

**UNIVERSITY
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**The Power of CRM - Customer Management in The
General Hungarian Company Practice**

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Theses of the PhD Dissertation

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1. Defining the Problem and the Purpose

It is very important that we apprehend the tendency that in the case of those companies which operate in a competitive market the only token of subsistence and development is the continuous search for solutions that mean reform and competitive advantage. We can also state that these solutions ensure the desired benefits only temporarily, so we always have to be ready to change. One of the greatest and wide-spread innovations of the 80s and 90s was the use of company management systems. By the 2000s the leading positions could not be kept by these, as the concurrency had acquired the technology. Beyond that the facts that the product approach had been pushed into the background and the customer-centeredness had come to the front promoted the appearance of modern customer relations solutions and the development of CRM. Nowadays, customer management that is assisted by 21st century technology means the opportunity of competitive advantage.

The well-defined research problem – according to which there is a significant gap between the actual and the desired state of the Hungarian companies' customer management strategy, approach, culture, methods and preparedness – evolved on the grounds of my experiences that I got during my researcher and consultant work. Therefore the purpose of my research is to demonstrate this difference and present the trigger circumstances and causes, while I create a practically adaptable model. In order to achieve this, that is to collect and synthesize a complex factual knowledge and to create a practicable proposal system, I separated four main research purposes:

1. Creating a comprehensive CRM definition that later can be considered fundamental.
2. Elaboration of a general theoretical customer relations model that can be interpreted and regarded as appropriate in any industries by the thorough examination of the literature concerning customer relations management..
3. Conducting an empirical research in order to map the Hungarian firms' customer relations practice.
4. Creating a process model that assists the introduction of CRM-systems which can by effectively used in practice as well.

In the course of my research, the professional and other support of the University of Miskolc, Innovationmanagement Cooperation Research Centre and the Institute of Management Sciences of the Faculty of Economics meant great help.

2. Research Methodology

The process of the research can be visualised by the following figure.

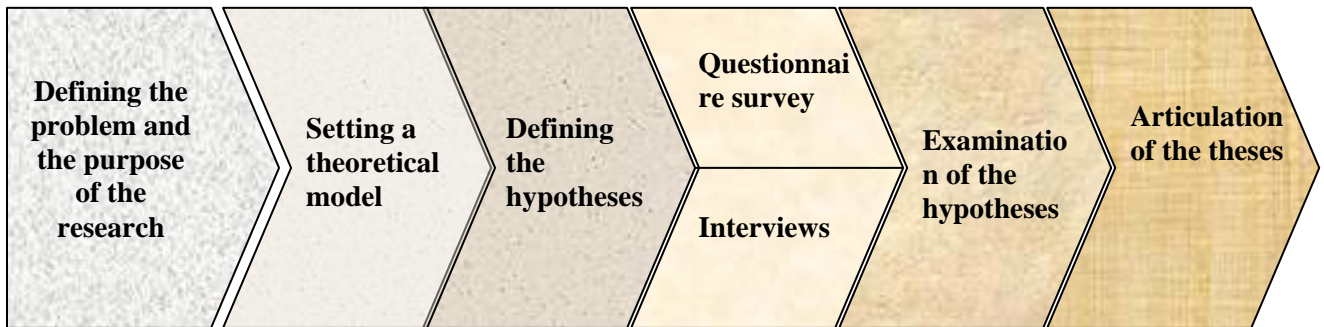


Figure 1
The Process of the Research

The structure of the dissertation also follows this. After the definition of the problems and the purposes of the research I made a theoretical model, and then I articulated the hypotheses, the analysis of which was based on questionnaires and interviews. In order to reduce the divergence between the theoretical approach and the practical examination I made a process model. After the accomplishment of the research I set up the theses that could be recognised in this topic and which are thought to be new and novel.

At the beginning of the dissertation in the course of the examination of the definitions I thought that it is important to collect the basic approaches by the theoretical and practical experts of this topic. It may result certain overlaps, but it can also provides the opportunity to reveal the differences, which enabled me to make up a complex and the most comprehensive work definition possible.

I tried to structure the summary of my hypotheses about the most effective method of customer management in a *theoretical model* which I based on the examination of wide range of the literature resources, in order to find an answer to the question that what the appropriate system is like. Certainly, I could not aim completeness in the literature summary, so I chose and presented those elements that provided the most suitable basis for making the model.

After I had made the theoretical model, I set up hypotheses, which I tested by a double empirical research, a questionnaire survey and interviews. As hypotheses mean prediction about the relation of two variables, these predictions must be verified that is the data that is gained from the survey must be examined in order to be able to decide whether they are right or wrong. According to Babbie (2001), a traditional scientific model has three main parts: conceptualisation, operationalisation and observation. Accordingly after the thorough examination of the literature, acquiring the possible theoretical knowledge, the articulation of a comprehensive definition, and the elaboration of a general customer relations system model I proceeded with the operationalisation. This essentially means that I had to have the questions to which I would like to get answers become measurable. Besides, this measurability must be achieved in a way that they appear as unambiguous and easily eligible alternatives to the companies that take part in the survey. Accordingly, I tried to make the

questions which I considered to be important analysable and the most easily tangible possible from the point of view of evaluation.

The questionnaire survey started at the beginning of July 2005 and ended on 30th September 2005. The response was voluntary from the companies that were asked. From the basic population of the Hungarian companies a 700 pieces planned sample was taken by random selection. The questionnaire was sent to these companies. 97 questionnaires were returned, which became the **examined sample**. After the closure of the research by examining the structure of the respondents from the point of view of activity and staff number I could state that the structure of the sample corresponds to the structure of the randomly chosen 700 companies; none of the groups were over- or under-represented. Therefore the sample is representative. It can be seen from the interval of the survey that lasted from July to September that the survey itself covers a relatively short time, so we can from a momentary picture concerning certain questions, yet it includes the opportunity of a repeated questionnaire by which we could detect the changes in the field of CRM very effectively. The distribution of the respondent companies according to sectors is the following:

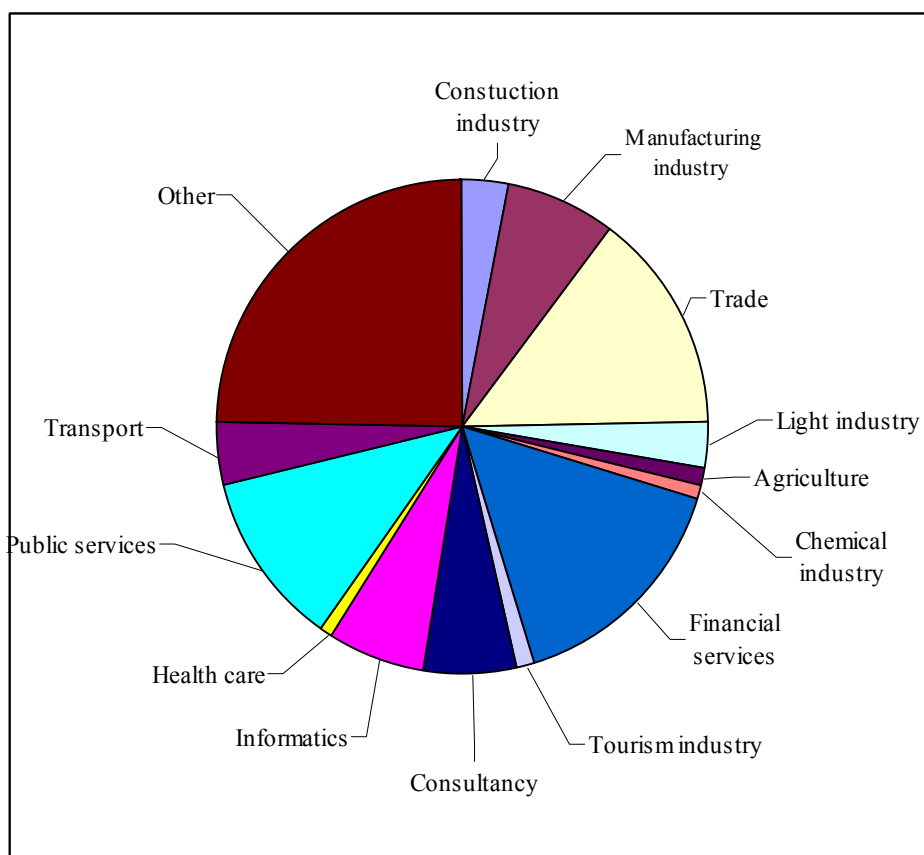


Figure 2
The Examined Companies' Field of Operation
Source: Csaba Mester

	<i>Frequency</i>	<i>Percentage</i>
<i>Building Industry</i>	3	3,1
<i>Processing Industry</i>	7	7,2
<i>Trade</i>	14	14,4
<i>Light Industry</i>	3	3,1
<i>Agriculture</i>	1	1,0
<i>Chemical Industry</i>	1	1,0
<i>Bank, Financial Services</i>	15	15,5
<i>Tourist Industry</i>	1	1,0
<i>Consultation</i>	6	6,2
<i>Information Technology</i>	6	6,2
<i>Health</i>	1	1,0
<i>Public Utility Services</i>	11	11,3
<i>Transportation</i>	4	4,1
<i>Other</i>	24	24,7
<i>Total</i>	97	100,0

Table 1
The Examined Companies' Field of Operation
Source: Csaba Mester

It can be seen from the distribution that the proportion of the companies that belong to the “other” category is significant, which is due to the limitation of the number of categories, as I could not create as many categories in which every company could have been classified. The proportion of financial companies, public utility services and trading companies is also significant, which may indicate that in the fields where the presence of numerous customers is characteristic the companies pay more attention to customer management, and they are more willing to respond in connection with this.

It is important to mention that in the summer of 2005 at the request of Frantisek Sudzina, employee of the University of Economics in Bratislava, Faculty in Košice, the complete questionnaire was translated into English, and a research project was launched in Slovakia, as well, in order to survey the Slovakian companies’ CRM situation. This parallel research provided a good opportunity for the comparison of a two neighbouring European Union member countries’ customer relations positions and to be able to draw the possible conclusions.

The basis of my questionnaire was the already mentioned theoretical model, which was introduced in the second chapter of the dissertation. In this way I developed a general picture of customer relations system which includes strategic, cultural, information technological process based and human approaches incorporating them into their best presumed place in the company system. The evaluation of the results of the survey was made by the help of the SPSS software, because this program package seemed to be the most suitable for the analysis of the data that comes from the structure of the research. The other part of the empirical research, besides the questionnaires, was a series of interviews with the leaders of four major companies, which operates in different branches of industry. The purpose of this was to complete, specify and deepen the results of the questionnaires. The four sectors from which the companies that took part in the interview came from were: production, financial services, information technology and public utility services.

3. Practical Results of the Research

According to my preliminary expectations articulated at the beginning of the research, after the completion of the research the examination of the hypotheses and the creation of an empirical model realised. This model is able to detect and analyse the weak points that occurs in the companies' customer relations system. Besides, one part of the expected results was a practical process model by the use of which the detected weak points can be eliminated and improving actions can take place. The system of the results of the research is presented in Figure 3.

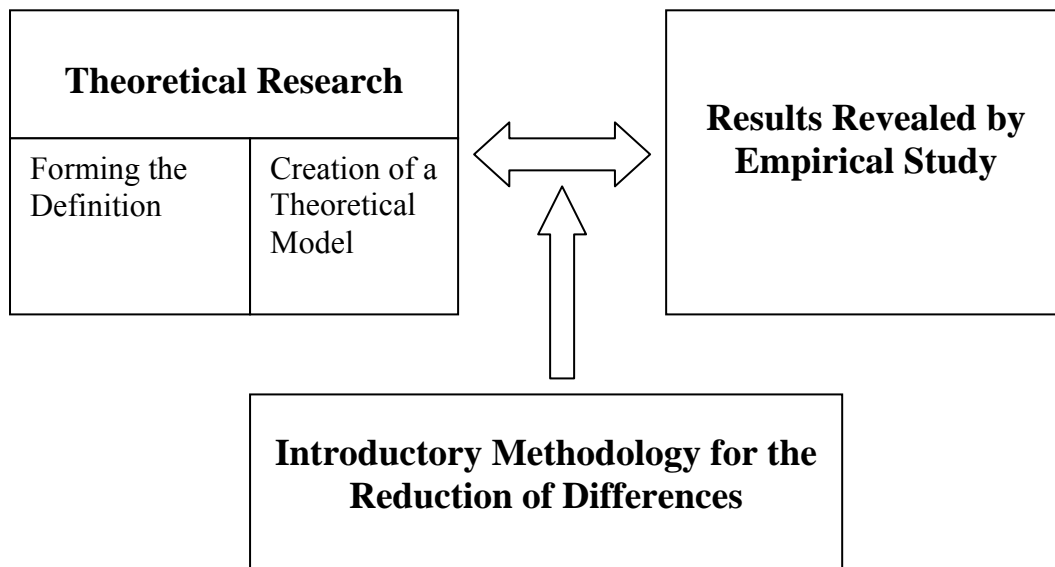


Figure 3
Solution and Result of the Research Problem
Source: Csaba Mester

Forming the work definition

I managed to separate five different approaches in the course of collecting and grouping the definitions that can be found in the literature. These are: marketing based, automatization aspect, customer value centred, customer centred and process approach.

After the study and interpretation of these types it was time to form the most complex and the most extended definition that had been made, which I interpreted as fundamental at the later phases of the research.

Model Creation by the Examination of Literature Resources

Studying the works, studies and analyses of theoretical researchers and practical experts and introducing those which are important regarding the creation of the model, I managed to set the theoretical model which contains the totality of the companies' customer relations system, connecting such other areas as human resource management, quality assurance, financial-controlling, project management, etc.

Three fundamental elements of the model are the analytic, operative and collaborative CRM components which include the front- and back-office fields that are beyond the marketing–sale–customer service triple the means of data analysis and storage, and the elements of the communication policy.

In the course of creating the theoretical model, it was revealed that the model was completely in line with the basis that was formulated by the work definition. As a result of the two approaches a harmonious theoretical picture has developed.

Conducting an Empirical Survey in order to Map the Hungarian Companies' Customer Relations Practice

The empirical study was made up by two parts: a questionnaire survey and interviews. The main aim was to make a snapshot which mirrors the state of customer relations of the Hungarian companies and verifies the assumptions that were articulated in the form of hypotheses before the survey in the course of which 97 companies were asked. It did not aim to serve as a representative sample of the whole Hungarian company range, as it would have exceeded the frame of this research. Yet the main motives were still traceable. The interviews, which were conducted at four companies, served as complements and specifications.

Developing a Methodology to Effectively Introduce the Most Suitable System

After the grounding research phase I began to work out a methodology that aims to approach the topic from the practical side, and sets out the tasks and processes that a company has to go through in order to have an up-to-date and competitive customer relations system. As a result, I created an 11 step process model that effectively supports the introduction of the system. This methodology is capable of helping the implementation of the most modern customer relations system, and eliminating the deficiencies which were revealed during the empirical survey.

Therefore I can say that I managed to get to the solution after I had examined the problem from different aspects, as it can be seen in the figure above. After the accomplishment of the research I formulated theses that can mean novel achievements and are verified by the theoretical and empirical models. I am going to present this in the followings.

4. Introduction of the Research Theses

AIMS AND ACHIEVEMENTS

H1: The fundamental of the hypothesis is that *most of the Hungarian companies deal with customer management on a strategic level that is beyond the operative considerations of the everyday work the long term approach also plays an important role concerning customer management in the companies' routine.* It means that although the management and improvement of customer relations on an operative level has great significance, we have to emphasise that the factor which influences the company's long term success fundamentally is the customer relations strategy, so it should be dealt with on a strategic level.

This statement is verified by the data that was gained from the analysis of the 12th and 14th questions of the questionnaire. The question was whether the company has a consciously elaborated and laid customer relations philosophy and strategy. The distribution of the answers can be seen in Figure 4. According to this, 27.8% of the companies have elaborated customer relations strategy and 61.8% says that even if the strategy is not elaborated, but there are certain elements in the company strategy concerning this topic. Thus however, only one quarter of the companies deal with this question strategically separately, if we examine the above mentioned two groups cumulatively we can see that 89.7% of the respondents deal strategically with the question of customer relations to some extent, and only 10.3% says that it is not necessary to regulate this field within the strategy.

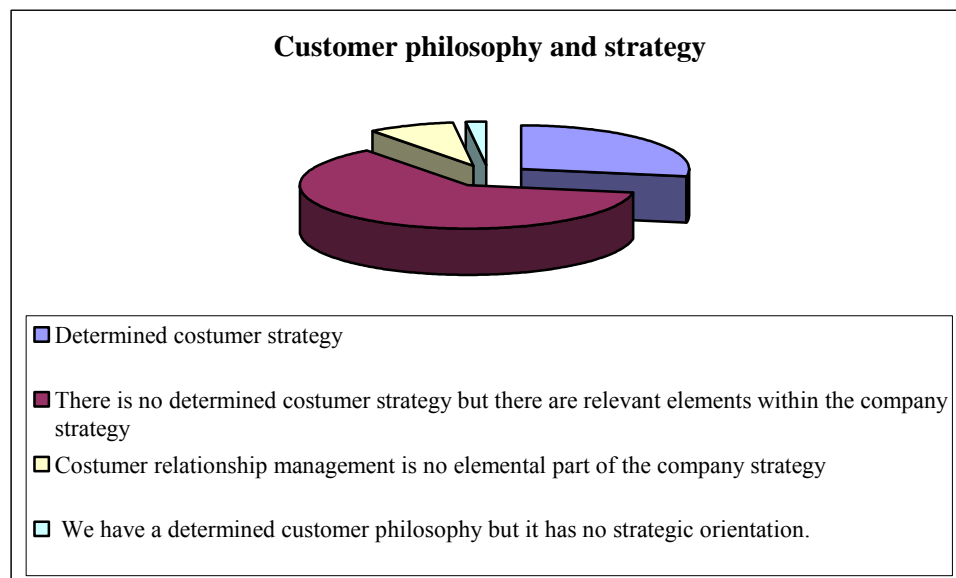


Figure 4
Customer Relations Philosophy and Strategy of the Companies
Source: Csaba Mester

After the analysis of the open part of question 12 concerning the sketching of the customer relation strategy we can say that the primary aim of the companies' customer relations strategy is keeping the customer satisfaction in view and satisfying customer demands as completely as possible. There is no doubt about that these aims confirm the importance of the strategic approach.

When I inquired about the concrete aims of the respondent company's customer relations policy in question 13, the answers harmonized with the experiences of the former question in many ways. The companies think that their main aim is to keep customer satisfaction at such a high level as possible. Besides, other strategically interpreted aims appeared, such as keeping the customers and getting new ones, which was articulated in almost every respondent's answer. By analysing and comparing the numbers that measures the developments that are planned in the field of customer relations in the next three years we can state that the companies thought that the employees' education (67.7%), the creation of new channels of communication (45.2%) and the introduction of computer system (39.8%) are the most significant developments in the next years. These one by one may emphasise the importance of the operative approach, but together they can be parts of a conscious strategy which aims to keep the customers and satisfying their needs at a high level in the long run.

By the analysis of the questions of the interview, concerning this topic, (CRM's place in the company strategy – see App. 5) we can state that every respondent company leader deals with customer relations management at a strategic level:

- For Alpha this area gets more emphasis because his monopoly status on the market is changing, thus it is vital to make customer management cost effective and “customer friendly” in order to prevent the loss of customers.
- The leadership of the Beta company thinks that customer centeredness is the fundamental motif of the strategy. The development of the CRM system serves this purpose.
- The managing owner of the Gamma company set the aim of creating a customer centred company which is important, because the company would not be authentic without this, as it also wants to sell CRM systems.
- In the case of Delta, we have to speak about a customer centred strategy; their slogan is: “We get our salary from the customer”. As it is an “A” label automotive industry supplier, the customers install its products without control; therefore they must not make any errors. They have a detailed strategy.

Comparing that the regulation of both the central position of the customer strategy and the customer relations management within the company strategy appears in the case of the companies, and the respondents take steps to develop customer management on a strategic level, it is confirmed that the companies interpret customer management on a strategic level and formulate aims concerning this.

T1: H1 hypothesis, according to which most of the Hungarian companies deal with customer management on a strategic level, can be regarded as confirmed.

H2: According to the hypothesis, there is a correlation between the introduction of the CRM system considered to be successful by the stakeholders and the improvement of the company's market position.

The successful implementation of a CRM system play a crucial role in the improvement of a company's market positions, as without the system customer management happens in an ad hoc and uncontrolled way, without the exploitation of the advantages that come from the conscious customer relations operation. The 65th question of the questionnaire assisted in the verification of this statement. Accordingly, the standard of successful implementation was the declaration of those companies that had already introduced the system; that is the statement whether the respondent company leaders considered the implementation to be successful or

not. They can judge it on a Likert-scale, where they could score their company from 1 to 5, whether the following statement was true or false: “The introduction of the CRM solution was successful”.

The improvement of the company’s market position was defined via the following question: “The company’s market position has improved by the implementation of the CRM system”.

17.6% of the companies answered the question that inquired about the successfulness of the implementation of the CRM system. The main reason for this low proportion is that in the sample the proportion of those companies that had implemented the CRM system was low, only 21.6%. As the sample was random, this, in turn, implies that this may be the proportion of the companies that operate a modern and complete customer relations system in the whole Hungarian economy. By examining the proportion of those who answered this question we get the following results: 82% of the respondents consider the implementation successful and only 6% think otherwise. 12% do not have information about the question.

We can see the answers concerning the improvement of the market position in Table 2. We can make the same statement about the number of respondents as in the case of the former point. After the summing up of the reactions we can state that almost a half of the respondents said that his company’s market position improved after the implementation of the system. A relatively big proportion, about 42%, could not make statements in effect, so probably the proportion of improvement exceeds 50%.

	I definitely agree*	I agree*	I do not have information*	I do not agree*	I definitely do not agree*
The company’s market position has improved by the implementation of the system	11,76%	35.29%	41.18%	5.88%	5.88%

*in the proportion of the respondents

Table 2
Opinion about the Company’s Market Position After the Implementation of the CRM system

Source: Csaba Mester

By examining the relationship between successful implementation of CRM solution and the indicator question that measures the improvement of the market position we face that there is a moderately strong correlation between the two presuppositions on a 5% significance level, as the rate of the Pearson index is 0.571. Thus the hypothesis that the improvement of a company’s market position depends on the successful implementation of a CRM system is confirmed.

Those companies that took part in the interviews could make fewer statements about the achievements of the CRM system (The achievements of the CRM system – see App. 5), because many of them have introduced it recently. However, one of them (Alpha) reported about cost reduction and more effective service that was realised by the implementation of the Call Center. It is revealed (Purposes of the Operation of the System –see App.5) that the leaders contribute an important market influencing role to the customer management solutions, because they want to achieve bigger and more satisfied clientele, more effective

service and customer centred developments by its operation. Consequently, these answers also confirm the results of the questionnaire survey.

T2: H2 hypothesis according to which **when a company's stakeholders consider the implementation of a CRM system successful, the system has usually a positive effect on the company's market position** is confirmed.

FIELDS AND ACTIVITIES OF THE CRM

H3: According to the hypothesis, **in customer management besides the fields of marketing, sales and customer service, which are considered to be in close association with it, activities concerning quality of the product or service which are generally thought to be not so closely connected to customer management also play a determining role.**

It is a vital or even strategic question in connection with customer relations management that which fields are thought to belong to this by the company leaders. On what level they deal with the questions of customer management depends on this. The more activities are thought to be in connection with it, the higher priority it gets in the company strategy. According to the hypothesis, besides the function of marketing, sales and customer service that are identified with customer management, the activities concerning quality that are important for the preparation of the products or services is connected to this area in the leaders' mind. The 28th question of the questionnaire aimed to prove this. The respondents had to choose the most acceptable options from the 9 fields of function of a company that were listed in the question.

93% of the respondents expressed their opinion. In the following I examine the distribution in the proportion of those who gave rateable answers (the above mentioned 93%).

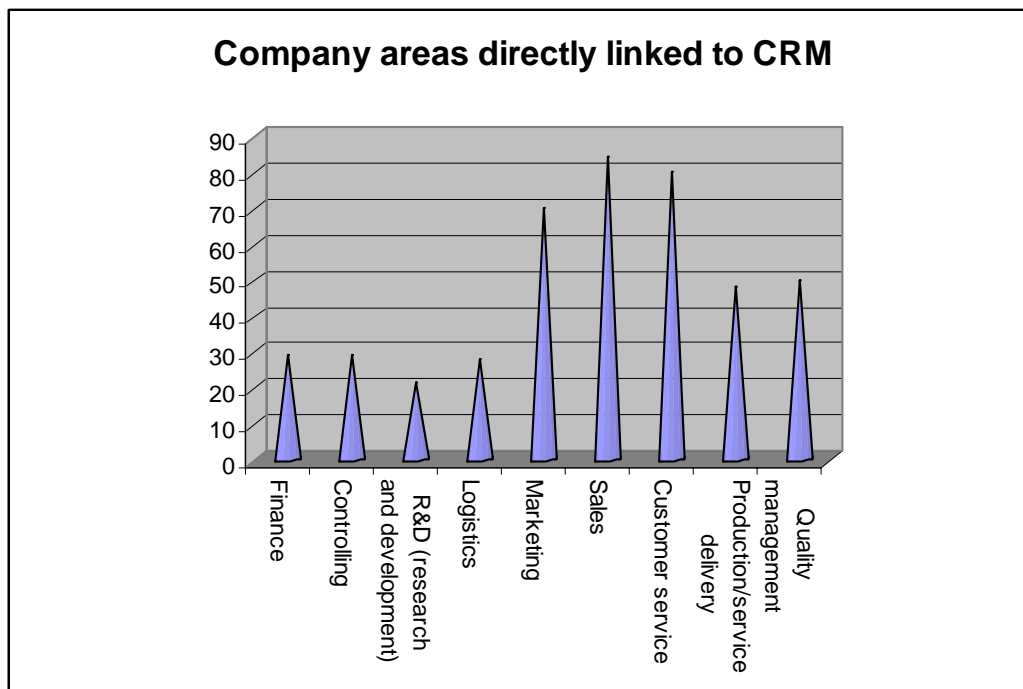


Figure 5
The Fields that are Considered to be Closely Associated with CRM
 Source: Csaba Mester

Confirming the technical literary approaches we can see in the Diagram above that more than two third of the companies thinks that marketing, sales and customer management are the most closely associated fields to CRM. I tried to review and demonstrate the distribution and distance of the examined fields by the method of multidimensional scaling, which I managed to visualize well by the SPSS. This can be seen in Figure 6. We can identify three definitely separate groups. It can be clearly seen that the fields of sales, marketing and customer service are located very close to each other, so those who marked one of these fields usually marked the other two as well. The set in which quality control and production/service are thought to belong to CRM are closer to the first group. Consequently these two functions also move together, and we can say that on the basis of their frequencies the marketing–sales–customer service triple can be regarded as the fundamental fields of CRM; and the quality control–production/service duet is the first “shell” around the “core” that is the functions that belong to CRM in a wider sense. The group that lies the farthest from the “core” and contains the finances–R+D–logistics–controlling quartet can be regarded as the second shell that is the widest interpretation of the fields of functions that belongs to CRM.

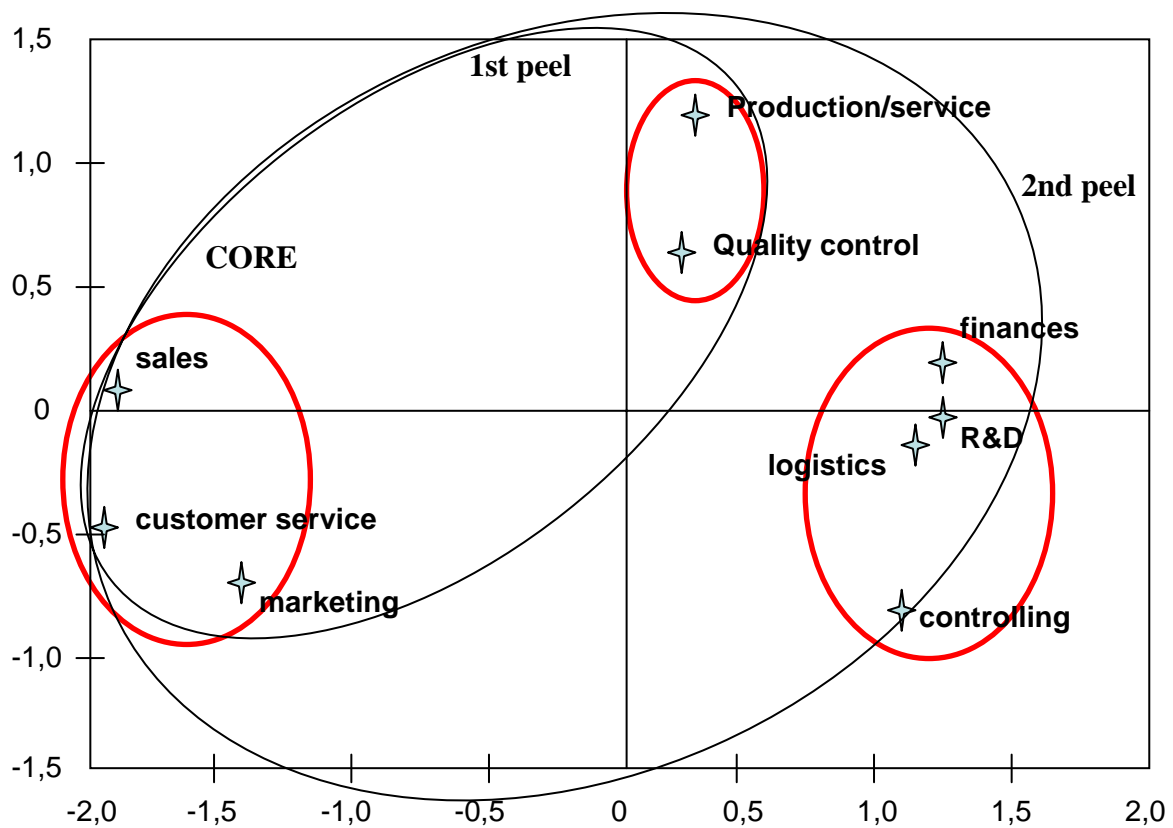


Figure 6
Examination of the Distribution of the Fields Included by Multidimensional Scaling
 Source: Csaba Mester

As the quality of the product or service is primarily determined by the production/service and the quality assurance, and these fields were highly rated in their proportion, we can state that the empirical studies supports that companies think that besides sales, customer service and marketing, which most of all are considered to be the fields of function of CRM,

production/service are also thought to be highly influential in customer relations, furthermore, in almost equal proportion.

Some information that confirms the hypothesis was heard in the interviews as well (Purposes of the Operation of the System and Feedback about the Customer Attendants' Efficiency and Personal Performance Evaluation in the Fields of CRM– see App. 5). Accordingly Alpha wants to increase the level of its commercial activity that is its service by the operation of the system; and Beta formulated the same aim. Delta aims to increase customer satisfaction by communicating the causes of the possibly emerging errors and product development commonly with the customers. In order to achieve this, Alpha's employees re-listen certain calls of the Call Center, and give evaluation and set development points on the basis of these. Delta tries to improve quality on the basis of customer feedback. All these show that fields concerning production, service, and quality assurance have increased significance in customer management.

T3: H3 hypothesis according to which in customer management besides the fields of marketing, sales and customer service, which are considered to be in close association with it, activities concerning quality of the product or service also play a determining role is confirmed.

H4: According to the hypothesis, in the case of most Hungarian companies, not a whole CRM system only a part of it is implemented, but the implementation of a complex CRM system covered at least the fields of marketing, sales and customer service.

CRM systems are the most effective when they operate together as a system. The three identified fields of information technology that belong to the system (they can be called modules) are the collaborative, interactive and analytic CRM. Simultaneous implementation and operation of the three fields is not crucial, yet the output is the biggest in this case. In Hungary we can find examples to both cases. According to my experiences, regarding all Hungarian companies the proportion of those companies that, because of deficiencies in their approach or capital scarceness, do not use a complex system to support their customer relations is much higher. I confirmed this statement on the basis of the 40th and 56th questions of the questionnaire.

H4a: In the case of most Hungarian companies, not a whole CRM system only a part of it is implemented.

H4b: But the implementation of a complex CRM system covered at least the fields of marketing, sales and customer service.

11.3% of the respondents did not answer the 40th question. If we take the respondents as 100%, we find that 55.8% of the companies have analytic, 80.2% operative, and 61.1% interactive or collaborative subsystem (see Table 2). We can conclude that about a half of the Hungarian companies use a complex solution. In order to prove this we have to filter out the companies that use the three modules together, which we can do on the basis of the information of Table 3.

	Frequency	Percentage of the Asked Companies	Percentage of the Respondents
Analytic	48	49,5%	55,8%
Operative	69	71,1%	80,2%
Interactive	53	54,6%	61,6%

Table 3
Composition of the Companies' Consumer Relations System
Source: Csaba Mester

Examining those that use the different systems together we find that altogether 29 respondents marked all the three modules. This is 33.7% that is about one third of the companies if we exclude those that did not answer this question. At the same time this means that some two third of the Hungarian companies (that is the considerable majority) do not use complex customer relations solution in their customer management activity.

			Does the company's customer relations system have an Operative part?					
			Yes			No		
			Does the company's customer relations system have an Interactive part?		Total	Does the company's customer relations system have an Interactive part?		Total
			Yes	No		Yes	No	
Does the company's customer relations system have an Analytic part?	Yes	Frequency	29.0	10.0	39.0	1.0	8.0	9.0
		Line %	60.4	20.8	81.4	2.1	16.7	18.8
		Column %	65.9	40.0	56.5	11.1	100.0	52.9
	No	Frequency	15.0	15.0	30.0	8.0	-	8.0
		Line %	39.5	39.5	79.0	21.1	-	21.1
		Column %	34.1	60.0	43.5	88.9		47.1
Total	Frequency		44.0	25.0	69.0	9.0	8.0	17.0
	Line %		51.2	29.1	80.2	10.5	9.3	19.8
	Column %		100.0	100.0	100.0	100.0	100.0	100.0

Table 4
Complexity of the Company Customer Relations System
Source: Csaba Mester

It is also revealed from Table 4 that about two third (60.4%) of the users of the analytic system use the other two modules as well: 20.8% use only the operative system, but they do not use the collaborative one, and 2.1% implemented the collaborative/interactive module as a complement. 16.7% of the users of the analytic part have not introduced any other system modules so far. On the grounds of this we can point out that if the companies decide to use the analytic module, they will implement the other modules as well in big proportion.

42.1% of those who use the operational solution use also the analytic and the collaborative part. 14.5% of the users of the operative system did not implemented collaborative module, only the analytic one. 21.7% of the users of the operative CRM introduced only interactive

module, and the proportion of those who use only the operative CRM in their company operation is the same. 65.9% of the respondents who have operative and collaborative subparts use the analytic solution.

The number of those who introduced a complex solution came out at 54.7% among those who use the collaborative CRM. The proportion of the companies that do not have operative only collaborative CRM, and beside use an analytic system as well is only 1.9% among the users of the interactive system. 28.3% is the proportion of those who implemented the collaborative and the operative system together on the circle of the implementers of the interactive CRM. 15.1% of these companies do not use any other modules.

In the case of the H4a hypothesis we can say that about a half of the Hungarian companies have some kind of CRM solution, but these are not complex systems, and the proportion of those who reported about the implementation of every component is about one third. In the case of the companies that introduced more than one modules the most common is the use of the operative and the analytic parts, this is followed by the symbiosis of operative and collaborative CRM, and the collaborative–analytic pair is little significance. In the possession of these empirical data we can tell that most Hungarian companies do not implement a complex CRM system, only some parts of the system.

A modern CRM system worked only in the case of two respondents of the interview; the other two companies supported the customer management functions by the use of their company management system (SAP). In the case of the other two respondents the implementation was on the way (it is a rather long, one-year-project), but neither of them could report a full coverage (Present Activities that Aim to Change Customer Relations System, Processes of the Customer Relations System – see App. 5). This supports the results of the questionnaire survey.

The H4a hypothesis can be considered confirmed on the basis of the data.

In the 56th question I surveyed the fields of function that were examined in connection with the implementation of the CRM solution. The summarised results can be seen in Table 5.

Examined Fields									
	Finances	Controlling	R+D	Logistics	Marketing	Sales	Customer Service	Production/ Service	Quality Control
Yes	42.9%	38.1%	33.3%	33.3%	90.5%	85.7%	90.5%	47.6%	47.6%
No	57.1%	61.9%	66.7%	66.7%	9.5%	14.3%	9.5%	52.4%	52.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5
Fields of Function that are Affected by the Implementation of CRM
Source: Csaba Mester

On the basis of Table 5, we can state that 90.5% of the implementers of CRM involved marketing, 85.7% involved sales, and 90.5% involved customer relations. Besides, finances, production/services and quality control appeared in the case of almost a half of the companies; and one third of the respondents mentioned logistics, R+D and controlling.

On the basis of further analyses, we find that two third of the respondents touched all the three fields of function on the course of the implementation of the CRM system wholly or partly. This is a very significant proportion, and it becomes more significant if we more closely examine those cases when one or two fields were involved. On the whole we can assert that the companies mostly use the three fields together, because the proportion of the respondents who involved sales and customer services without marketing in the CRM solution is only about 9.5%. The same proportion of the respondents declared that the marketing and sales pair was involved without consumer service. In 14.3% of the cases marketing and customer service appeared together. None of the respondents involved only marketing in the implementation. We can say the same about customer service and sales; that is the three fields did not appeared separately.

Among the examined company fields marketing, sales and customer service appeared in a prominent proportion, but other functions were also dominant. Analysing these three fields we can say that at least two third of the respondents included all these in the partial or whole implementation of the CRM solution, and this proportion increased when we examined the involvement of at least two of the three fields. This can be regarded as significant proportion, so we can state that the whole and partial implementation of the CRM system covers at least the fields of marketing, sales and customer service.

I examined the question narrowing it to the respondents who had implemented a complex system. In the course of this investigation I selected those people who marked all the operative, analytic and collaborative fields in the frame of the customer service system operated by the company. Within the scope of this narrowed group I searched for the answer that which fields of functions were included during the introduction of the system.

Involved Fields	Proportion of Involvement
Marketing	90.9%
Sales	72.7%
Customer Service	90.9%

Table 6
Involved Fields in the Course of the Implementation of a Complex CRM System

Source: Csaba Mester

It can be well seen in Table 6 that among the implementers of a complex CRM solution the involvement of all the three fields is very high, and besides, in fact all the respondents of the interviews mentioned the role of sales, marketing, and customer service. This emerged mostly in connection with complaint management, searching for and getting new customers and the operation of the Call Center and personal customer services (that deal with the especially important customers). (Several blocks of questions – see App.5)

Consequently, we can state that both H4a and H4b hypotheses can be regarded as confirmed; and we can formulate the T4 thesis:

T4: H4 hypothesis according to which in the case of most Hungarian companies, not a whole CRM system only a part of it is implemented, but the implementation of a complex CRM system covered at least the fields of marketing, sales and customer service can be regarded as confirmed.

H5. According to the hypothesis, the customer relation system of the companies that realize more than 3 billion Ft turnover has an operational and an analytic part, and where the analytic component is present, data analysis is dealt with purposefully.

My experiences in connection with customer relations management showed that the bigger companies had already reached the level of development that they use a relatively modern or simple operative and analytic system to support their customer management. Presumably, if the companies collect the customers' data, they will apply some resources to analyse them and to use it in the company's business, as data analysis offers an opportunity to realize a considerable profit for the company. According to my experiences, in the case of the Hungarian companies it is the turnover of about 3 billion Ft that means a limit above which the division of the fields of function takes place, thus the fulfilment of the tasks is carried out on a higher professional level. 49.5% of the respondents were companies that have more than 3 billion Ft turnover, so the examination of this group was relevant. For the purpose of verification I divided the Hypothesis formulated above:

H5a: The customer relation system of the companies that realize more than 3 billion Ft turnover has an operational and an analytic part.

H5b: Where the analytic component is present, data analysis is dealt with purposefully.

In order to confirm the H5a hypothesis, I had to sort out those companies that have more than 3 billion Ft turnover. The 40th question again provided an opportunity to survey the subparts of the customer relations system. The results can be seen in Table 7.

Components	Proportion of Users
Analytic	56.8%
Operative	81.8%
Collaborative	61.4%

Table 7
Components of the CRM System of the Companies that Have more than 3 Billion Ft Turnover

Source: Csaba Mester

According to the results of Table 7 it can be regarded as confirmed that the customer relations system of the companies that realize more than 3 billion Ft turnover mostly has an analytic and an operative part, as both proportions far exceeded the half of the number of respondents, we can talk about considerable majority.

On the basis of the results of the interviews, we can say that all the respondents mentioned the front-office tasks that belong to the operative CRM. Besides, it was revealed that in the case of Beta, the implementation of an analytic CRM is on the way, and besides, they have quite developed facilities for analysis. It had already taken place in the case of Gamma. Certain modules and the customer data base of the SAP were available for Alpha and Delta. (Present State and Characteristics of the Customer Relations Operation, Changes/Developments in the System, Information Technological Basis of the Customer Relations System) Along with the results of the questionnaire survey, these confirm the H5 hypothesis.

H5a: Confirmed on the basis of data.

To confirm H5b hypothesis we have to examine several questions. 41st, 46th, 50th 51st and 52nd questions of the questionnaire contains information concerning this. By examining question 46th it was revealed that 60% of the respondent companies have a computer system that supports customer relations, besides, 14.6% plans to implement one, which is a considerably high proportion. Besides, 56.8% have a working data warehouse, and further 12.5% plans to implement one, which is also an important aspect of effective customer relations operation. However, analysing the answers to the 50th question it was revealed that only 42% of the respondents employ a group or person who deals with data analysis purposefully. In connection with the 51st question we could examine to what purpose the companies use the analytics. This can be seen in Table 8.

Purpose of Customer Data Analysis	Proportion of Users*
Product Sale Analysis	33.3%
Analysis of Products and Services on Sale	28.2%
Customer Segment – Analysis of Approved Instruments Preference	46.2%
Detection of Latent Product Demand	17.9%
Customer Satisfaction Analysis	76.9%
Efficiency Analysis of Trading Area	61.5%
Web-Shop Analysis	0%
Other	2.6%

*In the case of respondent companies over 3 billion Ft turnover.

Table 8
Purposes of Data Analysis of the Companies Over 3 Billion Ft Turnover

Source: Csaba Mester

It excels from the results that the companies use customer data analysis mostly for customer satisfaction surveys and analysis of sales efficiency. The former purpose roots in the requirements of the ISO quality control system that has probably been implemented in the companies of this size. The later one means simply the score of the sales efficiency. We can conclude this from the fact that the proportion of application of the other fields which greatly correlate to these is low. Thus we can state that the companies do not capitalize the wide range of opportunities provided by data analysis; and they make only the necessary or the simplest analytics on the course of their operation. It is also supported by the fact that if we examine the correlation between the existence of the analytic and operative systems, and the existence of a data analysing group, the Pearson-index is only 0.217, which is a rather weak rate. This is a very big deficiency by the supplement of which a significant efficiency growth could be achieved.

The answers of the respondents of the interviews did not supported the H5b hypothesis, because in the case of Beta, mainly selection was present; they expected more significant opportunities for data analysis by the further system implementations that took place in the period of the interview. Gamma does not even have statistics about the complaints. The employees of Alpha do not use inquiries willingly, because it can be done with difficulty by their system, as only the central department that is responsible for the processes (SIC) has access to the data. (Present Situation and Characteristics of Customer Relations Operation – see App 5) These prove the deficiencies of the application of data analysis.

The H5b hypothesis cannot be regarded as confirmed by the results of the questionnaire and the interviews.

As H5a is confirmed, and H5b is not confirmed, we can formulate the T5 thesis:

T5: According to the thesis, the customer relation system of the companies that realize more than 3 billion Ft turnover has an operational and an analytic part, but the proportion of those companies that use data analysis purposefully is still small.

H6: According to the hypothesis, the companies that do not have a CRM system are not aware of the value of their customers that is they cannot identify the profitable customers and cannot estimate the life expectancy of their customers and the causes of customer drop-out. The companies that use a CRM system are able to do these.

The companies that have a modern customer relations system get much information that would not be possible without a CRM solution. Accordingly, the companies that do not have a CRM system get a considerable competitive disadvantage, as they cannot generate many data concerning their customers by lack of suitable back-up.

In order to confirm the hypothesis I had to select those companies that had none CRM system that is they did not use either full or partial solution. The proportion if these was 11.3% among the respondents. The companies that have a modern CRM system made up 21.65% of the sample.

On the basis of the 29th question of the questionnaire I conducted a survey to reveal what kind of measurements the companies that do not operate a CRM system made and what kind of registration they keep. The results can be seen in Table 9, which squarely reflect that there are

only two prominent fields: keeping record of the number and proportion of the present and new customers. However this is used by less than half of the members of this group. The other fields lag behind more, and the proportion of those who make these measurements is irrelevant. This confirms that the companies that do not have a CRM system cannot identify either the customer drop-outs or the causes why they do not have resort to their services any more. Contrarily, among the users of a CRM system these proportions that were measured in the former group at least doubled in every case, and there were some indexes where the proportion more than tripled. By the implementation of the CRM solution the development of the target groups is examined consciously and effectively. This is visualized in Table 10.

Types of Measurement and Registration	Proportion of Users
Number and Proportion of New Customers	36.4%
Number and Proportion of Present Customers	45.5%
Number and Proportion of Customer Drop-outs	27.3%
Customer Profile Analysis	27.3%
Customer Loyalty Analysis	9.1%
Frequency of Contacts	0%
Product Scale Analysis	27.3%
Customer Behaviour Analysis	18.2%

Table 9
**Types of Measurement and Registration in Connection with Customers Among the
Companies that Do Not Use a CRM System**

Source: Csaba Mester

Types of Measurements and Registrations	Proportion of Users
Number and Proportion of New Customers	71.40%
Number and Proportion of Present Customers	90.50%
Number and Proportion of Customer Drop-outs	52.40%
Customer Profile Analysis	57.10%
Customer Loyalty Analysis	33.30%
Frequency of Contacts	57.10%
Product Scale Analysis	61.90%
Customer Behaviour Analysis	42.90%

Table 10
**Types of Measurement and Registration in Connection with Customers Among the
Companies that Use a CRM System**

Source: Csaba Mester

As the proportion of those who do customer profile analysis, customer behaviour and customer loyalty is minimal, we can state that the companies that belong to this group are not aware of the value of their customers. This is supported by the information obtained by the processing of the 18th question, according to which, only 27.3% of the companies in this group segment their customers, and 18.2% deals with prominent customers, yet without segmentation, and 54.5% do not interpret customer segments at all. Contrarily, only 4.76% of the owners of a CRM system do not segment, 47.62% deal with prominent customers without segmentation, and the same proportion create customer segments. This difference also represents well the effects of a customer relations system in customer management.

In the course of the examination of the 19th question it was revealed that 91% of the companies that do not operate CRM do not interpret customer life cycle. We find similar differences as is the former case, as in the group of the users of CRM 38.1% (almost quadruple of the other examined segment) keep count of customer life cycle.

All in all we can state that because of the fact that the companies that do not use a customer relations system do not make customer relations measurements and registrations, hardly interpret customer segments and do not measure customer life cycle, these companies are not aware of their customers' value that is they cannot identify profitable customers and cannot estimate their customers' life expectancy and the causes of customer drop-out. Besides, in the case of the CRM owner companies, the situation is much more prosperous, as they mostly make the basic analyses, and the examination of the special fields is also realised in a big proportion.

During the interviews it was revealed that Alpha's SAP-ISU system is suitable for the segmentation of customers campaigns can be launched from it and it can be used for customer

assessment as well. Beta has a data warehouse, and its system is capable of an extensive analysis of the customer data that is stored in it, a wide scale survey, and the assessment of customers. They can also detect the causes of drop out by the analysis of customer behaviour. Gamma practises a personal customer management. In this company the data cannot be analysed in such depth, but the key-account managers are able to draw conclusions. Delta analyses its customers deeply and soundly by the help of SAP, and it knows the value of its small number of customers exactly. (Information Technological Background of the Customer Relations System – see App. 5) The answers confirm the H6 hypothesis.

T6: The H6 hypothesis according to which the companies that do not have a CRM system are not aware of the value of their customers that is they cannot identify the profitable customers and cannot estimate the life expectancy of their customers and the causes of customer drop-out. The companies that use a CRM system are able to do these can be regarded as confirmed.

HUMAN INFLUENCE IN CONNECTION WITH THE CRM SYSTEM

H7: According to the hypothesis, the launching of a project that aims to implement a CRM system in the majority of the cases happens because of market competition as an external factor, but as the top management supports the project in the planning and the execution phase on a high level, it serves an internal factor.

Constant development of the companies' customer relations solutions is essential in the strongly competing markets nowadays. It is motivated by market competition. One of the greatest pitfalls is the loss of the management's support. If we divide the hypothesis:

H7a: The launching of a project that aims to implement a CRM system in the majority of the cases happens because of market competition as an external factor.

H7b: The top management supports the project in the planning and the execution phase on a high level.

In connection with the examination of the 54th question that dealt with the causes of the implementation of the CRM system it was revealed that 70% of the companies in the sample were motivated by the increasing market competition to launch the project. Merely 5% was the proportion of those who refused to answer.

As a result of the analysis of the questionnaires it can be stated that the implementation of CRM systems is mostly motivated by the market competition. This is supported by the data of the interviews according to which the development of the system started because of the market pressure. In the case of Alpha, the already mentioned liberalisation was a powerful cause. The management of Beta also intends the CRM to be the basis of improvement. Gamma is going to acquire new customers and serve the present ones better. Delta wants to serve its customers effectively because of the strong competition that is the characteristics of the industry. (Purposes of the Operation of the System, The Antecedents of the Customer relations Management System – see App. 5) The H7a hypothesis can be regarded as confirmed by these.

In connection with the 59th and 60th questions I examined the degree of the top management support in the planning and execution phase of the project. I visualised the results in Table 11 and 12.

Supporters of the CRM System in the Planning Phase

Participant	Full Support	Partial Support
Top Manager	78.9%	15.8%
Middle Manager	63.2%	31.6%
Employee	38.9%	44.4%

Table 11
Source: Csaba Mester

Supporters of the CRM System in the Implementation Phase

Participant	Full Support	Partial Support
Top Manager	70.6%	17.6%
Middle Manager	64.7%	29.4%
Employee	52.9%	47.1%

Table 12
Source: Csaba Mester

These questions were answered by the 80-90% of the respondents. In the proportion of the respondents we can see that the support of the top leaders is very strong in both phases of the project. The proportion in the planning phase slightly exceeds the other one, but the support of any level is around 90% in both cases. It also excels that the top managers' support exceed that of the middle managers', and the proportion is the smallest in the case of employees, but in fact this cannot be considered to be negative. The interviewees that had information about the implementation of the CRM solutions reported a very high top management support. This emerged especially in the case of Beta and Gamma. The developments of the other two companies had taken place much earlier, but its leaders also thought that supporting customer management was significant. (Role and Place of CRM in the company's Strategy – see App. 5) After these examinations it is verified that the top managers' support is significant in both the planning and the implementation phase, so the H7b hypothesis can be regarded as confirmed.

T7: The H7 hypothesis according to which the launching of a project that aims to implement a CRM system in the majority of the cases happens because of market competition as an external factor, but as the top management supports the project in the planning and the execution phase on a high level, it serves an internal factor can be regarded as confirmed.

H8: According to the hypothesis, **the companies in the case of which we can speak about profitable customer relations management use financial and moral incentive to the employees that work in the fields of customer relations.**

According to the hypothesis, human factors have a very significant effect on the quality level of the customer relations system. Reversing this, a solution functions well if the workers who deal with the customers support it and aspire to the perfect use. This mostly appears if the person participates in the system and is motivated properly. In order to confirm the hypothesis, we have to determine what we mean by profitable customer relations management. We can determine its basic parameters by the 65th question of the questionnaire. These are the following:

- Without the development of the customer relations the company would have got into a competitively disadvantageous situation in the market.
- By the implementation of the CRM system the profit of the company has increased.
- After the implementation of the customer relations solution the standard of customer management has increased.
- By the implementation of the CRM system the customers' commitment to the company has increased.
- By the implementation of the CRM system the efficiency of marketing actions has increased.
- By the implementation of the CRM system the company's cost effectiveness has increased.
- By the implementation of the CRM system the company's position has improved.
- By the implementation of the CRM system the number of customer drop-out has decreased.

We can see the visualisation of these parameters in Table 13.

Parameters	Proportion of Fulfilment in the Percentage of Respondents
After the implementation of the customer relations solution the standard of customer management has increased.	70.6%
Without the development of the customer relations the company would have got into a competitively disadvantageous situation in the market.	72.2%
By the implementation of the CRM system the number of customer drop-out has decreased.	76.4%
By the implementation of the CRM system the profit of the company has increased.	7.%
By the implementation of the CRM system the efficiency of marketing actions has increased.	47.1%
By the implementation of the CRM system the company's cost effectiveness has increased.	41.1%
By the implementation of the CRM system the customers' commitment to the company has increased.	46.6%
By the implementation of the CRM system the company's position has improved.	47.1%

Table 13
Parameters of an Effective Customer Relations System and their Realization
Source: Csaba Mester

As it can be seen the first four parameters concerning the effective operation of the system were realized in operation in a very high proportion. In the case of the four components in the second group we find smaller rates, which can be attributed to the fact that a significant number of the respondents marked the "I do not have information about it" option that is they were not in the position to take a definite stand. So I conducted the examination by taking the first four parameters into consideration. I selected the respondents who operate a successful customer relations system. On the basis of these four parameters a new variable was created in which the operators of a successful and a less successful CRM system could be separated. I examined the correlation between the use of a successful solution and the type of motivation. As a result of the investigation we could face surprising data. According to this there is a relatively weak correlation between successful operation and motivation. Although 62.5% that is almost two third of the users of successful customer relations solution applies moral incentive, financial incentive appears only in 43.8% of the cases. This means that the

operation of a successful customer relations system does not necessarily correlate to financial motivation, but rather to moral one. Accordingly the H8 hypothesis must be rejected that is the companies who operate a successful customer relation solution do not necessarily use financial motivation in the case of its employees that deal with customer management. This is supported by the answers of the respondents of the interview, according to which, positive and negative motivation appears only in the case of Alpha; it is not characteristic to the other companies. (Customer feedback in connection with customer attendants' efficiency and personal assessment in the field of CRM – see App. 5)

T8: After the examination of the H8 hypothesis it was revealed that the data do not support the assumption, and the following thesis can be considered confirmed: **the companies in the case of which we can speak about profitable customer relations management do not necessarily use financial and moral incentive to the employees that work in the fields of customer relations.**

CHANNEL POLITICS

H9: Great majority of the companies that realize more than 3 billion Ft turnover and work in the fields of finances or public utility have a Call Center, E-mail customer service, Web accessibility and personal customer service, although only a small proportion of these companies are able to consciously realize the significant cost benefits, because only a few of them examine to what extent the customers use these channels of communication.

Channel politics is a very significant question in the point of customer relations, as it is a determining factor in customer satisfaction and thus loyalty whether the customer finds the most suitable way to contact. That is why the companies with a considerable number of customers such as public utility services or financial service companies (e.g. banks and insurance companies), to whom it is important that the customer relations channels function on the highest level possible, try to provide many facilities to the customer and to direct the service towards those that allows cheaper and faster administration unnoticed. The companies are capable of achieving considerable cost benefits by this. Certainly, the wide range of customer relations channels can be assured if the company has proper financial background, as the necessary equipments and technologies are very expensive (installation of a call center, etc.), so the experience shows that the companies under 3 billion Ft turnover are less capable to purchase these. Besides, as I have already mentioned in connection with the T3 thesis, in the case of the Hungarian companies, considering the phases of company growth it is the turnover of about 3 billion Ft that means a limit above which the division of the fields of function takes place, thus the fulfilment of the tasks is carried out on a higher professional level. The companies that realize more than 3 billion Ft turnover were 49.5% of the respondents. By selecting those who work in the fields of finances and public utility we got a sub sample that made up 13.4% of the full sample, on which the survey was conducted. Accordingly the examination of this group was relevant. I examined the hypothesis dividedly:

H9a: Great majority of the companies that realize more than 3 billion Ft turnover and work in the fields of finances or public utility have a Call Center, E-mail customer service, Web accessibility and personal customer service.

H9b: Only a small proportion of the companies that realize more than 3 billion Ft turnover are able to consciously realize the significant cost benefits, because only a few of them examine to what extent the customers use these channels of communication.

In order to prove this hypothesis as a first step I had to select the companies that realize more than 3 billion Ft turnover, and as a second step I had to select those that work in the field of finances and public utilities. After this I examined the results of the 31st question, which are resented in the following figure. This resulted the sub-sample mentioned above which made up 13.4% of the full sample.

It is expressive in the figure that the use of personal customer service (customer point), call center, e-mail and web exceed from the channels.

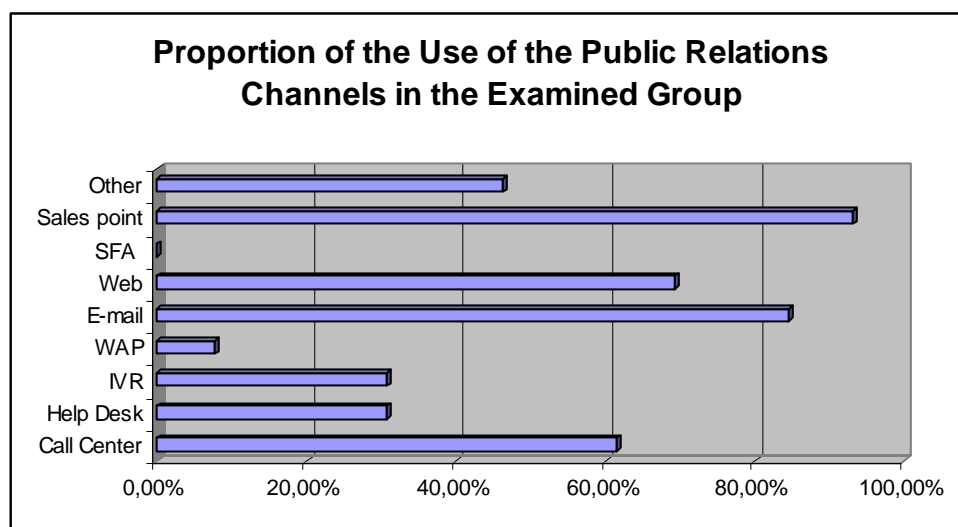


Figure 7

Proportion of the Use of the Public Relations Channels in the Examined Group

Source: Csaba Mester

Within the scope of the 32nd question I examined what types of consumer service activity the companies of this group carry on. These results prove the above presented statements probably more saliently. I summarised the data in Table 14.

Types of Customer Service	Proportion of Use
Call Center	81.8%
Personal Customer Service	90.9%
Internet Customer Service	63.6%

Table 14

Use of Different Types of Customer Services in the Examined Group

Source: Csaba Mester

It marks out that the majority that is two third of more of the companies use a personal, telephone and internet customer service in the group of financial and public utility companies that realize more than 3 billion Ft turnover. Considering this and the results of the 31st question that also proved the high proportion of the use of the above mentioned public relations channels we can state that the data supports the H9a hypothesis. This is confirmed by the statements of the two concerned respondents of the interview. They both realize more than 3 billion Ft turnover. Alpha (a public utility company) has a call center, both personal and internet customer service, and web accessibility. Beta (a financial service company) does not operate a classic call center, but the personal customer attendants receive phone calls as well, and are available via e-mail and the web. (Appearance of Customer Relations Management in the Organisational Units and its Sub-Systems – see App.5)

In order to confirm the H9b hypothesis I had to analyse the answers for the 32nd question in which the respondents had to provide information about whether they measure to what extent their customers use the channels. In the case of a positive answer I also asked the concrete proportions. The survey conducted among the financial and public utility companies that have more than 3 billion Ft turnover showed that 53.8% that is about half of the companies attend to the level of utilisation of the channels. The cross table analysis showed that the channel utilisation is measured by the companies within this group in much bigger probability (~54%) than by those who fall out of this group (29.3%). Consequently the data refute the hypothesis according to which only a small proportion of the companies that realize more than 3 billion Ft turnover examine to what extent the customers use these channels of communication, as this proportion is about 50%. The interviews revealed that Alpha is roughly aware of its customers' channel use, and consciously tries to direct them towards the internet. Beta did not mention this question in the interview, but on the basis of its other statements it is outlined that it does not make such investigations. (Appearance of Customer relations Management in the Organisational Units and its Sub-Systems – see App. 5) The H9 hypothesis was not confirmed.

H9a: The hypothesis can be regarded as confirmed.

H9b: The hypothesis cannot be regarded as confirmed.

T9: The hypothesis would be confirmed if it were formulated like this: **Great majority of the companies that realize more than 3 billion Ft turnover and work in the fields of finances or public utility have a Call Center, E-mail customer service, Web accessibility and personal customer service, and about half of these companies are able to consciously realize the significant cost benefits, because in this proportion they examine to what extent the customers use these channels of communication.**

DATA MANAGEMENT

H10: According to the hypothesis, **institution of a data warehouse is beneficial for a company from a financial point of view only if the same level of access can be technically assured for the customer service attendants who work at the different customer service points, and the organisation that operates such a system enables this.**

A data warehouse which contains every information about the customers provides an opportunity for analysis and serves as a source of data mining is an exceedingly important component of a customer relations solution. Information gained from this can make the

company's sales, marketing campaigns and customer service processes more effective. It is of vital importance that information gained from the data warehouse get to the employees and moreover get to everyone by the same way at the same time. This is really important in the case of contacts via different channels, as a customer has to get the same information through two different channels, there cannot be even a tiny difference. The statement says that if a company operates a data warehouse he assures access for the employees that work at different customer service points. The 46th and 47th question of the questionnaire provide an opportunity to confirm the hypothesis.

91.8% of the respondents answered the question about the existence of a data warehouse, and 53.9% of the respondents gave a positive answer. This means that a significant proportion more than half of the Hungarian companies have a data warehouse solution which was implemented between 1983 and 2005, most of them in 2004. Further 25% of the respondents said that they plan the implementation.

In the group of the data warehouse owner companies I investigated the question of access at the same level. According to this, about 87% of the respondents assure inspection into the data base for its employees. Consequently the investigation has proved without any doubt that the data warehouse owner companies assures access to the customer service attendant colleagues that work at the different customer service points.

In the course of the interviews, I get information concerning this question from Alpha and Beta. In the case of the former one, the data base is on a central server on which they run a program that is an own development in order to assure direct inquiry. By this they eliminate the constant dependence on the central development division. In the case of Beta, 1-2 colleagues who are charged with this task fulfil the data request of the other colleagues. Thus the employees have access to the data in the case of both companies. (Appearance of Customer relations Management in the Organisational Units and its Sub-Systems – see App.5)

H10: The hypothesis can be regarded as confirmed that is:

Institution of a data warehouse is beneficial for a company from a financial point of view only if the same level of access can be technically assured for the customer service attendants who work at the different customer service points, and the organisation that operates such a system enables this.

METHODOLOGY

H11: As the implementation of a CRM system has special requirements in comparison with other computer systems, it is necessary to identify a methodology that fulfils these special requirements. The 11 step CRM specific series of activities that consist of preparation, changes, implementations and operations seems to be suitable. Supported by high level of human process management, project management and quality assurance, it serves as a suitable and general process model for the implementation of a customer relations system.

Methodology is nothing else but a plan that aims to solve a complex problem that offers solution proposals phase by phase and component by component. Accordingly, the given methodology of the implementation of a CRM can be divided into four main parts. The single phases in fact imply a coherent series of steps and provide an opportunity for formulating milestones at the end of each phases and checking the closure of a coherent part of the process. The first phase includes the first five steps; the second phase is the 6th step; the third phase involves the 7th, 8th and 9th steps; and the fourth phase covers the 10th and 11th steps.

As it can be seen, the division of the phases appears here in its details, the separate steps can be seen which lead to the achievement of the previously set aim by forming a logical chain. Besides the activities that follow each other I have to mention two other important functions, which permeate the process of the project to the end. These are: project management, and quality assurance; and the human processes, which require constant attention and maximal effort in order to assure the quality of the project.

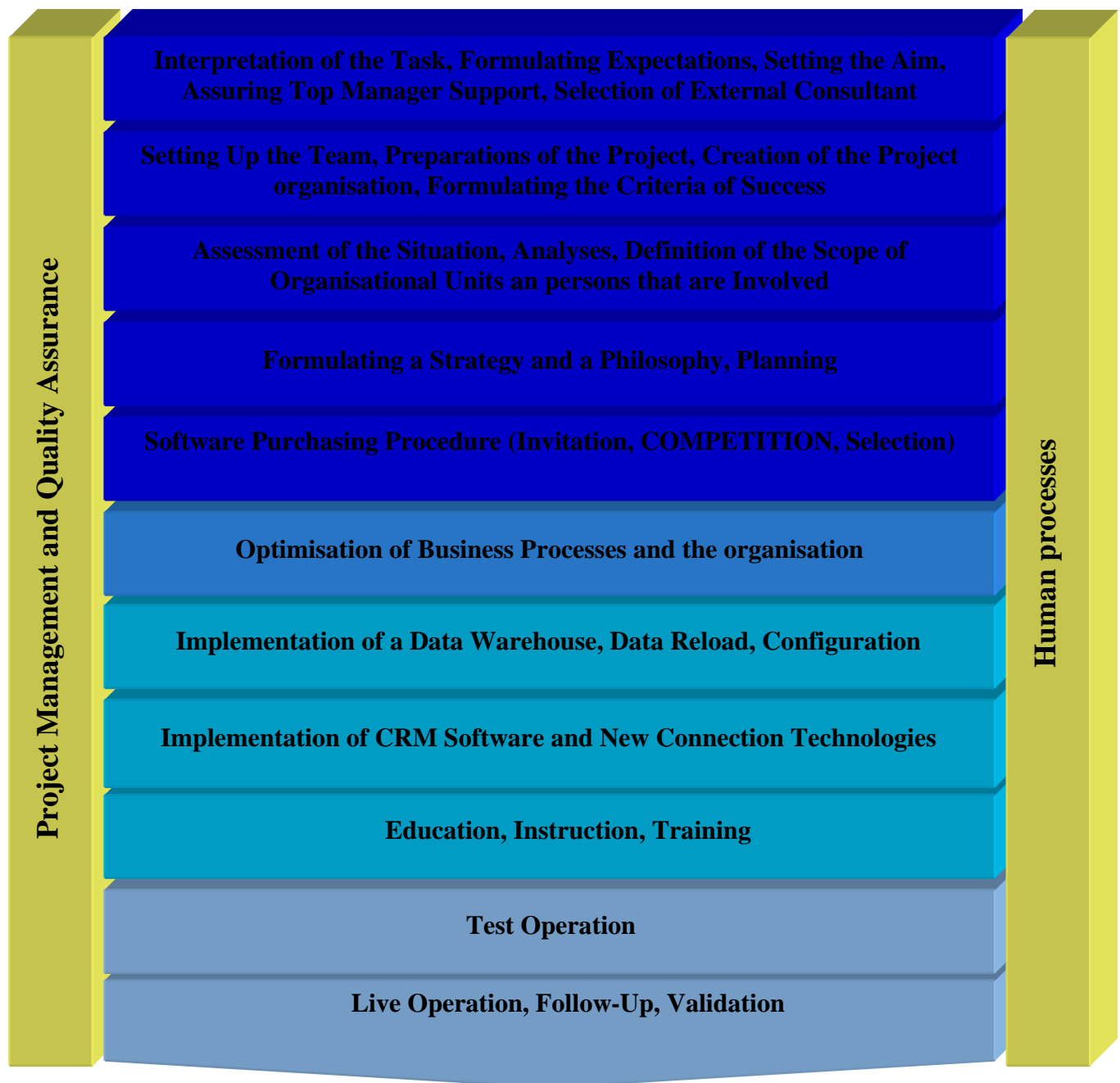


Figure 8
Methodological Steps of the Implementation of CRM
 Source: Csaba Mester

Project Management and Quality Assurance

These two activities, by their nature, do not take place between the steps or after them, but they accompany the whole process of the project along. High quality of the project management is guaranteed by the project leader(s) expertise and experience, and the application of the well tried approaches and rules of project management. In the course of the project, fulfilment of the professional tasks and the smooth running of the project, the direction and control of the fields of tasks together and in a successive way and documentation management realise smoothly.

Quality assurance is closely connected with this. Its main aim is that all the project components are executed with proper security and high efficiency that assures the result in the course of the execution of all tasks.

Human processes

In order to achieve the aims of the project, it is important to deal with the role of the human factor prominently. Resistance to the change can come forward on many levels and in many forms which should be eliminated as quickly and effectively as possible. We have several means for that, but first it is advisable to apply those which are the least drastic, and requires the least intervention. It is effective to constantly inform every employee of the company about the causes and purposes of the project, in the course of which, we can achieve the best results by conveying true information. In order to avoid the rumours, gossips and hearsays that hinders the success of the project it is advisable to inform those employees as well who will get in contact with the system only in a later phase or do not get in contact with it at all. The regularity of information aims to create an opportunity for presenting the partial achievements of the project that represents the top management's support for the necessity of the tasks that are to be done.

It is equally important to hold and control the human processes within the project team. Regular feedback and assessment provides an opportunity for developing a team that works effectively and carries out the tasks of the project on the highest level possible.

Steps of the CRM specific methodology involve the following activities:

1. Interpretation of the Task, Formulating Expectations, Setting the Aim, Assuring Top Manager Support, Selection of External Consultant

The implementation of a CRM system involves significant improvement and developmental possibilities for a company, in case that it is carried out along with the proper business reforms (organisational and process changes). In order to achieve a successful implementation of the system, many conditions has to be realised even in the initial phase of the project. A successful implementation of a CRM system holds forth an exceeding value creating potential, but it cannot be managed separately from the other factors, because a system centred approach can significantly decrease the expectable advantages. Before the actual realisation of the project the comprehensive process and organisational expectations of the whole organisation in connection with CRM has to be estimated, and they have to be mapped to the level of the project. Only such an approach that keeps the global and not the local company values in view can produce the results that are potentially in CRM.

2. Setting Up the Team, Preparations of the Project, Creation of the Project organisation, Formulating the Criteria of Success

The purpose of this group of tasks is to mark the participants of the project, set the project team and the project management, and assure the human resources that are needed for the execution of the project. The framework of the project organisation that assures the operation of the project has to be created.

The implementation of the system is done by a project team the members of which are the employees of the company and external consultants and experts. The project team is directed

by two project leaders jointly. One of them is charged by the company the other one is delegated by the external consultant. Both of them are experienced and highly qualified experts. In this initial phase the management and controlling structure that is needed for the project management has to be defined by creating all the necessary documentation.

3. Assessment of the Situation, Analyses, Definition of the Scope of Organisational Units and persons that are Involved

After the configuration of the project organisation and the setting of the project team detailed assessment of the situation that serves as the foundation of the project and the persons, functional units and processes within the organisation can be defined. The work material that was made for the decisions at the launch of the project can be used well in this phase, because the information it contains do not have to be collected and processed again. Although a more detailed and deeper investigation is needed here, that is conducted by the internal and external members of the project team together. By the leading of the project managers they detect, document the questions that have to be cleared before the planning of the solution.

4. Formulating a Strategy and a Philosophy, Planning

In order to formulate the company's CRM strategy, the formerly defined aims have to be taken as a basis and articulate the steps and tasks that are necessary to achieve this on a strategic level. The scale of the CRM strategy has to be adjusted to the extension of aims, and it has to be integrated into the company strategy and harmonise it with the other factors that form the strategy. The main motive of a really effective company's organisational strategy is customer centeredness.

During the implementation of a CRM solution the first step of strategy creation is the supervision of the company's marketing, sales and customer service strategy – along the lines of CRM approach, assessment of the strategic directions, analysis of its map into operation, and identification of the intended and realised strategy by using the results of former analyses. Dependently on the results of the supervision, the aim is the definition of the strategic direction of the possibly necessary modifications.

5. Software Purchasing Procedure (Invitation, Competition, Selection)

After the creation of the strategy and the setting of its components, we can get round to the next phase of the project, in the course of which we have to decide which delivery solution the company would like to implement. This can be decided in a very thorough selection procedure that takes every demand into account. The system dependent of the external consultant plays a great role here, which provides an opportunity for finding a software that really maximally fulfils the company's requirements.

6. Optimisation of Business Processes and the organisation.

The aim of the phase is that the project team reform the involved present business processes according to the new customer relation system that is to be implemented, and integrate them into it. Certain business demands and activities change by the implementation of the CRM solution, that is why the process system and the organisational structure have to be formed accordingly. The place of certain fields of function changes in the organisation, and the scopes of responsibility do not remain the same in every case, either. The process regulation phase standardize the operation that is about to be formed.

7. Implementation of a Data Warehouse, Data Reload, Configuration

In the course of the implementation we can see the interconnection and separation of the three main components of CRM the most. The analytic part is characterised by the creation of the data warehouse, the OLAP and ROLAP devices which gives an opportunity to conduct the concrete analyses. The implementation of the CRM system itself can mean the appearance of the operative component. The configuration and modernisation of the customer relations channels can be identified as the collaborative part. The implementation of Call Center, IVR, SFA, electronic (web, WAP) and mobile technology systems that was done within the scope of the project or is closely connected to it belong to this. These parts of the project have to be accomplished in a harmonized way by discussing the problems and solving them together in order to achieve maximal efficiency.

8. Implementation of CRM Software and New Connection Technologies (Channels)

After the implementation of the data warehouse and the loading of the data the definition of the specifications concerning the implementation of the CRM system can take place. After this, the concrete software implementation and configuration can start which means the installation of the server and the client and the installation and configuration of the above mentioned collaborative devices.

In order to define the CRM system that is needed for the maximisation of customer value, analyses are conducted on the data of the configured and loaded data warehouse by the means of the analytic CRM and special data mining devices and processes.

9. Education, Instruction, Training

The CRM system cannot be set into operation till the training of the employees, from the top managers to the operators, that get in contact with it takes place. The primary task of the leaders is to get to know the potentials of the system and to acquire the use of the different reporting devices. This can eliminate the creation of exaggerated requirements and thus tension at the company. The middle management has to be aware of the operation of the system as well, because they can call the employees to account only by this way. The lowest level of users who in fact mean the frontline between the customer and the company has to be instructed and trained thoroughly till they learn it as a skill. Information technologist employees who are fully aware of the functions and operations of the system should be available regularly at the company. A separate training should be held for them. Besides, a constant contact is necessary with the supplier as well. The trainings should be held for the project team by the involvement of the employees of the system supplier, or at least by the use of its instruction materials.

10. Test Operation

In the course of this phase, the full operation test of the system is carried out with real data. It tests the readiness for live operation of the solution. It takes place in a sub-unit of the company's business environment. The test operation means the side by side operation of the new and the old system during a certain time interval, in the course of which the possible problems of the solution are revealed in a way that the errors do not endanger the company's usual processes and possible inconveniences of the customers cannot occur. If we detect

errors that can hinder the live operation of the system, and these cannot be mended during the test operation, the live launch will be delayed and a further test phase comes after the correction.

11. Live Operation, Follow-Up, Validation

In this phase every component of the implementation has to be summed up in order that after the validation the transfer to the real environment will be successful. By this time the training of the users has been finished, the patrol service has been created, the constant support has got to a stand by phase, and the project team has finished the final configuration and setting on the basis of the experiences of the test operation. After the newly implemented solution has been set into operation the activities of the former system have to be stopped and its operation has to be finished.

H11: The hypothesis can be regarded as confirmed.

T11: As the implementation of a CRM system has special requirements in comparison with other computer systems, it is necessary to identify a methodology that fulfils these special requirements. The 11 step CRM specific series of activities that consist of preparation, changes, implementations and operations seems to be suitable. Supported by high level of human process management, project management and quality assurance, it serves as a suitable and general process model for the implementation of a customer relations system.

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Article

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Members of the Research Team: Csaba Deák, Angelika Árvay, László Berényi, Beatrix Bozsó, Orsolya Hógya, Csaba Mester, Zsolt Papp.

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A felhasználó is fontos vagy csak a vevő?

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