

# **The impact of the IS on the effectiveness of the Sales Funnel Management as a part of CRM in an automotive company**

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## **Abstract**

*Sales Funnel Management (SFM) as a part of the Customer Relationship Management (CRM) is of great importance in the automotive industry when the companies want to attract new customers and retain the existing ones. Due to the complex and changing business environment customers are becoming more and more demanding and less loyal to their current brands. Existing research has shown that IT/IS play a crucial role throughout the execution of the CRM activities. However, the mere existence of an IS in a company is not enough. The ability and willingness of companies to use these IS in a sufficient manner plays a key role in the success and failure of CRM activities. Therefore, the objective of the article is to show how the role of the IS impacts on the effectiveness of the SFM through conducting a case study analysis in a leading German automotive company. The results show that IS has an important impact on improvements in execution of all phases of SFM and importantly contributes to primary goals and measures of effectiveness of the SFM in the automotive company, which are the increased number of vehicles sold and the lowest possible cost per vehicle sold, as well as higher level of customer satisfaction.*

**Keywords:** CRM, Sales Funnel Management, IT/IS, Microsoft Dynamics CRM.

## **Introduction**

Customer Relationship Management (CRM) is a fundamental business strategy that links the internal processes and functions with external networks with the aim of creating value for the targeted customers and making profit. It is based on quality data related to customers and is enabled and enhanced with the use of information technology (IT) and/or information systems (IS; Buttle, 2012). Sales Funnel Management (SFM) is mostly a part of the operational CRM and to some extent also a part of the strategic CRM, is of great importance in the automotive industry for acquiring new customers and retaining existing ones. Due to the complex and changing business environment, customers are becoming more demanding and less loyal to their current brands. Companies therefore constantly need to find better and more effective ways to improve customer satisfaction, attract new customers, and make profit along the way.

The purpose and the objective of the presented study is to show how Microsoft Dynamics CRM helps in the effectiveness of the SFM in the leading German automotive sales company. The ultimate goals and measures of the effectiveness of the SFM in the studied automotive company are the increased number of vehicles sold and the lowest possible cost per vehicle sold. A

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secondary objective is a higher level of customer satisfaction. The hypotheses of the study are that in order to achieve the ultimate goal and thereby the effectiveness of the SFM, all seven phases of the sales funnel should be precisely specified and executed; each of the phases has an impact on at least one of the main objectives of the SFM; and that the execution of the phases is not possible or economically feasible without the use of properly designed IS.

The paper is structured as follows: Following this introduction, the research background is provided, including CRM and SFM descriptions, along with the purpose of using IT/IS to this end. Additionally, findings of previous studies are elaborated. In the next section, the methodology used for this study is described. The case study description is then provided, followed by the analysis of the results and discussion of findings. Finally, the implications and concluding remarks are stated at the end.

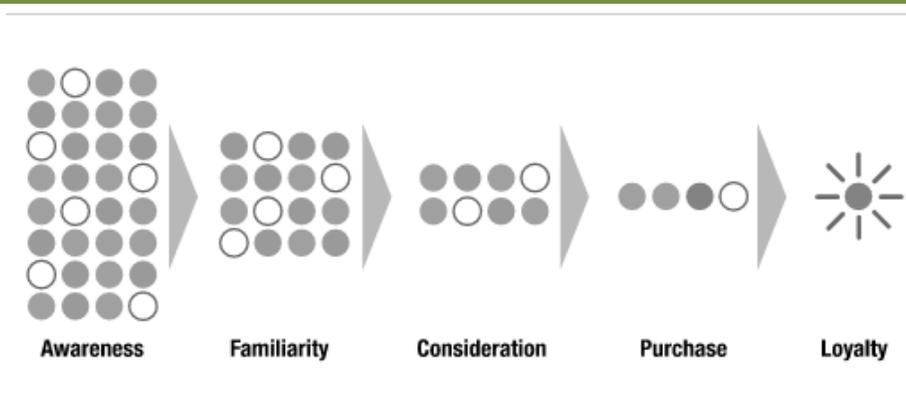
## **Research Background**

### **Customer relationship management**

Buttle (2004) defines CRM as a value chain consisting of five main stages and four supporting conditions with the ultimate goal of increasing customer profitability. The main stages of CRM are the analysis of the client's portfolio, the customer's privacy, network development, development of proposals, and management of the customer lifecycle. These stages provide to a company the opportunity to acquire and retain profitable customers. Supporting conditions are leadership and culture, information and IS, people, and processes. Depending on the type and processes it supports, CRM can be divided into four types: strategic, operational, analytical, and collaborative.

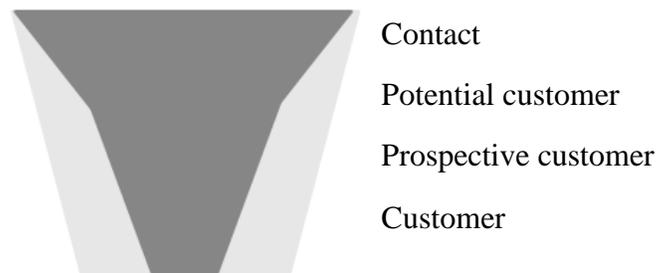
### **Sales funnel**

A sales funnel is basically a process through which a potential customer goes from the customer's first contact with the company to the final purchase of the product or service (Daniels, 2014). The word "funnel" is used figuratively for its specific conical shape, where there is a large number of contacts at the beginning of the sales funnel, then through the sales process and transition phases of the sales funnel these contacts start falling out so that at the end of a sales funnel throat, there is a relatively smaller number of customers who actually bought the product or service. Court, Elzinga, Mulder and Vetvik (2009) stated that customers go through four stages of the sales funnel buying process: awareness - customers already pay some attention to a particular brand, but at this stage they have almost no information; familiarity - customers are already interested in basic information, such as price and technical specifications of the product; consideration - customers want to test the product and demonstrate a high degree of purchase interest; purchase - customers decide to buy the product; and loyalty - customers remain loyal to the brand and consider repurchase. This customer decision journey that was developed by McKinsey & Company and described in Court et al. (2009) is presented in Figure 1.



**Figure 1:** Customer decision journey through the stages of the sales funnel (*Court et al.,2009*).

The form of the sales funnel varies from company to company. In Figure 2 we present a classical form of the sales funnel (colored dark) and the ideal or desired form of the sales funnel (colored light). D’Haen & Van den Poel (2013) describe following phases through which customers go throughout the buying process: a contact, a potential customer, a prospective customer and finally an actual customer. This definition of stages of the sales funnel is also used in the studied company.



**Figure 2:** Typical and ideal (desired) sales funnel and the phases(D’Haen & Van den Poel, 2013).

D’Haen and Van den Poel (2013) described the characteristics and descriptions of each of the stages as follows. Contacts are all entities that are potential customers of the company. In theory these are all entities over which the company has a potential access to and can be contacted. Potential customers are all entities that have certain characteristics in terms of higher perceived buying interest or potentially increased buying interest in relation to the segmentation of the company. Prospective customers are all potential customers who have in the process of qualification expressed a high purchasing interest and will be more likely to become customers. Finally, customers are all prospective customers who have actually purchased a product or service of the company.

**Sales funnel management**

SFM includes all activities involved in planning, generating and sorting of sales potential with the main objective of transforming contacts into potential customers, potential customers into prospective customers and finally prospective customers into actual customers. The objective of

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the SFM is that each sales potential passes all stages of the sales funnel on its way from first contact with the brand to actual purchase (Court, D., Elzinga, D., Mulder S., & Vetvik, 2009; D'Haen & Van den Poel, 2013; Daniels, 2014). SFM includes management and the execution of all its seven stages, namely planning of the sales potential and CRM activities, preparation of CRM activities, implementation of CRM activities, coverage of the sales potential, sorting of the sales potential, ensuring further contact with the sales potential, and monitoring and evaluating all elements of the sales funnel (Daniels, 2014).

By using the sales funnel and calculating the number of potential customers that are required for each new customer, it is possible to calculate the number of contacts needed for achieving the target results within the CRM activities. Furthermore, by observing the quantity of potential customers in every step of the sales funnel, it is possible to observe the effectiveness and suitability of the CRM activities and, if necessary, make timely adjustments. It also provides insight into the quality of the CRM activities and gives an important basis for future planning of CRM, marketing and sales activities. With a deeper view into each stage of the sales funnel, the quality of each of the phases can be determined, which provides information for potential improvements of each phase based on its shortcomings (Daniels, 2014).

### **Review of the findings in previous studies**

Although existing studies provide different findings and conclusions, researchers generally agree with the Monat (2011) statement that prospective clients are a heart of a company. However the choice of prospective customers that are most likely to make a purchase is still greatly left to guessing and intuition. This results in inefficient use of funds, inaccurate sales forecasting, and loss of potential sales.

In the existing literature we can find theories that the effective management of the sales funnel positively affects the outcome of a given process and can have positive economic effects for the company (Chan, Nickerson, & Owan, 2007). Furthermore, companies can actively influence each of the phases of the sales funnel and thereby achieve optimal results. Accepting ineffective decisions throughout the process of management of the sales funnel can reduce the overall value of the company over time, since that reduces the net present value of each newly acquired customer of company (Ding & Eliashberg, 2002; Hansotia & Wang, 1997).

Most of the authors agree that IS plays a key role in implementing operational CRM (Ahearn, Hughes, & Schillewaert, 2007). For example, Reinartz, Krafft, and Hoyer (2004) identify a CRM system as the main facilitator of CRM activities. Jayachandran, Sharma, Kaufman, and Raman (2005) show that IS performs an important role in influencing the connecting information processes in the context of CRM.

Nevertheless, mere existence of an IS in a company is not enough. The ability and willingness of companies to use these IS effectively plays a key role in the success and failure of CRM activities (Babakus, Cravens, Grant Ingram, LaForge & 1996).

Ahearn, Srinivasan, and Weinstein (2004) found that the use of the IS in the sales process significantly improves its performance and contributes to the growth of the performance benefits with improving sales skills and behaviors based on the information provided by IS. Using IS for management of the sales funnel plays an important role already in the first (widest) stage of the sales funnel which is targeting potential contacts and qualifying potential customers.

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While some authors advocate that the main objectives of the use of IT/IS in the SMF are immediate improvements in sales compared to the number of contacts that enter into the sales funnel, Boujena, Johnston, and Merunka (2009) believe that the most important goal is increasing customer satisfaction, which leads to the achievement of the primary goal – that is the sales of products or services of the company. Namely, the customers expect organizations to provide them with accurate and timely information, timely responses to requests, personalized offers, and professionalism (Homburg & Rudolf, 2001).

Boujena et al. (2009) observed further positive impacts in the use of IS for SFM on four main levels of customer's perceptions that influence their ultimate satisfaction. These levels are: the expertise of the sales staff of the organization, frequency of interaction with the customers, responsiveness of the sales staff of the organization, and the quality of the company/customer relationship.

Due to the complexity of the processes, SFM is practically impossible or very difficult to handle without the correct use of the IS (Ahearne, Hughes, & Schillewaert, 2007; Boujena, Johnston, & Merunka; 2009). The main reasons for the use of IT/IS in CRM are the ever more complex CRM processes along with increasingly demanding customers and their growing expectations. This require an integrated and centralized view of the customer through all the points of contact and communication. Therefore, the desired objective is to create a CRM technology that will serve the communication with the customers in a single, consistent dialogue with the use of so-called multi-channel CRM. IT/IS also supports one of the main objectives of CRM, which is to increase customer profitability through an increase in client satisfaction with the services and the use of analytical tools that help assess customer value and measure the performance of each CRM activities and processes. IT also helps in customer segmentation and data mining, and participates in all types of CRM: strategic, operational, analytical and collaborative (Buttle, 2012).

## **Methodology**

A case study has been used as a research method to underline the theoretical findings from previous research set out in the previous sections, and to specifically show how IS can help improve the effectiveness of the sales funnel management (SFM) as a part of the CRM process in the leading German automotive sales company.

The case study methodology provides better explanations and understandings of the examined phenomenon which would otherwise be lost in other quantitative designs (Miles & Huberman, 1994; Yin, 2003). Case studies are particularly useful for in-depth studies of contemporary phenomena within the organizational context over which the investigator has little or no control (Yin, 2003). They are appropriate for capturing the relevant facts with respect to understanding complex management and decision-making processes (Buxey 2006). Yin (1994) identified four main phases of case studies: design of the case study, execution of the case study, analysis of the results and evidence, and development of conclusions and recommendations.

Three types of data sources cited by Yin (1994) were used: company's documentation, historical data, and direct observation of employees. The research analysis then included documentation analysis, observation based on watching and listening, executing and participating throughout the changes before and after the implementation of the Microsoft Dynamics CMR for SFM, and

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analysis of historical data to facilitate data triangulation. The effectiveness was assessed with cause-effect method showing and analyzing the effectiveness before and after the introduction of the Microsoft Dynamics CRM IS to help support the SFM process.

## **Case study description**

### **Description of the company**

The case study was conducted in a Slovenian branch of a German holding company operating in automotive industry. The holding company is a leading German manufacturer of premium vehicles, manufacturing vehicles of three brands. From 2013, onwards it was also a manufacturer of premium electric vehicles, belonging to the sub-brand of the three major brands. The company is one of the largest German industrial companies and one of the most successful manufacturers of automobiles and motorcycles in the world with a clear vision: "The company is the world's leading provider of premium products and services for individual mobility". The studied Slovenian subsidiary of the holding company predominantly deals with importing and distributing vehicles of the two main brands of the holding company and has an organized sales network in Slovenia with six authorized car selling companies.

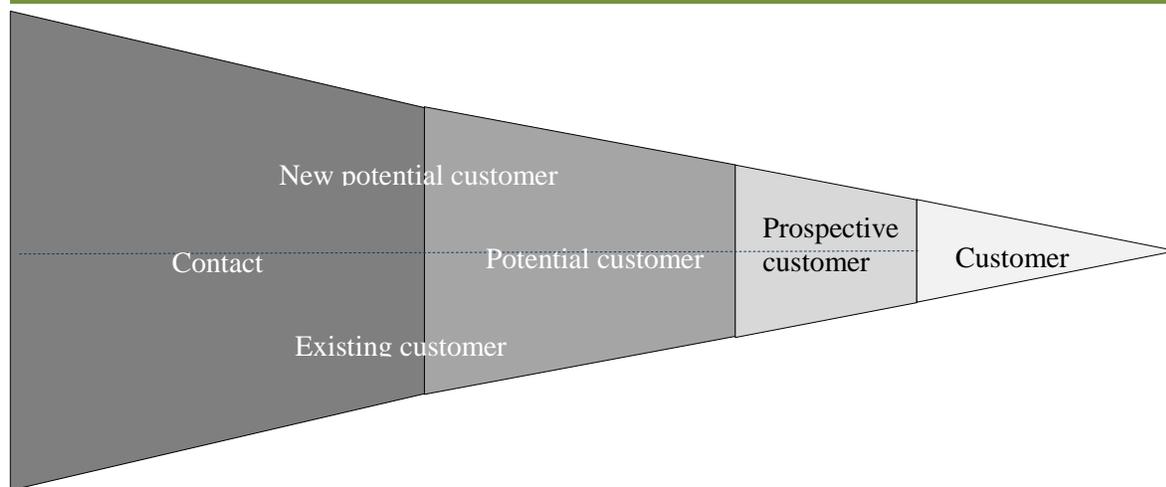
### **The problem the company faced**

The problem the company faced was unawareness and unfamiliarity of certain elements of the SFM and the inability to measure the effectiveness of the SFM and marketing activities. Being one of the most successful automotive companies, a big part of their resources are devoted to marketing activities, but the company has not accurately measured the effectiveness of each activity of SFM on all levels before the implementation of customized supporting IS. The company has consciously decided to renew the SFM process and at the same time restore and renovate the supporting IS, as well as develop its own customized system for CRM and SFM. This makes the company adequate for studying and researching the proposed issues.

### **Sales funnel management in the studied company**

SFM is an important part of the CRM process at the studied company. It covers all activities involved with planning, generating, and sorting of the sales potential with the main objective to convert contacts into potential customers, potential customers into prospective customers, and finally prospective customers into customers. The main stages of SFM in the studied company are: planning of the sales potential and CRM activities, preparation of CRM activities, implementation of CRM activities, coverage of the sales potential, sorting of the sales potential, ensuring further contact with the sales potential, and monitoring and evaluating all elements of the SFM. The CRM activities related to SFM also include activities of customer care, such as management of complaints and demand management. The main objective of SFM in the studied company is that each sales potential passes all stages of the sales funnel on their way from the first contact with the company to buying a company's product.

The sales funnel which is used in the studied German automotive sales company can be seen in Figure 3 and is in line with common shapes of the sales funnel (D'Haen & Van den Poel, 2013; Court, Elzinga, Mulder & Vetvik, 2009).



**Figure 3:** Sales funnel of the studied company (Court, D., Elzinga, D., Mulder S., & Vetvik, J. 2009; D'Haen & Van den Poel, 2013)

The sales funnel is the same for both existing as well as new potential customers. New potential customers are individuals who do not own the product of the company, but there is a possibility that they will purchase the company's product on their way through the sales funnel. Existing potential customers are individuals who already own the product of the company and for which there is a possibility of buying a new or additional product of the company. Sales potential thus presents both new and existing potential customers.

As shown in Figure 3, each sales potential on their way to becoming an actual customer passes through three stages in the sales funnel: contact, a potential customer and prospective customer. A contact is the sales potential that has been in contact with the company in the past and which the company since had further contact. A contact becomes a potential customer in two ways. The first is, if at the time of the contact with the company, the contact expresses a desire for a test drive, expresses a desire for a company's offer, or requests further contact with the company's seller. The second is if the company received a reply, where it was evident from the content that the contact expressed a buying interest. A potential customer therefore actively expresses an interest in the company's product, then each potential customer goes through the process of sorting of the sales potential. The purpose of sorting of the sales potential is to determine the likelihood that a potential customer becomes an actual customer. The process further splits potential customers into prospective and potential customers. By purchasing a product of the company, the prospective customer becomes a customer.

### **The impact of Microsoft Dynamics CRM IS on the SFM in the studied company**

Microsoft Dynamics CRM is an IS for CRM with web-based access, i.e. via an Internet browser or Microsoft Outlook tools (Kachinske, Kachinske, & Kachinske, 2012). It is basically a database with tools that enables effective management of the sales funnel.

Microsoft Dynamics CRM importantly contributes to the execution of all seven stages of the SFM. Due to the related processes carried out in some of the stages of SFM, we further divide

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the impact of the IS into two parts of the SFM, namely: planning and execution of the SFM and monitoring, measurement, and evaluation of the SFM.

In the first part, Microsoft Dynamics CRM helps with the preparation of CRM activities, the implementation of CRM activities, coverage of the sales potential interceptions, ranking of the sales potential, and ensuring further contact with the sales potential. In this part the IS thus helps with the consistent and correct execution of the SFM process. It also serves as a database of existing and potential customers, enabling a transparent overview of the history of all activities carried out with each customer, provides customer demographic information, and enables a complex customer segmentation, which all helps with the preparation of CRM activities. It also enables sending requests to company's dealers and thus a possibility of making further steps in the vehicle sales process.

While the use of Microsoft Dynamics CRM in the execution phase impacts on the achievements of the objectives within the already planned CRM activities, like vehicle sales and satisfaction of customers and potential customers, the use of the IS plays an important role in monitoring and measuring of the SFM and all activities within the sales funnel. With the help of monitoring and measuring, the company gains important information about the effectiveness of all activities, while the IS also serves as a basis for the adjustments of individual activities within a specific phase of activities or as an important basis for planning future activities.

In the second part, the system supports and helps with ensuring continued contact with the sales potential and monitoring the activities of the SFM. The results of this part are therefore crucial for the planning of the future activities. The basis for the successful measurement and monitoring is therefore provided by properly executed activities supported by Microsoft Dynamics CRM system in the execution phase of the SFM. Due to the relatively limited reporting possibilities in Microsoft Dynamics CRM, the studied company has developed its own customized system for reporting on the SFM, which uses data directly from Microsoft Dynamics CRM and can be synthesized in desired reports.

### **Data analysis and discussion of findings**

Data analysis and the discussion of findings consist of two parts. The first part provides an estimation of how the execution of each of the seven phases of the SFM impacts the final objectives of SFM, which are a greater number of vehicles sold, lower cost per sold vehicle, a higher level of customer satisfaction, and the role and impact of the Microsoft Dynamics CRM IS in each phase. The second part presents concrete results of the improvements in effectiveness of the SFM by comparing the three periods: SFM before the implementation of the IS, SFM right after the development and implementation of Microsoft Dynamics CRM, and the execution of SFM three years after the implementation of Microsoft Dynamics CRM IS. With the results of the analysis, we strive to confirm the hypotheses of the study and reach the objectives of the study.

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## **Analysis of the impact of SFM phases on achieving the main objectives of SFM and the role of IS**

### ***Planning of the sales potential and CRM activities***

At the first stage of the SFM, the objectives of each activity in the sales funnel, prepared based on the sales targets, are identified. The execution of the phase has a significant impact on the effectiveness of the subsequent stages, and also on one of the main objectives, the number of vehicles sold. At this stage, the magnitude of the sales funnel or goal is determined, which includes how many contacts, potential customers, and prospective customers ought to be acquired within the framework of activities to achieve the desired amount of vehicles sold. If the company sets the goal incorrectly at this stage, it will most likely not achieve the planned sales. An important impact for the efficiency of this phase presents the IS (Microsoft Dynamics CRM), as it provides information for decision support in the form of historical data on conversion rates of contacts into potential customers, potential customers into prospective customers and prospective customers into customers. Without the use of an IS, the company cannot obtain accurate information about conversion rates and the data could only then be estimated, which could lead to incorrect calculations and failure to achieve the planned volume of vehicles sold.

### ***Preparation of CRM activities***

At the preparation of CRM activities phase, the company determines a way to achieve the targets or goals defined in the first phase. The correct choice of target groups and means of communication enables the attainment of the objectives and the planned conversion rates. It is also important that the company properly segments the target groups and addresses them with a message appropriate for each group. The role of the IS is also very important in this phase, by offering support for customer segmentation, identifying purchase patterns, and identifying common characteristics of individual customer groups. With the support of the IS, the company has access to large amounts of data and analytical tools that provide support when deciding on how to implement CRM activities. The execution of this phase thus has an effect on all three of the main objectives of the SFM. First, it impacts the amount of vehicles sold with the correct choice of target groups that will be addressed in the context of certain activities. By choosing the wrong audience and the wrong way of communication, the target groups would not respond to company's communications, consequently the conversion rate would be lower and the company would not achieve the targeted sales. Second, it impacts the costs per vehicle sold. Having the wrongly selected target groups and failing to achieve sales goals, the company would have to carry out additional activities to achieve sales targets, which would mean additional costs, and thereby increasing the cost per vehicle sold. Third, it impacts the level of customer satisfaction. The incorrect choice of target groups and means of communication with the customers would consequently lead to customer dissatisfaction with the communication, as this would be directed at the wrong target group for which the content is most likely not relevant.

### ***Implementation of CRM activities***

The implementation of activities of this phase is the operative part of the second phase of SFM. The impact and use of the IS in the execution of this phase presents the technical implementation of activities. These activities include sending communication to customers and a structured recording of activities in the form of main and supporting campaigns and marketing lists, which

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can further serve as a support at the coverage of the sales potential phase, monitoring and evaluation of the SFM, and the preparation of future CRM activities. At this phase it is also evident that the proper design, implementation, and use of the IS has an important impact on the improvements in the execution of this phase and has an indirect effect on all three of the main objectives of SFM.

### ***Coverage of the sales potential***

At this phase, the conversion of contacts to potential customers occurs. Successful execution enables capture and recording of contacts who have responded to communication, and that all necessary information needed for the implementation of the next phase is obtained. The role of the IS at this stage is consistent recording of sales potential and support in obtaining all the necessary information about potential customers, which also takes into the account the information already gathered in the existing database and historical data. This phase has an effect on all three objectives of SFM as well. If the sales potential would be captured incorrectly, the next phase in which potential customers become prospective customers would be more difficult, as incorrectly identified prospective customers could lead to a lower conversion rates into sales and thus lower vehicle sales. Consequently, due to lower vehicle sales, the company should re-take the data capturing phase again or even undertake a new activity, which would involve additional costs and thus higher cost per vehicle sold. Customers who do not receive the desired and timely communications are of course less satisfied.

### ***Sorting of the sales potential***

At this stage the conversion of potential customers to prospective customers occurs, thus promising potential customers who will continue the path through the sales funnel are separated from the potential customers that leave the sales funnel at this stage. For the execution of this stage, the criteria for identification of prospective customers that the company determined on the basis of identifying its customers and the ability of the evaluation of purchase potential is important. This decision-making process is again improved by the support of the IS and the execution of this phase affects all three major objectives of the SFM.

### ***Ensuring further contact with the sales potential***

When a potential customer is identified as a prospective customer, the next important steps include contacting these prospective customers by a car dealer and the execution of the sales process. The studied company thus needs to provide contacts, which is made easier with the assistance of the IS, as the sales request is sent to the car dealer through the IS. With the support of the IS, the company can also monitor whether and when the customer was contacted. Additionally, this information makes it is easier to provide proper directions to the dealer to ensure timely contact with the customer. Usually the desired further contact with the customer is within 48 hours. The execution of this phase has a direct impact on the level of customer satisfaction and, consequently, on the amount of vehicles sold. For the customer that was not contacted in time and in line with the customer's expectations, the likelihood of dissatisfaction and thereby reduction of the purchase potential is higher.

**Monitoring and evaluating all elements of the Sales Funnel Management**

At the last phase of SFM, the company measures key indicators of the sales funnel in order to optimize current sales funnel or support decision-making in the planning stage of future operations and the future activities in the sales funnels. At this stage the company measures conversion rates and cost of individual activities, and then dynamically adjusts the course of the current sales funnel in order to achieve all of the main objectives of SFM. The role of the IS is crucial throughout the execution of these activities with its analytical tools and the reporting possibilities. Without the existence of these reporting possibilities, enabled by customized software implementation, it would not be possible to measure key indicators and thereby direct the sales funnel in the direction of successfully achieving the main objectives.

These findings are summarized in Table 1.

**Table 1:** The impact of each phase of the SFM on achieving the main objectives of SFM and the role of IS in achieving these objectives

<b>Phases of Sales Funnel Management</b>	<b>The impact on the number of vehicles sold?</b>	<b>The impact on the costs per vehicle sold?</b>	<b>The impact on customer satisfaction level?</b>	<b>The impact of IS?</b>
<b>Planning of the sales potential and CRM activities</b>	✓			✓
<b>Preparation of CRM activities</b>	✓	✓	✓	✓
<b>Implementation of CRM activities</b>	✓	✓	✓	✓
<b>Coverage of the sales potential</b>	✓	✓	✓	✓
<b>Sorting of the sales potential</b>	✓	✓	✓	✓
<b>Ensuring further contact with the sales potential</b>	✓	✓	✓	✓
<b>Monitoring and evaluating all elements of the Sales Funnel Management</b>	✓	✓	✓	✓

**Analysis of the improvements in the effectiveness of the sales funnel management with the use of the IS**

In order to deal with the problems the company faced described in the case study description chapter, the company decided to renovate and improve its SFM process by implementing and using an IS. The company decided to use Microsoft Dynamics CRM with some additional customized features to support and improve its SFM activities. Further on we thus describe the execution of SFM and, along with that, analyze the improvements in the effectiveness of the SFM process by comparing three periods, namely the period before the implementation of the IS,

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the period right after the implementation of the IS, and the period three years after the implementation of the IS. As already mentioned, the measures of the effectiveness of the SFM in the studied automotive company are the increased number of vehicles sold along with the lowest possible cost per vehicle sold, and the secondary objective of a higher level of customer satisfaction.

### ***The analysis of the SFM in the period before the implementation of supporting IS***

The company faced several issues before the renovation of the SFM process by implementing the supporting Microsoft Dynamics CRM. In the period before the implementation of the SFM-supporting IS in 2009, it was difficult to even talk about the SFM. During the analysis, several problems were identified in the pre-implementation phase.

- (1) The execution of most of the SFM phases without the use of a proper IS was practically impossible.
- (2) The company had no information about what the conversion rates were, what the cost per vehicle sold was, how effectively individual activities were executed, and how effective each part of these activities were.
- (3) Due to the absence of a supporting IS, customer segmentation was not possible and the contacts with them were inconsistent.
- (4) The company only had a simple database in the form of simple tables and spreadsheets that enabled only basic analytics.

The company thus started with the initiation stage, which is the first stage of the IT/IS implementation model suggested by Cooper and Zmud (1990) and Saga and Zmud (1994). In the initiation phase, a company identifies organizational problems/solutions that warrant a technological solution (Cooper & Zmud, 1990). The company thus decided to renovate the SFM process by implementing a supporting IS in order to alleviate the identified problems. After the analysis of the problems, several goals were set for the SFM process renovation.

- (1) To be able to execute all of the seven phases of the SFM properly.
- (2) To be able to measure the effectiveness of the SFM process and its phases.
- (3) To be able to take corrective actions if any deviations would occur in comparison with the set objectives.

### ***The analysis of the SFM in the period right after the implementation of supporting IS***

In order to deal with the problems described in the previous section in 2012 a SFM process renovation was undertaken by implementing a supporting IS, namely Microsoft Dynamics CRM with customized developed features to help improve the execution of the SFM. The company thus started with the next stages of the IT implementation model, the adoption stage, deciding to adopt and install the new IS to support the SFM process, and adaptation stage, the modification of processes directed toward individual/organizational needs to better fit the IS with the work

setting (Cooper & Zmud, 1990; Saga & Zmud, 1994). By that it had taken all of the necessary actions leading to the actual roll-out of the system.

Right after the system deployment, the company was able to assess the situation before the IS implementation. During this period, the company had only started to recognize the shortcomings of certain parts of their sales funnel, but still did not have the right solutions for their improvements and were not aware of the right procedures to take corrective actions. The first stage of the post-implementation had also started, that is user acceptance of the introduced IS. This means that the company undertook efforts to induce organizational members to commit to the use of the new IS (Cooper & Zmud, 1990; Saga & Zmud, 1994).

The most important and evident changes and improvements in the IS implementation were:

- (1) The company was able to start the execution of each of the seven phases of the SFM.
- (2) The IS further enabled the possibility of measuring conversion rates and the effectiveness of the execution of the various stages of the SFM.
- (3) During this period, the company still could not execute all of the phases of the SFM properly, due to the absence of an IS in the past. Consequently, the company at this stage did not have the possibility of proper preparation and planning for all of the activities, mainly due to the lack of historical data on customers and operations, not knowing the conversion rates, and inconsistent database that in this period only began to take proper shape.

In this period the company has reached the following conversion rates (see Figure 4):

- 5% conversion rate from contact to potential customers,
- 11% conversion rate from potential customers into prospective customers,
- 1.3% conversion rate from prospective customers to customers,
- 35% rate of return contact by prospective clients from a company's dealer.

This meant that the company had to address 13,986 contacts, to acquire about 700 potential customers to lead them through the sales funnel in order to obtain 1 new customer.



**Figure 4:** The company's sales funnel in the period right after the implementation of supporting IS

The analysis identified the following issues that the company faced during this period.

- (1) Low conversion rates from contacts to potential customers. The company therefore did not know their customers and potential customers and thus did not address the right target audience, where there would be a greater likelihood of purchase. The company has therefore made high investments into CRM activities and communication with customers, but with a relatively small effect.
- (2) Low conversion rates of potential customers into prospective customers. The main reason for this issue was low awareness of potential customers' needs. The company did not know how to properly convert potential customers, who have expressed an interest in the company's products, into prospective customers, or to carry out accurate activities. Part of the reason for the low conversion rates may also be due to the incorrectly specified criteria for determining prospective customers.
- (3) Low conversion rates of prospective customers into customers. This meant that only 1.3% of prospective customers, where a high degree of purchase interest was detected, actually purchased the company's product at the end of the sales funnel. Several reasons for this issue were identified: low rates of return contact to prospective customers by company's car dealers, incorrectly defined criteria for prospective customers, and underdeveloped sales process at company's dealers.
- (4) Low rate of return contact by prospective customers from a company's dealer. Only 35% of prospective customers who were sent to a company's dealer were subsequently contacted within the next 48 hours, which means that the company was losing a large part of the sales potential due to the poor responsiveness of the sales staff. The company thus realized the necessity for corrective actions which meant the need for the process optimization and properly directing and monitoring the activities of traders.

### ***The analysis of the SFM in the period three years after the implementation of supporting IS***

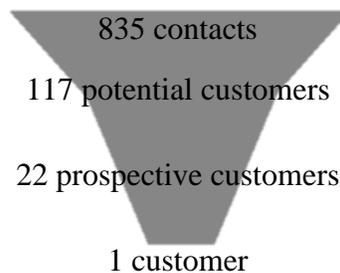
In the period three years after the IS implementation to support the SFM, in 2015, the company followed with the final stages of the IT/IS implementation model, which are the routinization stage, the altering of the work system to account for the IS such that it is no longer perceived as new or out-of-the ordinary, and the infusion stage, which means that the IS becomes embedded within the company's work system (Cooper & Zmud, 1990; Saga & Zmud, 1994). In this period the company was able to recognize several benefits of the SFM process renovation by implementing and using a designated IS to support the SFM actions.

Three years after the implementation of IS to support the SFM process, the company has improved or alleviated all of the issues identified in the period right after the deployment of the IS. The company was able to correctly record the information about their customers, accurately execute their activities and SFM phases, and properly record responses to a variety of activities into the IS, Microsoft Dynamics CRM. By doing that, the company has obtained the necessary basis for getting to know their customers, the responses of these customers to different types of communication, and a higher possibility of a successful targeting of potential customers by using

a variety of analytical functions and possibilities enabled by supporting IS. The company was thus able to more accurately identify which contacts it should address and how, in order to obtain the most potential customers. Furthermore it was able to identify the criteria for a potential customer more successfully in order to transform potential customers into prospective ones, and then communicate with the latter to transform them into actual customers. The company has also improved the low rate of return contact by prospective customers from a company's dealer. This has been achieved by the possibility of measuring and monitoring these levels, along with the possibility of giving proper guidance to car dealers, which included implementing several bonus systems.

In this period the company has reached the following conversion rates (see Figure 5):

- 14% conversion rate from contact to potential customers,
- 19% conversion rate from potential customers into prospective customers,
- 4.5% conversion rate from prospective customers to customers,
- 85% rate of return contact by prospective clients from a company's dealer.



**Figure 5:** The company's sales funnel in the period three years after the implementation of supporting IS

From the structure of the sale funnel in this period shown in Figure 5 we can see that in order to obtain 1 new customer the company needed only 6% as many contacts, 17% as many potential customers, and 29% as many prospective customers compared to the period right after the implementation of the IS to support the SFM process.

The analysis of the SFM process showed that the improved processes, the modernized infrastructure, such as call centers, more efficient targeting of customers, and the more expensive but efficient communication channels resulted in four times higher costs per potential customer than in the period before the implementation and the execution of SFM with Microsoft Dynamics CRM. Nevertheless, if this is observed from a cost per sold vehicle, it represents only 67% of the costs per vehicle sold compared to the period before the implementation of SFM with the use of Microsoft Dynamics CRM, which can be contributed to the improved conversion of potential customers into prospective customers and further to actual customers. In other words, the cost per vehicle sold three years after the implementation of the SFM with the use of Microsoft Dynamics CRM decreased by 33% compared to the period before. Therefore, with the same budget for CRM activities, the company was able to sell 50% more vehicles.

The analysis of the execution of the SFM three years after the implementation of Microsoft Dynamics CRM showed improvements throughout the whole process of SFM.

- (1) The company was able to execute all of the seven phases of the SFM properly and effectively.
- (2) The company has significantly improved all of the conversion rates and thus the effectiveness of the SFM process and its phases.
- (3) The company was able to take corrective actions if any deviations in comparison with the set objectives occur in a timelier and more effective manner due to the effective analysis and reporting abilities enabled by the supporting IS.

### **Implications and concluding remarks**

Throughout the case study we have researched the execution of SFM and the role of the use IS in improving all phases of SFM in a leading German automotive company. Furthermore, we have analyzed the effectiveness of the SFM in three periods: before the implementation of supporting IS; right after the development, implementation, and deployment of supporting IS; and three years after the implementation and use of customized Microsoft Dynamics CRM solution for SFM. We have found that the effective execution of SFM is of great importance in the automotive industry for achieving the objectives of SFM and that it cannot be done effectively without the appropriate use of supporting IT/IS. However, the implementation of IS does not itself guarantee the effectiveness or achieving the desired objectives of the SFM process. Carefully planned activities, proper execution of all of the phases of the SFM process along with constant monitoring, and taking timely corrective actions, if necessary, are also needed. By case study analysis, we have confirmed the proposed hypotheses that in order to achieve the ultimate goal and thereby the effectiveness of the SFM, all seven phases of the sales funnel should be precisely specified and executed; each of the phases has an impact on at least one of the main objectives of the SFM; and that their execution is not possible or economically feasible without the embedded use of properly designed IS.

The analysis of the results show high improvements in all three effectiveness measures of the SFM after the implementation of the supporting IS. This gives important implications for research and particularly for practitioners. By the results of this case study, we have backed up some of the findings from previous studies presented in the research background section and provided a deep insight into the research case context that cannot be obtained in quantitative studies. The results provide several useful implications and guidance points for managers and other competing companies regarding how to improve the effectiveness of the SFM, potentially reduce costs, increase customer satisfaction, and ultimately make more profit.

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