believe that Option A was easily understandable for respondents, with benefit to both parties of CRM relationship. Definitions that were presented to respondents are not exact definitions of specific authors, but were made with respect to the development of CRM definitions, which are numerous, and key concepts they should contain, and opinions that occur in practice. According to Menster (2006) it is evident that some of the key words appear in almost all definitions. Nearly all definitions talk about concepts of strategy, technology, customer, organization, and cooperation. It is obvious that the definitions of CRM may be designed in different ways, they will differ in their approach, but the key concepts are identical.

Comparison of the level of customer contact

If we want to compare the changes that have occurred in the level of customer contacts, we can again compare the research results in 2005 and 2015. Specifically, the 4 selected options that were offered to respondents in both periods of research. Comparison of the results does not show too much progress, as shown in Fig. 2. Randomness in customer records (option A) was higher in the last 10 years by 7.3 %, which is not favourable. Higher shares can also be observed for the other three options, which monitor the level of contact. But growth is positive. These positive options offer some form of contact and recording of relations, up to their full evaluation and creation of a database, which provides necessary information that can be used to improve customer relationship and satisfaction. Positive change in the level of customer contacts in 2015 is the largest for option B, where everyone was dealing with customer contact records for themselves (+7.2 %).

Complete customer evaluation and creation of a database (option D) had the second most positive change (+6 %). Still, the share of SMEs that work with a customer database in 2015 was less than 30 %. Insufficient information and customer data may cause their dissatisfaction (Mozaheb *et al.*,

2015). Berka (2006) also asked about the existence of a database in his research. The database, which is used to collect data from all the departments in a company that directly meet customer, is used by 69 % of his respondents.

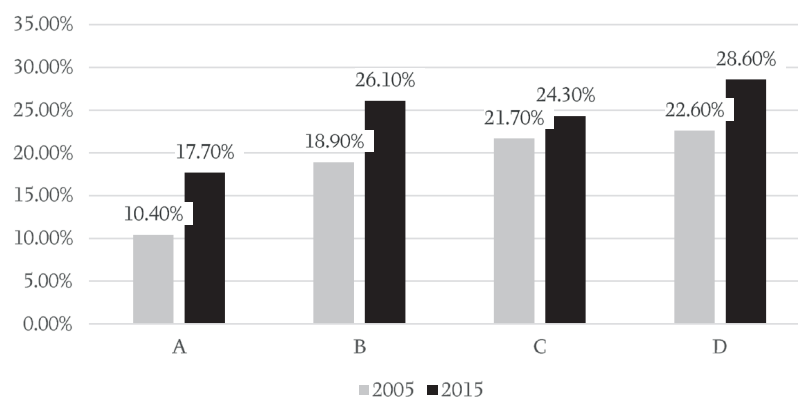
Why was the proportion of respondents in the research by Berka so much higher? These differences can occur due to different sample structures, because Berka included large enterprises as well as SMEs, which generally have more sophisticated organizational structure with well-defined division of labour. In our sample, micro enterprises have a significant share.

The smallest change was recorded for the existence of a specialized department that deals with the customer feedback (option C). The share of such respondents has increased over the monitored period only by 2.6 %. Again, this may be associated with a significant presence of micro-enterprises in our sample.

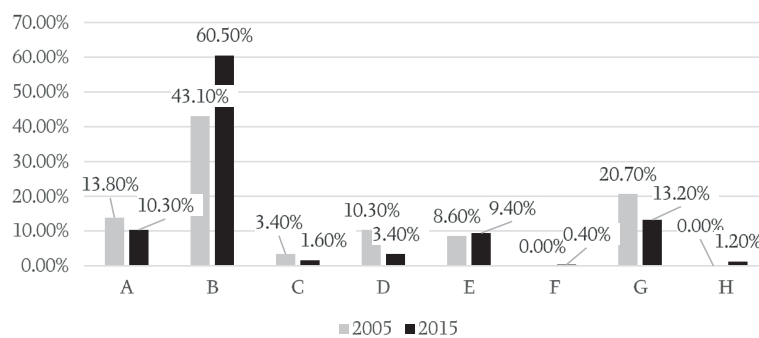
Comparison of the CRM results

The most important results of the CRM, confirmed in 2005 and 2015, are similar, the differences are in terms of its shares of answers, as we see in Fig. 3.

The biggest change in shares occurred in 2015 with an increase in the number of loyal customers (option B, +17.4 %). The second position was a competitive advantage (option G), but the response rate was lower than in 2005, by 7.5 %. Increase in total profitability (option A) was at the third position in 2015, but again with a lower share than in 2005 (–3.5 %). The issue of economic results and benefits of CRM gets in research studies less attention, although there are domestic and foreign studies that deal with it. One of the key findings is that managers are most likely to succeed in maximizing value for customers, if they fully understand the impact of the characteristics of the relationship in the short-term and long-term profitability (Kumar, Reinartz, 2003). Long-term profitability through customer relationship is also influenced by the level and possibilities of customers' spending and shopping behaviour. Long-term interest of the customer is also affected by company



2: Comparison of the level of customer contact in 2005 and 2015
Source: own research



3: Comparison of the CRM results in 2005 and 2015

Source: own research

VI: Estimation of the logistic regression model for SME size category and CRM knowledge

	Estimate	Std. Error	Wald	df	Sig.	95 % Confidence Interval	
						Lower Bound	Upper Bound
Threshold CRM knowledge	-0.858	0.215	15.901	1	0.000	-1.280	-0.436
Location Size of SME	-1.104	0.128	74.387	1	0.000	-1.355	-0.853

Source: own research

communicating with its client, for example through e-mailing.

Lošťáková *et al.* (2009, p. 106) also dealt with the economic aspects of the CRM, in a study focusing on differentiated Customer Relationship Management. The study, among other things, quite carefully dealt with what customer value constitutes for the company. They pointed out that can't work only with the sales indicators as criteria for evaluation of CRM results, but we should take into account the costs associated with customer care, its profitability both short and long term, which also corresponds with the views by Kumar and Reinartz (2003).

Verification of statistical hypothesis and research premises

As already mentioned, binary logistic regression was used to verify the hypothesis. Let's recall the zero hypothesis and add an alternative:

H_0 – knowledge (awareness) of CRM is not dependent on the size category of SMEs.

H_1 – knowledge (awareness) of CRM is dependent on the size category of SMEs.

Testing was performed at a 95 % confidence level. The zero hypothesis is valid if:

- the coefficients (parameters) of the logistic regression model are not statistically significant,
- the significance is greater than 0.05, (i.e., $P > 0.05$).

Tab. VI shows an estimate of the binary logistic regression model for SME size category and CRM knowledge. To verify the hypothesis, we need to derive from the table whether the coefficients are statistically significant or not. Coefficients (model parameters) are estimated by the method of

maximal assurance (Pecáková, 2007). The P-value of the coefficient is 0. The coefficients are therefore statistically significant because the significance is less than 0.05 (value $P < 0.05$). Therefore, the knowledge of CRM is dependent on the size category of an SME. We reject the null hypothesis and accept the alternative hypothesis.

Now we can proceed with the verification of the premises:

P1 – The share of SMEs preferring the option A of the CRM definition has increased in 2015 compared with 2005.

This premise was confirmed, because in 2005 the option A was chosen by 59.4% of respondents, and in 2015 it was 64.8% of respondents.

P2 – The share of SMEs performing a complete evaluation of customer contacts and forming database has increased in 2015 compared with 2005.

This premise was also confirmed. In 2005 this answer was chosen by 22.6% of respondents, in 2015 it was 28.6%.

P3 – The share of SMEs showing a certain randomness in their relationship with customer has decreased in 2015 compared with 2005.

This premise has not been confirmed. In 2005 this answer was chosen by 10.4% of respondents, in 2015 it was 17.7%.

P4 – SMEs applying a long-term CRM confirm an increase in the number of customers in 2015 compared with 2005.

The premise was confirmed. In 2005, 43.10% of SMEs reported increased number of loyal customers. In 2015, 60.5% confirmed an increase.

CONCLUSION

The share of respondents from Moravian-Silesian Region demonstrating knowledge of the term CRM has in the last 5 years a growing trend, as confirmed in our research among SMEs. In 2010, it was confirmed by 39%, in 2015 it was 78%. Verification of the hypothesis has indicated that there is a correlation between the size of SMEs and this knowledge. Question about the definition of CRM was used in both 2005 and 2015. Option A won in both mentioned years, in 2005 it was 59.4%, and in 2015 it was 64.18%. Respondents preferred a definition which says that CRM means “*establishing lasting relationships with customers, which delivers long-term value to both parties in this relationship*.” Most respondents are aware that permanent and long-term relationships are important, and closely connected with the creation of value for the customer and the value of the customer for the enterprise, as confirmed by Lošťáková *et al.* (2009). At the level of customer contacts, several positive changes took place between 2005 and 2015. The share of those who deal with the customer for themselves and record every contact (+7.2%). At the same time, the share of respondents who record the response of customers by a specialized department (+2.6%), and perform a full evaluation of contacts and create a database (+6%). Noteworthy is also the randomness of customer records, that was reported as increasing, which we did not anticipate. Companies expect after the introduction of CRM certain results. The most important result was in both surveys the increase in the number of loyal customers, which also determines the possible impact on the economic benefits of the system. Loyalty is closely related to customer satisfaction and trust in the business, which is reflected by recommending products and services to other interested parties. SMEs should implement CRM into their strategic marketing management, thus improving their business results and benefits for their customers, to whom they are closer than large firms. The respondents' answers revealed that the proportion of firms in which CRM has not brought the desired effect was low, and negligible was the share of those where the CRM failed. In today's highly competitive environment, no business can be successful without customer orientation, therefore the low number of CRM failure.

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