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CRM IN TECHNOLOGY COMPANIES

Process, Technology and Measurement

Master’s Thesis in
Human Resource Management

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ABSTRACT

Customer Relationship Management (CRM) is a management approach that aims to create, develop, and enhance relationships with strategically targeted customers. CRM is utilized in order to maximize customer value, corporate profitability, and thus, shareholder value. From a strategic viewpoint, CRM is not merely an IT-Solution. CRM involves a synthesis of strategic vision: A corporate understanding of the nature of customer, the utilization of the appropriate CRM applications and information management as well as high-quality operations and service.

This study reviews the different CRM frameworks and definitions and presents critical factors of CRM metrics and success in the light of current literature. After literature review, a new framework for CRM is introduced and discussed. In the empirical part of the study, CRM is studied from two different point-of-views: CRM consultants and major Finnish technology companies using CRM.

The use of CRM in the case companies is still mostly at an operative level and the greater strategic advantages have not yet been achieved in a larger scale. The companies are still struggling with integrating and unifying their customer information, but the visions in a longer term match the model of a more strategic and holistic CRM.

KEYWORDS: Customer relationship management, CRM, Industrial, Business to business
1. INTRODUCTION

The conditions of doing business in today’s society are changing rapidly. The rapid development of technology and the increased competition caused by globalization set new demand for ways that companies use to develop their customer relationships and gather information about customers. In order to success, companies need to find new long-term competitive advantages. This doesn’t mean only implementing for example new IT-technologies since those are also available for the competitors, but the changes have to be strategic by nature.

The fundamental reason for companies to develop CRM and to manage their customer base is to identify, acquire, satisfy and retain profitable customers. However, it is not profitable to grow the customer base aimlessly. The companies should aim to retain existing customers and acquire new customers, who have future profit potential (or are important for other strategic reasons). It should be noted that not all customers are equally important. Some might not be worth retaining or acquiring at all for example because of high cost-to-serve. (Buttle & Maklan, 2015:28-29.)

This change in competitive environment has caused an enormous interest in customer relationship management (CRM) in both academics and executives (Plakoyiannakii, 2005). Even though there is an increasing amount of published material on CRM, there is a lack of agreement about what CRM actually is and how it should be seen in relation to company’s strategy. (Payne & Frow, 2005.) This disparity in the way CRM is interpreted can be seen in the major differences in frameworks generated about customer relationship management, as discussed later in this study.

Considering the current situation of CRM research, a more uniform strategic framework is needed. For example Grabner-Kräuter and Moidrtscher (2002) in their paper point out that there is a lack of an adequate strategic CRM framework. After all, CRM should be seen as a strategic approach, not merely a technology solution since one of the key reasons for CRM failure is considering it as a technology initiative (Kale, 2004; Payne & Frow, 2005). Furthermore as the Gartner Group (2003) has found, approximately 70% of CRM projects result
in losses or no bottom-line improvements in performance. A need for a better understanding is in place.

1.1 Purpose of the study and research questions

The goal of this study is to review the existing frameworks of customer relationship management and form a synthesis that links the significant parts of CRM together. After the formation of a strategic framework, an empirical study is executed in Finnish industrial companies in order to clarify how CRM is used in real business environment. To focus the goal of this study, the following research questions are aimed to answer:

1. What processes and factors CRM consists of?
2. How is CRM used in case companies?
3. How is the CRM information exploited in different levels of organization?
4. What is the role of CRM in the future?

When discussing operational CRM, the emphasis will be on sales operations since the case companies represented in the empirical part use CRM mainly as an operational tool for sales departments.

1.2 Definition of focal concepts

Customer relationship management (CRM)

CRM can be seen as the “core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit. It is grounded on high-quality customer-related data and enabled by information technology.” (Francis Buttle & Maklan, 2015)

SFA (Sales Force Automation)

“Sales force automation is the application of computerized technologies to support salespeople and sales management in the achievement of their work-related objectives.” (Buttle & Maklan, 2015: 212)
Customer Lifetime Value (CLV)

CLV is a way of evaluating customer relationships by looking at what the retained customer is worth to the organization now, based on the predicted future transactions and costs. CVL’s meaning is to better understand the value of each customer or customer segment for the company by looking to the value of future sales and costs (expressed as the present value of a stream of future profits) (Ryals & Knox, 2007).

In other words, Customer Lifetime Value is “a realistic estimate of the total business that can be expected from a customer, if he remained loyal over his lifetime”. (Muikerjee & Singh, 2009)

ACRM (aCRM)

ACRM, as in Analytical CRM is the “process of evaluating customer data and their behavior pattern in buying any product to better understand the trends.” Analytical CRM gathers the customer information from various sources and uses Data Mining and analytical tools in order to create customer insights (Ranjan & Bhatnagar, 2011).

1.3 Structure of the study

This thesis consists of five chapters. Chapter 1 includes an introduction and a background to the problem area as well as definition of the focal concepts. Chapter 1 also includes a presentation of the research problem and research questions of this thesis. In chapter 2 the theory relevant for this study is reviewed and discussed. The end of chapter 2 summarizes the theory base reviewed in the previous chapters and a new framework is constructed. Chapter 3 includes a description of the methodological approaches chosen for this study and chapter 4 the analysis of the empirical data. Chapter 4 begins with a within-case analysis of each company case which is followed by a cross-case analysis. Finally chapter 5 contains conclusions and discussion, including an evaluation of the study and further research recommendations.
2. LITERATURE REVIEW

2.1 Definitions of CRM

Customer relationship management has been defined in various different ways by the scholars. In Table 1, a summary of these definitions is presented. The definitions range from considering CRM mostly as a technological approach (e.g. S. Kim & Mukhopadhyay, 2011) into defining it as a core of company’s strategy and value proposition (Francis Buttle & Maklan, 2015; Mandic, 2008).

Table 1. Summary of CRM definitions

<table>
<thead>
<tr>
<th>Scholar(s)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. Kim &amp; Mukhopadhyay, 2011</td>
<td>CRM (technologies) are divided in two categories: &quot;While targeting CRM improves the success rate of distinguishing between non-loyal and loyal customers, support CRM increases the probability of retaining the loyalty of existing customers.&quot;</td>
</tr>
<tr>
<td>Mandic, 2008</td>
<td>&quot;CRM puts in focus the customer and their satisfaction in such a way that all the company’s activities are pointed towards the customer. The main aim of CRM is to get to know the customer as well as possible, which can help a company deliver better, more appropriate and higher added value to the customer&quot;. &quot;CRM is the strategic process of selecting the customers a firm can most profitably serve and of shaping the interactions between a company and these customers. The goal is to optimize the current and future value of the customers of the company.&quot;</td>
</tr>
<tr>
<td>Hoots, 2005</td>
<td>&quot;A development of a universal image of customers’ needs, their expectations, behavior and of managing the mentioned elements (factors) which influence a company’s business.&quot;</td>
</tr>
<tr>
<td>Francis Buttle &amp; Maklan, 2015</td>
<td>&quot;Core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit. It is grounded on high-quality customer-related data and enabled by information technology.&quot;</td>
</tr>
<tr>
<td>Reimann et al., 2009</td>
<td>“Firms’ practices to systematically manage their customers to maximize value across the relationship lifecycle”</td>
</tr>
<tr>
<td>Payne &amp; Frow, 2004</td>
<td>CRM is a management approach that seeks to “create, develop and enhance relationships with carefully targeted customers to maximize customer value, corporate profitability, and thus, shareholder value.”</td>
</tr>
<tr>
<td>Payne &amp; Frow, 2005</td>
<td>“Strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments”</td>
</tr>
<tr>
<td>Wilson et al., 2002</td>
<td>“Processes and technologies that support the planning, execution and monitoring of coordinated customer, distributor and influencer interactions through all channels”</td>
</tr>
</tbody>
</table>
Even though the term “CRM” is relatively new, the main principles behind the theme are not. For a long time companies have already done customer relationship management in some form. The difference in present day CRM is that organizations can access an increased potential by utilizing technology which makes it possible to manage more personal relationships with vast numbers of customers (Payne & Frow, 2006).

CRM begins with the basic assumption that firms view customers as manageable strategic assets of the firm (Thomas, Blattberg, & Fox, 2004). In line with this perspective, Reimann et al. (2009) define CRM as “firms’ practices to systematically manage their customers to maximize value across the relationship lifecycle.”

Buttle & Maklan (2015) define CRM as the “core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit. It is grounded on high-quality customer-related data and enabled by information technology.”

As Buttle & Maklan mention the importance of IT-solutions in their definition, also Payne & Frow (2005) underline information technology as an enabler of CRM. However they also highlight that CRM is a “strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments.”

In unison with the definitions mentioned is also Greenberg’s view on CRM evolvement, which describes Information Technology only as a base of the pyramid (see Figure 1) that is determined by the company’s business strategy and people & processes.
Payne & Frow (2004) describe CRM as a management approach that seeks to “create, develop, and enhance relationship with carefully targeted customer to maximize customer value, corporate profitability, and thus, shareholder value”. They state that CRM unites the potential of new technologies and new market thinking to deliver profitable, long-term relationships.

The same view is also supported by Jill Dyché (2012) who defines CRM as “The infrastructure that enables the delineation of and increase in customer value, and the correct means by which to motivate valuable customers to remain loyal – Indeed, to buy again”

Wilson, Daniel and McDonald (2002) emphasize the role of multiple channels when it comes to CRM although their define CRM from the operational point-of-view. They define CRM as “processes and technologies that support the planning, execution and monitoring of coordinated customer, distributor and influencer interactions through all channels.”

In unison with the previous, Boulding et al. define that “CRM relates to strategy, the management of the dual creation of value, the intelligent use of data and technology, the acquisition of customer knowledge and the diffusion of this knowledge to the appropriate stakeholders, the development of appropriate (long-term) relationships with specific customers and/or customer groups, and the integration of processes across the
many areas of the firm and across the network of firms that collaborate to generate customer value.” (Boulding et al., 2005).

2.2 Concept of CRM

The core of strategic CRM can be seen as a manifestation of what Kotler et al. (2009) name as customer orientation. Kotler et al. (2009) identify four different business orientations that form a company’s competitive strategy: Product-orientation, production-orientation, sales-orientation and customer or market-orientation.

**Product-oriented** businesses believe that customers are interested in the best quality, design or features of the products. Companies that are product oriented are often highly innovative and entrepreneurial. Product-oriented companies often make assumptions about what customers want and only a little customer research is conducted.

**Production-oriented** businesses focus on operational performance. They consider that customers are interested on getting the best value for money and they continually work to keep operating costs low and develop standardized products. Production-oriented companies try to avoid customization and the focus innovations on the optimization of supply chain and simplification of their production processes. Production-oriented businesses see customers as a mass that don’t have unique needs or desires.

**Sales-orientation** is often linked to production-orientation. Sales-oriented businesses emphasize the meaning of advertising, sales and public relations. If the investments in the processes mentioned are high enough, customers will be persuaded to buy.

In **customer or market-oriented** companies it is essential to put customers in the core of the business. Customer-oriented companies strive to develop better value propositions for customers. Customer-oriented companies collect, use and analyze customer and competitive information in order to deliver better value than competitors. (Kotler, Keller, Brady, Goodman, & Hansen, 2009.)
The focus of strategic CRM is in the development of a customer-centric business culture that aims to acquire and keep customers by offering better value than competitors. Therefore CRM can be seen as a form of Kotler’s customer orientation. The main strategic goals of CRM are to develop relationships to make differentiation, customer retention and giving continuous competitive advantage (Francis Buttle & Maklan, 2015).

In short, strategic CRM’s value proposition is to help companies to understand their customers well enough so that they can identify the ones worth keeping and the ones the company should be willing to lose (Dyché, 2012). The customers identified as important should be the core of the business as customer orientation depicts (Kotler et al., 2009).

Buttle & Maklan (2015: 4) note that the term “CRM” can have a significantly different meaning depending on the party using it. Information technology providers for example use the term to describe software applications used to support sales, marketing and service functions in companies, whereas others with managerial perspective emphasis state that CRM is a strategic approach where technology may have a role but necessarily doesn’t. In order to solve this difference of views Buttle & Maklan (2015: 4) divide CRM into three different categories: operational, strategic and analytical CRM.

Operational CRM aims to automate customer-facing business processes. Operational CRM can be divided into three main groups by their user group: Marketing automation, Sales force automation (SFA) and Service automation. CRM software is designed to integrate, unify and automate processes in these functions in order to make them more tuned and measurable. The original form of operational CRM was Sales force automation and SFA systems are widely adopted in B2B companies. (Buttle & Maklan, 2015.)

Strategic CRM is focused on developing a more customer-centric culture that aims to create and deliver better value to customers in order to gain competitive advantage. Strategic CRM is based on the idea that resources should be allocated where they enhance customer value and that reward systems should promote employees in behavior that improve customer satisfaction and retention. Strategic CRM also emphasize the meaning of customer information and sharing and applying it across the entire business. However it is also
important to remember that an organization’s CRM strategy is limited by its operational and analytical (CRM) capabilities. (Buttle & Maklan, 2015.)

Analytical CRM covers capturing, storing, extracting, processing, distributing, using and reporting customer-related data to enhance customer and subsequently company value. Customer-related data is gathered from various sources inside the company: sales data, financial data, marketing data, service data etc. This customer data can be enriched by data from external sources, for example from business intelligence organizations or market research companies. With data mining tools a company can solve questions as: Who are the most valuable customers? Which customers we should aim a specific new product to? Which customers are likely to switch to competitors? Analytical CRM gives valuable information for both strategic CRM and operational CRM. (Buttle & Maklan, 2015.)

Also Payne & Frow (2005) describe different approaches to CRM. They portray the differences in a form of a continuum where one end describes CRM as narrowly and tactically defined and on the other end is CRM as a broadly and strategically defined phenomenon (see figure 2.)

![Figure 2: The CRM Continuum (Payne & Frow, 2005).](image-url)
Dyché (2012) divides CRM into two aspects: “operational” versus “analytical”. He describes operational CRM as the “front-office”, all the areas where direct customer contact or “touchpoint” occurs. Analytical CRM on the other hand is called the “back-office” or “strategic” CRM. Analytical CRM involves understanding customer activities that happen in the front-office. Analytical CRM is closely connected with business intelligence and analytical or strategic CRM are a distinctive concept from CRM products or technology since they involve information from other sources as well. The difference between business intelligence and strategic CRM according to Dyché is that CRM integrates the information with business actions: “The mandate of CRM is the ability to act on that data and to change fundamental business processes to become more customer-centric” (Dyché, 2012).

Dyché (2012) also describes analytical CRM as the “only means by which a company can maintain a progressive relationship with a customer across that customer’s relationship with the company”. This means that the company has to be able to integrate customer data from operational CRM systems as well as other enterprise systems in order to track all the customer interactions and events over time.

**Figure 3**: Analytical CRM: The sum of its parts (Dyché, 2012).
The way Dyche (2012) describes analytical CRM can be seen in Figure 3. In this figure, the core of data for analytical CRM is the operational CRM of different business functions, including contact management, customer support, sales force activity management etc. This data is enriched with enterprise data coming imported from other enterprise systems such as ERP, SCM, billing etc. All this data is analyzed in different forms of analysis in order to achieve higher understanding of customer needs and relationships.

2.2.1 Business-to-Business CRM

The concept of customer differs significantly between B2B and B2C context. In B2C customer is the end consumer - a household or an individual. In B2B context the customer is on organization – a company (producer or reseller) or an institution (non-profit organization or government body). B2B environment differs from B2C in many ways.

First, the customers are fewer. For example in Finland the population is 5,5 million (OSF, 2014) but there are only 350 000 enterprises (OSF, 2013). Second, household customers are much smaller than business customers. Third, relationships in B2B contexts are often much closer than between household customers and their suppliers. Fourth, the demand for input goods and services by companies is formed from end-user demand. For example household demand for ice cream creates organizational demand for milk. Fifth, buying in B2B context is professional and formal, made by trained professional. Compared to B2C context, the value of single purchase is often massive. Finally, a great amount of B2B trading is direct. Suppliers sell often direct to customers whereas in B2C context the number of intermediaries is higher (Buttle & Maklan, 2015.)

In B2B context, the challenge for CRM is to identifying who are on the other side of the relationship. Inside the customer company, there are several individual “relationships within relationships” and each one of these “customers” should be considered as a part of the customer base and to be identified and tracked. On other challenge compared to B2C context is identifying the actual end users of the products (Peppers & Rogers, 2011). Whereas the purchasing process is more complex in B2B context it is challenging to predict the repeat purchases in B2C context. This is due to the
fact that B2B buyers are more likely to be relationally oriented when they seek trustworthy supplier relationships (Johnson & Sohi, 2001). Johnson’s & Sohi’s (2001) findings also show that strategic utilization’s impact on CRM performance is stronger in B2B relationships, when building deeper, long term relationships.

2.3 Success factors of CRM

The success factors or reasons for failure have been a popular subject of research in CRM field. The reason for this is that in many cases CRM fails to produce the results expected. According to Gartner approximately 70% of all CRM projects fail to achieve the goals set (Gartner, 2003). In this chapter, different approaches to CRM success factors are discussed.

Buttle, Ang and Iriana (2006) found several matters that have an effect on success of CRM implementation. First of all the implementation has to have strong enough support from senior management. The involvement of the user groups during the project planning and technology selection as well their attitude towards innovation and technology combined with realistic expectations about what CRM will deliver play also a major role in the success of the implementation project. The technology implemented has to be easy enough to use, the user groups have to understand how it fits their roles and appropriate training and user support are crucial for successfully implementing new CRM technologies.

Another significant challenge with CRM and customer-related information is data integration. In order to fully benefit from CRM systems a holistic, single view of the customer should be achieved. Often this means integrations with multiple data sources and all the customer interactions have to be identified and traceable to the right customer. Unless data can be fully integrated in order to create a single view of the customer, companies can suffer from poor operational efficiency, duplication of work and for example poor customer experience (Francis Buttle & Maklan, 2015). Also Campbell (2003) emphasizes the meaning of integration of customer information throughout the firm.

In most cases, CRM products start out as so-called point solutions. They are implemented in order to solve a problem of a specific business function, for example sales force automation. This leads to a situation where customer
information is scattered into different local databases and is often mismatched and not linked to each other (Dyché, 2012).

Oshita and Prasad (2000) in their research study recognize four overarching factors for CRM success. For more detailed view, see figure 4.

1. CRM’s ability to impact corporate strategy (according to 25% of respondents)
2. Successful technology integration (23%)
3. Enhanced strategic partnerships (20%)
4. Assimilation of CRM-related technologies (18%)

Figure 4. CRM Success factors (Oshita & Prasad, 2000).

The main finding here is that when implementing CRM, companies should realize that the means don’t matter, it is the strategic impact and the usefulness of the resulting tool that determine the success of CRM (Oshita & Prasad, 2000). In unison with this, Wells, Fuerst and Choobineh (1999) identified four key elements for CRM implementation: business process analysis; integration and redesign of customer data; ICT enabled customer interaction; accessibility/transmission of organizational information.
Avlonitis and Panagopoulos (2005) in their research discovered that in order to gain positive impact on sales performance, the sales people should be recognized as the “internal customer” of the CRM system and their needs, beliefs must be understood, managed and satisfied. Main factors for CRM technology acceptance according to their study is the perceived ease-of-use and usefulness. Sales organizations should develop accurate expectations regarding the benefits of using CRM so that the users have a unified picture of what are the management expectations from system implementation. Secondly, Avlonitis & Panagopoulos underline that salespeople should be involved in the system design and implementation phases in order to develop realistic expectations about the system. Also management support and encouraging the salespeople to use the system have a major role in the system acceptance process.

Wilson et al. (2002), in their research found several factors that support CRM success. The whole list can be seen in **table 2**, but board level backing, defining approval procedures, board awareness of strategic potential of IT, Organizing round customer, User involvement, design for flexibility and rapid strategy/action loop were the factors supported by the study. So, the CRM implementation should be supported by the board, done in involvement with the actual users and be developed in order to champion the customer perspective taking cross-functionality into consideration. The system should from the beginning be developed so that it can be changed to meet future requirements and the implementation should be rapid so that for example management changes won’t result in loss of support for the project. In their conclusions Wilson et al. (2002) note that the need to gain board-level champion/sponsor may not be enough. Commitment is needed across various functions which interact with the customer in order to gain unified understanding of customers.

**Table 2.** Descriptions of Final Success Factor List (Wilson et al., 2002).

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors with full support</strong></td>
<td></td>
</tr>
<tr>
<td>Gain champion / sponsor</td>
<td>A sponsor is needed, preferably at board level, to sell a proposed project and to build commitment across relevant functions</td>
</tr>
<tr>
<td>Rapid strategy/action loop to experiment &amp; gain credibility</td>
<td>Relaxed timescales render a perfect vulnerable due to loss of key sponsors, organizational restructuring, external events and so on. A phased approach can help to build the</td>
</tr>
<tr>
<td><strong>Define approval procedures which allow for uncertainty</strong></td>
<td>Applications which aim to increase efficiency may be cost-justified precisely. But effectiveness-based applications are difficult to predict, even if the case is strong. Project approval procedures should recognize this.</td>
</tr>
<tr>
<td><strong>Gain board awareness of strategic potential of IT</strong></td>
<td>If the board regards IT as merely a support function to keep the business running smoothly, ideas for major initiatives at the customer interface are unlikely to flourish.</td>
</tr>
<tr>
<td><strong>Design for flexibility</strong></td>
<td>The difficulty in getting IT right first time, combined with the need to phase and a changing environment, necessitate the inclusion of flexibility as a key design constraint.</td>
</tr>
<tr>
<td><strong>Organize round customer</strong></td>
<td>As marketing becomes data-driven, its need to integrate closely with other functions increases. A joint sales/marketing director may be more conducive to IT-enabled marketing applications. Failing that, close teamwork on joint processes is necessary, such as with cross-functional process teams.</td>
</tr>
<tr>
<td><strong>Involve users interactively in system design</strong></td>
<td>Users of a system need to be closely involved in such tasks as requirement specification. This involvement works best if it is interactive.</td>
</tr>
<tr>
<td><strong>Factors with limited support</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Address culture change in project scope</strong></td>
<td>The project plan needs to address any requirement to change organizational culture, such as addressing staff willingness to share data.</td>
</tr>
<tr>
<td><strong>Manage IT infrastructure</strong></td>
<td>While user departments may believe they have the skills to bypass the IT function, there is a need for coordination of IT infrastructure to ease future support and development, and to exploit the cross-functional and, indeed, inter-organizational nature of customer-facing processes.</td>
</tr>
<tr>
<td><strong>Leverage models of best practice</strong></td>
<td>Where available and suitable, the use of minimally tailored software packages can embed aspects of best practice.</td>
</tr>
<tr>
<td><strong>Identify need for business system convergence internally &amp; coordination externally</strong></td>
<td>An explicit IT strategy for marketing should be developed to ensure that disparate projects can be integrated to deliver a single organizational view of the customer, product or competitors.</td>
</tr>
<tr>
<td><strong>Prototype new processes, not just IT.</strong></td>
<td>Effectiveness-based marketing applications may have profound implications for internal or external processes and relationships. These...</td>
</tr>
</tbody>
</table>
need prototyping just as much as the IT; if left too late the IT will constrain necessary modifications.

Manage for delivery of benefits, not specification. Documents such as requirement specifications may need refining during implementation, if the intended benefits are to be achieved. The implementation process needs to reflect this need for flexibility.

Ensure market orientation The organization needs a market orientation, or at least the perception of the need for it, if an IT system is to be accompanied by the necessary business changes and deliver the intended benefits.

Also King & Burgess (2008) have identified a list of CSF’s for CRM systems which can be divided into three sections: Context, Supporters & Project organization (see table 3.) This listing underlines the meaning of organizational context and the readiness for the organization for utilizing CRM. The success or failure of the technology initiative are dictated by the company’s knowledge management capabilities, technological readiness and its employee’s willingness to share data and to change and develop processes. On top of the context, success of CRM is also affected by the project organization assigned to the implementation project. Their ability to communicate CRM strategy, integrate systems and capabilities to change processes and culture has a strong effect in success of the initiative. Finally, the support of top management was named as a critical success factor for CRM by Burgess and King, which is in line with the findings of other scholars as well (Avlonitis & Panagopoulos, 2005; Francis Buttle et al., 2006; Wilson et al., 2002).

Table 3. Critical Success Factors for CRM (King & Burgess, 2008).

<table>
<thead>
<tr>
<th>Context</th>
<th>Knowledge Management Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Willingness to Share Data</td>
</tr>
<tr>
<td></td>
<td>Willingness to Change Processes</td>
</tr>
<tr>
<td></td>
<td>Technological Readiness</td>
</tr>
<tr>
<td>Supporters</td>
<td>Top Management Support</td>
</tr>
<tr>
<td>Project Organization</td>
<td>Communication of CRM Strategy</td>
</tr>
<tr>
<td></td>
<td>Culture Change Capability</td>
</tr>
<tr>
<td></td>
<td>Process Change Capability</td>
</tr>
<tr>
<td></td>
<td>Systems Integration Capability</td>
</tr>
</tbody>
</table>
From the strategic point-of-view in addition to full commitment and support from the company’s board and senior management (Fletcher & Wright, 1996) also a culture that lives by the philosophy of CRM is crucial (Haley & Watson, 2003).

Buttle and Maklan (2015) have summarized the most common reasons for CRM failure in a form of “The Seven Deadly Sins of CRM”. The sins are listed in Table 4 with explanations.

**Table 4. The Seven Deadly Sins of CRM** (Francis Buttle & Maklan, 2015).

<table>
<thead>
<tr>
<th>Sin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Failure to define a CRM strategy</td>
<td>Companies what CRM means for them, what are the business requirements?</td>
</tr>
<tr>
<td>2. Failing to manage staff expectations</td>
<td>Business users must be considered as stakeholders for the project.</td>
</tr>
<tr>
<td>3. Failure to define success</td>
<td>Discrete success metrics should be defined and monitored.</td>
</tr>
<tr>
<td>4. Hasty ASP (or in more general, technology) decisions</td>
<td>Companies haven't yet sorted out the advantages and disadvantages of ASP models.</td>
</tr>
<tr>
<td>5. Failure to improve business processes</td>
<td>Companies should be willing to modify and refine their business processes and assure that CRM technology incorporate these processes.</td>
</tr>
<tr>
<td>6. Lack of data integration</td>
<td>Effective customer-focused decision making requires understanding customers across their various touchpoints with the company. Finding, gathering and consolidating customer data is crucial for CRM success.</td>
</tr>
<tr>
<td>7. Failure to continue socializing CRM to the enterprise at large</td>
<td>CRM is an ongoing process and it should be promoted and communicated constantly.</td>
</tr>
</tbody>
</table>

In addition to the already mentioned success factors, many researchers (Mukerjee & Singh, 2009; Ryals & Knox, 2001; Webster, 2002) underline the effect of cross-functional management and processes in CRM. In order to success in CRM, companies have to have a cross-functional approach, not only involving the marketing department, but the entire company. This is one of the key means to link customers with the organization.
Zablah et al. (2004) examine CRM success from a process point-of-view (see figure 5.). First step in order to achieve the goals is to specify a Relationship Management Strategy. The company has to prioritize relationships and allocate resources so that relationship building and management is based on customers’ value to the company. CRM strategy should specify how the company plans to allocate its limited resources when dealing with customers from different priority levels. Defining CRM processes and assigning process roles includes mapping and describing the relevant processes and subprocesses and allocating responsibilities for these processes to individuals and groups. When the processes have been defined and roles assigned, the state of the CRM capabilities have to be assessed to ensure that the company has the required resources to execute the activities. The management may need to enhance existing capabilities for example in a form of new technologies. As a last step, continual monitoring, evaluation and improvement of the process and subprocesses has to be done. Management should focus to ensure that desired
outcomes are achieved and find out new ways to develop the productivity of the process.

2.4 CRM concept
In this chapter different existing models of CRM are presented and discussed.

The Gartner group’s (2001) model suggest that there is eight competencies in CRM that companies need to be successful (Figure 6).

<table>
<thead>
<tr>
<th>1. CRM vision: Leadership, Social worth, Value proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. CRM Strategy: Objectives, Segments, Effective interaction</td>
</tr>
<tr>
<td>3. Valued customer experience</td>
</tr>
<tr>
<td>Understand Requirements</td>
</tr>
<tr>
<td>Monitor Expectations</td>
</tr>
<tr>
<td>Satisfaction vs. Competition</td>
</tr>
<tr>
<td>Collaboration and Feedback</td>
</tr>
<tr>
<td>4. Organizational collaboration</td>
</tr>
<tr>
<td>Culture and Structure</td>
</tr>
<tr>
<td>Customer Understanding</td>
</tr>
<tr>
<td>People: Skills, Competencies</td>
</tr>
<tr>
<td>Incentives and Compensation</td>
</tr>
<tr>
<td>Employee Communication</td>
</tr>
<tr>
<td>Partners and Suppliers</td>
</tr>
<tr>
<td>5. CRM Processes: Customer life cycle, Knowledge Management</td>
</tr>
<tr>
<td>6. CRM Information: Data, Analysis, One view across channels</td>
</tr>
<tr>
<td>7. CRM Technology: Applications, Architecture, Infrastructures</td>
</tr>
<tr>
<td>8. CRM Metrics: Cost to serve, Satisfaction, Loyalty, Social costs</td>
</tr>
</tbody>
</table>

Figure 6: Gartner’s (2001) CRM model.

In order for the project to be successful a CRM vision has to be formed so that strategy and implementation can be developed to achieve the vision. CRM vision describes how the company wants to look and feel to its customers and prospects. The objectives of a CRM strategy are to target, acquire, develop and keep the valuable customers so that company goals can be achieved. CRM strategy sets the direction and goals on how the company will build customer loyalty. Valued customer experience includes understanding customer
requirements, monitoring their expectations and satisfaction as well as gathering feedback in order to maintain a good customer experience. Many companies think that once they implement a CRM system, they automatically become customer-focused. **Organizational collaboration** highlights the need for organizational and cultural development in order to gain the benefits of CRM. The **CRM processes** examine the company processes from the customer point-of-view. Instead of only improving efficiency and reducing costs from the enterprise viewpoint, customers should be taken in consideration and customer expectations should be met with customer process re-engineering. In order to be successful at customer relationship management, an integrated flow of **CRM information** is needed. The employees need to have the right information at the right time in order to get customer insights and allow effective customer interaction in all of the company’s channels. Often the customer information is fragmented across various departments and databases and integrating and coordinating this information flow is crucial for CRM success. Many companies see implementing CRM as a technology project. **CRM technology** is an important enabler for a CRM business strategy but is should be seen as only one piece of the puzzle. In order to achieve the strategic goals, **CRM metrics** have to be set. Companies must set measurable CRM objectives and monitor them in order to turn customers in to assets.

Peppers’ and Rogers’ (2011) IDIC model suggest that four actions are needed from companies that want to build closer one-to-one relationships with their customers: Identify, Differentiate, Interact and Customize (see **Figure 7**). This model is made strongly from the process point-of-view to CRM. These different tasks are based on “the unique, customer-specific, and iterative character of the relationships”. Peppers & Rogers (2011) state that relationships are possible only with individuals, not with segments or markets. Thus it is important to identify the individual customers. Companies have to be able to recognize each customer and be able to organize the various information resources so that the company can form a customer-specific view of its business. The company should be able to “know” its customers in as much detail as possible. Understanding the differences of the customers a company can focus its resources on the customers who are most valuable and implement strategies to satisfy these different customers’ needs and improve customer experience.
do this, companies have to **differentiate** customers. Customers are clustered into different categories based on their characteristics, involving the needs the customer has as well as customer’s value to the company. **Interact.** Companies must improve the effectivity and quality of their customer interactions. Each interaction should be linked with all the previous interactions with that customer. This gives the company a better insight into customer’s needs and gives the customer a better experience by saving time. Lastly the company should **customize** its behavior to the individual needs of the customer. Peppers & Rogers (2011) speak about engaging the customer in an “ongoing Learning Relationship”, where enterprise needs to adapt to satisfy the customer’s expressed needs.

**Figure 7.** The IDIC model (Peppers & Rogers, 2004).

Buttle’s (2001) model of the “CRM value chain” consists of five primary stages and four supporting conditions that lead towards enhanced customer profitability. The primary stages ensure that a company create and deliver value propositions that acquire and retain profitable customers. The supporting conditions’ task is to enable the CRM strategy to function effectively (see **Figure 8**). The five steps in the CRM value chain are customer portfolio analysis, customer intimacy, network development, value proposition development and managing the customer lifecycle. The first step, **customer portfolio analysis**
acknowledges that not all customers are equally valuable for the company. With customer portfolio analysis, the company determines who are the strategically significant customers. The customer portfolio consists of a mixture of groups that form the customer base for the company. **Customer intimacy** determines how the company will use the customer information to best serve customers’ needs. In order to serve the customers’ needs effectively and valuably, the company must **develop a complete network**. The network may contain suppliers, investors, manufacturers, employees, technology etc. After recognizing the customers and building a network, the whole network has to work together to develop and deliver **value** for the chosen customer. After the previous steps are finished, the company’s responsibility is to create, start and **manage the relationship**. The **Supporting conditions**, leadership and culture, Data & IT, people and processes are the basic conditions that work as a foundation for the whole CRM process (F. Buttle, 2001).

![Figure 8](image)

**Figure 8.** The CRM Value Chain (F. Buttle, 2001).

Payne’s & Frow’s (2006) model consists of two main components: CRM implementation elements and core cross-functional CRM processes (See **Figure 9**). The critical implementation processes (CRM readiness assessment, CRM change management, CRM project management and employee engagement) are integrated with the five core CRM processes (Strategy development, Value creation, Multi-channel integration, Information management and Performance
Assessment. The core CRM processes are now described first, followed by the description of the key CRM implementation elements.

The strategy development process defines the overall objectives and parameters for the CRM activities of the whole organization. This process is done with dual focus on both, the organizations business strategy and its customer strategy. The value creation process takes the outputs from the strategy development process and builds a program that identifies both the value received from the customer and the value customer receives from the company. The value creation can be seen as an interactive process with dual creation of value. In the multi-channel integration process, decisions are made on the most effective combination of channels. The question that should be answered is that how the company can create and present a “single view” of the customer. The large number of customer interaction channels offers great opportunities for improving customer relationships as well as enormous challenges in managing the complexity of customer information and processes. The information management process, according to Payne & Frow (2006) can be described as an “engine” that drives CRM activities. This process consists of two different key activities: Collecting customer information from all contact points and by combining it with other relevant data, developing customer insights that can be used to improve customer experience. The performance assessment process monitors that the strategic CRM objectives defined are met. In addition key metrics to guide future improvement are identified. (Payne & Frow, 2006)

CRM readiness assessment aims to help managers understand the readiness to progress with CRM implementation, both internally and compared to other companies. Ryals and Payne (2001) have identified five stages for CRM readiness: 1. Pre-CRM planning, 2. Building a data repository, 3. Moderately developed, 4. Well developed, 5. Highly advanced. The understanding of the maturity level helps to find the CRM priorities for the company. CRM change management: In order to implement a complex CRM initiative, companies most often have to go through significant organizational and cultural changes. Thus, effective change management is crucial for success in CRM implementation. The research shows that the companies often don’t recognize the scale of change management needed (Payne & Frow, 2006). Since the size and complexity of CRM projects have increased over time, the importance of CRM
**Project management** has increased. Successful CRM projects deliver the objectives defined at corporate level and support the overall business strategy. The final of the four implementation elements is **employee engagement**. When it comes to CRM processes, employees have a crucial role in the success or failure of CRM implementation. It is impossible to develop customer-focused systems and processes without trained and motivated employees (Payne & Frow, 2006).

![CRM Strategy and Implementation Model](image)

**Figure 9.** CRM Strategy and Implementation Model (Payne & Frow, 2006)

Payne & Frow’s (2006) model has been criticized that it has failed to include certain aspects like the methods to be adopted for focusing on key customers and critical aspects of choosing the right CRM technology (Mukerjee & Singh, 2009). Their model (See **Figure 10**) divides CRM into four different sections: **CRM vision, CRM Goals, CRM Implementation and CRM Performance**. **CRM Vision**, according to Mukerjee & Singh should be the starting point of any CRM initiative. They refer to Tamošiūniene & Jasilioniene (2007) when they state that CRM vision can be seen as “the creation of a picture of what the customer-
centric enterprise will look like to ensure that a competitive position can be created in the marketplace.”. CRM vision consists of CRM objectives and metrics that are used to monitor CRM performance and the success of the CRM project (Mukerjee & Singh, 2009). As CRM Goals the authors list Customer profitability, Behavior prediction and segmentation and Personalization. In order to recognize their key customers, companies have to be able to estimate customer profitability and make segmentations in order to concentrate on the most profitable customers. With help of cross-functional information and IT systems, the contact with customers can be personalized to achieve higher customer satisfaction. CRM implementation is divided in this model to three different sections. First, the CRM orientation includes the process and cultural changes needed in the company in order to succeed in CRM implementation. Integration of CRM strategy, technology and employees is needed to ensure that the right orientation is achieved (Mack, Mayo, & Khare, 2005). In order to achieve the goals set, a list of broad objectives for the CRM technology should be created. A comprehensive list of tasks to be performed using technology need to be created to enable well-informed selection of CRM technology.

During CRM implementation, the deployment of CRM needs has to be monitored. The following questions should be answered:

1. Does the CRM implementation enable the company to identify and focus on its key customers?
2. Does the use of multi-channels enhance customer relationships while reducing the cost of transactions with low-profit yielding customers?
3. Does sales force automation enable the sales people to enhance share of wallet with key customers?
4. Does the analysis of the data gathered through customer interactions enable cross-selling and up-selling opportunities?

After the CRM implementation, in order to ensure the success of the project, the CRM performance should be measured against the metrics decided based on the CRM vision and objectives (Mukerjee & Singh, 2009).
Zablah, Bellenger & Johnston (2004) see CRM as an “ongoing process that involves the development and leveraging of market intelligence for the purpose of building and maintaining a profit-maximizing portfolio of customer relationships”. In their model they divide this CRM process into two different sub-processes, the knowledge management process and the interaction management process (see Figure 11).

In the first part of the knowledge management process, customer data is collected from various sources such as customer interaction and secondary sources (for example buying third-party financial information). From this data, customer intelligence should be created using traditional analysis as well as data mining and modeling methods. Any intelligence that can benefit the customer interaction is valuable. Finally, it is important to be able to spread this intelligence to all members of the company that are in any way in contact with the customer. The knowledge management process is highly dependent on the technological and human resources of the company. In interaction
management process, first customer evaluation and prioritization is done. In customer evaluation, an informed assessment of the state of the relationship is made. For example, what is the stage of customer’s needs and is there a danger of losing the customer to competitors? Prioritization determines the importance of given customer in order to allocate company’s resources accordingly. This mapping gives the guidelines for the interaction with each customer. The buyer-seller interactions happen in exchange of products and services (core benefits exchange), information exchange (planned or unplanned communication) or social exchange (e.g. business lunch). All of these different types of interactions should remain consistent, relevant and appropriate. All customer interaction should provide the information back to the knowledge management process in order to further develop the overall CRM process (Zablah et al., 2004).

Figure 11. The CRM Process (Zablah et al., 2004)
2.5 Outcomes of CRM

The fundamental reason behind CRM initiatives in the companies is always seek for business benefits. The benefits of CRM are not always easy to measure, the initiatives being so versatile and complex by nature. However, the scholars have found various potential benefits of CRM if it is successfully implemented. The outcomes of CRM are summarized in Table 5.

Table 5. CRM Outcomes.

<table>
<thead>
<tr>
<th>Scholar(s)</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandic (2008)</td>
<td>Greater customer loyalty, retention and profitability</td>
</tr>
<tr>
<td>Kim, Suh &amp; Hwang (2003)</td>
<td>Increased customer retention and loyalty, Higher customer profitability, Customer value creation, Customization of products and services, Lower process cost, Higher quality products and services</td>
</tr>
<tr>
<td>Buttle &amp; Maklan (2015)</td>
<td>More focused customer acquisition and customer retention, shorter sales cycles, improved salesperson productivity, improved customer relationships, accuracy of reporting, improved visibility of the sales pipeline, more accurate predictability, accelerated cash flow, improved profitability</td>
</tr>
<tr>
<td>Reichheld (1996)</td>
<td>Increasing purchases, Lower customer management costs, Customer referrals, Premium prices</td>
</tr>
<tr>
<td>Newell (2000)</td>
<td>Identifying the profitable customer groups</td>
</tr>
<tr>
<td>Erffmeyer &amp; Johnson (2001)</td>
<td>Improved efficiency, improved customer contact, increase in sales, reducing costs, improve in accuracy</td>
</tr>
<tr>
<td>Freeman &amp; Seddon (2005)</td>
<td>Improved customer-facing processes, improved management decisions, improved customer service, increased business growth</td>
</tr>
</tbody>
</table>

A well implemented CRM is a powerful tool for more focused customer acquisition and customer retention (Francis Buttle & Maklan, 2015). There is a strong economic argument which favors customer retention. Reichheld (1996) has four different arguments for this:

1. **Increasing purchases as tenure grows.** As time goes and customers come to know their suppliers, customers tend to commit more of their spending to suppliers that have proven to satisfy their needs best. Since suppliers have better insight of longer-term customers also cross-selling is more efficient.
2. **Lower customer management costs over time.** Start-up costs of a new customer relationship can be relatively high. Therefore it may take several years before enough profits are earned to cover the acquisition costs. Especially in B2B context maintaining an ongoing relationship can be relatively cost-effective in comparison to the costs of winning the account. Costs of maintaining an acquired customer reduces over time as the parties become closer and processes get more automated which leads to lower transaction costs.

3. **Customer referrals.** Customers who are highly committed to a preferred supplier are generally more satisfied to the relationship than customers who are not committed. For this reason committed customers are more likely to spread positive word-of-mouth and thus influence the beliefs, attitudes and expectations of others.

4. **Premium prices.** Satisfied customers may reward their suppliers for the relationship by paying higher prices. This can be explained by the customer sensing value from other aspects than price alone. Also committed customers are likely to be less responsive to offers by suppliers’ competitors.

In short, customer retention increases customer lifetime value (CLV) (Reichheld 1996). Also Newell (2000) points out that CRM can be used as a tool to analyze customer groups purchase behavior and identify the profitable groups in order to filter out the non-profitable ones. Also Kim, Suh and Hwang (2003) have found that a working CRM gives various benefits to the company, such as: Increased customer retention and loyalty, higher customer profitability, customer value creation, customization of products and services, lower process costs and being able to offer customer higher quality products and services.

Buttle & Maklan (2015) have specified different benefits that different stakeholders seek from CRM and Sales Force Automation (SFA). Salespeople seek for shorter sales cycles, more closing opportunities and higher win rates. Sales managers see the benefit of SFA being improved salesperson productivity, improved customer relationships, accuracy of reporting and reduced cost-of-sales whereas senior management seek for improved visibility of the sales pipeline, more accurate predictability, accelerated cash flow, increased sales revenue, market share growth and improved profitability.
Erffmeyer & Johnson (2001) in their research suggested that the main motivation factors for implementing CRM & SFA were improved efficiency and improved customer contacts (see table 6).

**Table 6:** Motivations for implementing SFA (Erffmeyer & Johnson, 2001).

<table>
<thead>
<tr>
<th>Motivation</th>
<th>% of sample reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve efficiencies</td>
<td>72</td>
</tr>
<tr>
<td>Improve customer contact</td>
<td>44</td>
</tr>
<tr>
<td>Increase sales</td>
<td>33</td>
</tr>
<tr>
<td>Reduce costs</td>
<td>26</td>
</tr>
<tr>
<td>Improve accuracy</td>
<td>21</td>
</tr>
</tbody>
</table>

In their research, Chen & Chen (2004) divided the benefits of CRM into tangible and intangible benefits. Managers attending their study regarded CRM as very important for achieving business success (an average mean score of 9.2 on a scale from 1 to 10). Their list of benefits can be seen in table 7. The tangible benefits consist of increased revenues and profitability, faster turnaround time, reduces in internal costs, higher employee productivity, reduced marketing costs (for example direct mailing), higher customer retention rates and protected marketing investment with maximized returns. Intangible, or not as easily measured benefits according to the managers in Chen and Chen’s study were increased customer satisfaction, positive word-of-mouth, improved customer service, streamlined business processes, closer contact management, increased depth and effectiveness of customer segmentation, acute targeting and profiling of customers and better understanding and addressing of customer requirements.

**Table 7.** CRM benefits (Chen & Chen, 2004).

<table>
<thead>
<tr>
<th>Tangible benefits</th>
<th>Intangible benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased revenues and profitability</td>
<td>Increased customer satisfaction</td>
</tr>
<tr>
<td>Quicker turnaround time</td>
<td>Positive word-of-mouth</td>
</tr>
<tr>
<td>Reduces internal costs</td>
<td>Improved customer service</td>
</tr>
<tr>
<td>Higher employee productivity</td>
<td>Streamlined business processes</td>
</tr>
<tr>
<td>Reduced marketing costs</td>
<td>Closer contact management</td>
</tr>
<tr>
<td>Higher customer retention rates</td>
<td>Increased depth and effectiveness of customer segmentation</td>
</tr>
<tr>
<td>Protected marketing investment with maximized returns</td>
<td>Acute targeting and profiling of customers</td>
</tr>
<tr>
<td></td>
<td>Better understanding/addressing of customer requirements</td>
</tr>
</tbody>
</table>
In their research, Freeman and Seddon (2005) found that CRM can benefit the company in four different areas. **Improved productivity of customer-facing processes** is a result from being able to increase the volume of activities with the same amount of resources or being able to reduce the number of people required to perform the processes. Also the integration of processes, data and technology resulted in improved productivity by enabling automation, standardization of processes and improving information access. **Improved management decisions** were enabled by better information access and capture, enhanced measurement of business performance and improved reporting. The case companies in Freeman’s and Seddon’s research had experienced **improve in customer service** due to increased personalized service and being able to be more responsive to customer’s needs. Lastly, CRM activities has resulted in **increased business growth and revenue** by increased sales and sales activities as well as more effective information access and capture. CRM initiatives enabled the case companies for example to sell more profitably to the normally “high cost to service” segments by more effective ways of process automation without losing customer intimacy.

Even though there are a lot of benefits found from working CRM initiatives, the implementation of CRM and SFA hasn’t in all researches implicated only positive outcomes (Francis Buttle et al., 2006). One of the problems seen in companies is that customer acquisition and customer retention are often managed in different parts of the business. This leads to recruiting customers who might have low chance of becoming profitable, since only few marketing plans consider lifetime value as a useful guide to customer acquisition (Buttle & Maklan 2015: 58-59).

The metrics used with CRM varies a lot depending on what level the CRM is used and considered. If CRM is seen only as an operational tool or if it is part of strategic decision making with a lot of analytical features, the need of different metrics comes into question. Even if CRM is used only as an analytical tool, it can be used by the sales force, marketing, or customer service and all these different user groups have different needs for metrics. After all, “the ultimate purpose of CRM is to deliver improved shareholder results” (Payne & Frow, 2005). Payne & Frow (2005) describe the complexity of measuring CRM performance. Since CRM works in a cross-functional sense, there is a strong need for a range of metrics that cover the whole span of processes and channels.
used to deliver CRM. Heskett, Jones, Loveman, Sasser, & Schlesinger (2008) emphasize that the relationships between customers, employees and shareholders are linked and for example Anderson, Fornell & Mazvancheryl (2004) have in their research linked customer satisfaction with shareholder value.

Kim et al. (2003) divide the base of CRM metrics in four different perspectives: Customer knowledge, customer interaction, customer satisfaction and customer value. Each perspective is evaluated by appropriate metrics. They emphasize the many different channels that companies use to interact with customers and they see that fundamentally customer satisfaction is the factor that links directly to company’s profits (see figure 12).

![Figure 12: The Evaluation Process of CRM (J. Kim et al., 2003).](image_url)

In order to serve customers according to their individual and unique needs, **customer knowledge** has to be created in the company. Customer characteristics are learned by analyzing customer retention, customer deviation...
and customer acquisition. To do this, companies use data mining and data warehousing for filtering, sorting, managing and analyzing relevant information from various sources. Examples of Customer Knowledge measures are presented in table 8 (J. Kim et al., 2003).

Table 8. Measures for Customer Knowledge (J. Kim et al., 2003).

<table>
<thead>
<tr>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer acquisitions (No.)</td>
</tr>
<tr>
<td>Number of customers (No.)</td>
</tr>
<tr>
<td>Web marketing</td>
</tr>
<tr>
<td>Page views per day (No.)</td>
</tr>
<tr>
<td>Visits per day (No.)</td>
</tr>
<tr>
<td>Net sales/employee (%)</td>
</tr>
<tr>
<td>Technological capacity (No.)</td>
</tr>
<tr>
<td>Frequency of hardware upgrade (No.)</td>
</tr>
<tr>
<td>R&amp;D investment ($)</td>
</tr>
<tr>
<td>Customer profile research ($)</td>
</tr>
<tr>
<td>Security level (%)</td>
</tr>
</tbody>
</table>

In today’s world companies communicate with their customers through various different communication channels. To manage the use of these channels efficiently, managers have to be able to monitor the business processes. The interaction processes can be further divided into internal and external processes. Internal processes determine operational excellence whereas external processes determine channel management effectiveness. Measures for customer interaction are presented in table 9 (J. Kim et al., 2003).

Table 9. Measures for Customer interaction (J. Kim et al., 2003).

<table>
<thead>
<tr>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing campaign (No.)</td>
</tr>
<tr>
<td>Total cost for promotion ($)</td>
</tr>
<tr>
<td>Frequency of contents update (No.)</td>
</tr>
<tr>
<td>Number of payment methods (No.)</td>
</tr>
<tr>
<td>Number of response channel to customer inquiry (No.)</td>
</tr>
<tr>
<td>Total cost for managing channel ($)</td>
</tr>
<tr>
<td>Avg. delivery time after order fulfillment (No.)</td>
</tr>
<tr>
<td>Response time to customer inquiry (No.)</td>
</tr>
<tr>
<td>Transaction conducted by members (%)</td>
</tr>
<tr>
<td>Product diversity</td>
</tr>
<tr>
<td>Detailed product information</td>
</tr>
<tr>
<td>Timeliness sales in popular product</td>
</tr>
</tbody>
</table>

Customer value consists of the tangible and intangible benefits gained from CRM activities. For example marketing campaigns, customer retention rates
and net sales are monitored in order to determine customer value. Customer value measures are presented in \textit{table 10}.

\begin{table}[h]
\centering
\begin{tabular}{|l|}
\hline
Number of retained customers (No.) \\
Net sales ($) \\
Ordinary sales ($) \\
Asset/employee ($) \\
Profit/employee ($) \\
Channel interface \\
  • Usability \\
  • Attractiveness \\
  • Navigation efficiency \\
  • Contents search \\
  • Consistency of site structure \\
\hline
\end{tabular}
\caption{Measures for customer value (J. Kim et al., 2003).}
\end{table}

The original and final aim for implementing CRM in companies is increased \textbf{customer satisfaction}. It is also the most difficult aspect to monitor since it is difficult to quantify satisfaction level. Kim et al. (2003) describe customer satisfaction as the most important perspective since it is directly linked a company’s profits. In their model, Kim et al. (2003) use Pamasuraman’s, Zeithami’s & Berry’s five dimensions of customer satisfaction: Assurance, Reliability, Empathy, Responsiveness and Tangibles. Measures for customer satisfaction are presented in \textit{table 11}. Customer satisfaction is qualified into three different levels: Excess, satisfaction and insufficiency.

\begin{table}[h]
\centering
\begin{tabular}{|l|}
\hline
Brand image (%) \\
Service level (%) (response to customer inquiry) \\
Number of daily customer inquiries (No.) \\
Customer satisfaction (%) \\
  • Assurance \\
  • Reliability \\
  • Empathy \\
  • Responsiveness \\
  • Tangibles \\
\hline
\end{tabular}
\caption{Measures for customer satisfaction (J. Kim et al., 2003).}
\end{table}
2.6 SUMMARY AND FORMATION OF A CRM FRAMEWORK

As described earlier in this study, there are multiple ways to comprehend CRM and the scholars haven’t been able to construct a unified view of the phenomenon. Many of the models presented are quite theoretical and complex and often describe only one narrow theme of CRM, such as the implementation process (e.g. (Mukerjee & Singh, 2009; Payne & Frow, 2006). The CRM framework aims to give a more holistic picture of customer relationship management, in a way simple enough to be of use for company management trying to form the general picture of how CRM should be seen.

The model (see figure 13.) starts with the idea that the foundation of CRM is strategic. Company should see its customers as a strategic asset and the whole CRM process should be considered as something that gives strategic advantage to the company by enabling better customer interaction, which leads to customer satisfaction, rise of customer value and eventually results in higher value for the company itself. This chain of interaction, satisfaction and value is based on Kim et al. (2003) model. Throughout these points of customer contact, data is collected to CRM system in the Knowledge creation process. CRM system works as a unified database for all the customer information the company has and the flow of customer information is continuous.

The customer knowledge in the CRM system is turned into Customer intelligence by so called analytical CRM processes. Different kinds of analytical tools and data mining play significant role in this process which gives the company management insights of its customers for strategic decision making. This ongoing flow of customer information and intelligence defines the basis for strategic development of the company which in turn defines the needed changes to CRM technologies and interaction processes.
This model brings together all three different dimensions of CRM, presented by Buttle & Maklan (2015). Operational CRM can be seen as customer interaction, satisfaction & value and knowledge creation whereas customer intelligence is created by analytical CRM. Strategic CRM defines all of these other processes and everything is enabled by CRM technologies (CRM system). This model will be used as a basis for analyzing the empirical material.

**Figure 13.** Holistic model of CRM
3. RESEARCH METHODOLOGY

This chapter focuses on presenting the methodological framework for the study including the description of research approach, data collection and data analysis methods. In the end of the chapter, the validity and reliability of the research will be discussed.

3.1 Research design

A multiple case study design was chosen as the research type for this thesis. The value of case studies has been recognized for example in business marketing theory by all three specialist B2B marketing journals (IMM, Journal of Business and Industrial Marketing & Journal of Business-to-Business Marketing) (Beverland & Lindgreen, 2010). Case studies are often chosen because the flexibility of the method makes it suitable for studying “complex, evolving relationships and interactions in industrial markets” (Dubois & Araujo, 2004). This research aims to collect information and create understanding on events that occur naturally in the companies. According to Yin (2014) case studies are considered as the most appropriate method for studying “how” and “why” questions as in this study.

3.2 Data collection

According to Yin (2013), interviews are one of the most important sources of information. Through interviews a deeper understanding on the studied subject can be developed.

The empirical study material for this thesis was gathered by conducting semi-structured interviews with two different interviewee groups: CRM-consultants, and Finnish industrial companies using CRM. The details of the interviews conducted can be seen in table 12. All the interviews were recorded and transcribed and the transcriptions and recordings were analyzed and compared to each other. The insights from the case companies are reinforced by analyzing the answers of the CRM-experts in order to gain a better picture of the phenomenon.
<table>
<thead>
<tr>
<th>Company</th>
<th>Title</th>
<th>Date</th>
<th>Length of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant 1</td>
<td>Consultant, Microsoft Dynamics CRM MVP</td>
<td>10.4.2015</td>
<td>01:23:22</td>
</tr>
<tr>
<td>Consultant 2</td>
<td>Director, Customer Solutions</td>
<td>10.4.2015</td>
<td>01:22:12</td>
</tr>
<tr>
<td>Consultant 3</td>
<td>CRM Team leader &amp; Project manager</td>
<td>1.10.2015</td>
<td>01:21:19</td>
</tr>
<tr>
<td>Company A</td>
<td>Process Development Manager, Sales Management</td>
<td>27.3.2015</td>
<td>01:04:18</td>
</tr>
<tr>
<td>Company B</td>
<td>Head of District</td>
<td>8.5.2015</td>
<td>01:07:33</td>
</tr>
<tr>
<td>Company C</td>
<td>Sales &amp; Marketing Director</td>
<td>28.10.2015</td>
<td>50:48</td>
</tr>
<tr>
<td>Company D</td>
<td>Service Manager</td>
<td>4.6.2015</td>
<td>01:18:34</td>
</tr>
<tr>
<td>Company E</td>
<td>Manager, Global Concept Management</td>
<td>17.12.2015</td>
<td>57:48</td>
</tr>
</tbody>
</table>

Yin (2013) recommends building a structured interview guide before conducting the interviews. In this study the themes discussed in the interviews were:

1. CRM implementation process and effects on sales processes
2. CRM metrics from the point of view of different user groups
3. Data gathering and quality
4. CRM analytics and forecasting
5. Challenges and opportunities with CRM

These themes are then reflected on the CRM model presented earlier in this study.

Interview studies can be generally divided into three different types: open interviews, semi-structured interviews and structured interviews. In a structured interview the researcher uses questions that are developed from the research hypotheses and the answer options are predetermined and same to all interviewees. Open interview can be seen as an opposite for structured interview, where the knowledge and insights of the interviewee are exploited in a more general way to achieve a more holistic understanding of the subject. In semi-structured interviews the interviews contain both, structured and open questions. This type of interviews allow the interviewer to ask more precise
additional questions in order to attain deeper understanding on the subject whereas the constructed questions give a more organized frame for the interview so that it doesn’t get too distracted from the theme (Hirsijärvi & Hurme, 2008).

3.3 Data analysis

According to Yin (2013) when analyzing multiple case studies, general explanations that fit the cases should be built. This way the comparison between cases is easier in order to find the differences and similarities between cases. A cross case analysis is used in this study to compare the perspectives of the case companies.

The data analysis is based on the framework described earlier in this study. The framework is tested by comparing the respondent’s answers if they agree or disagree, or if changes to the framework should be made. In order to make the structure of the analysis more consistent, the analysis is divided into the themes used in the interviews.

Each theme was analyzed from the point-of-view of all of the case companies and the findings were enriched by the comments of the consultants to achieve a more holistic view into the study. The aim of the analysis is to better understand the current status of CRM in the industrial companies in Finland, their challenges, needs and future visions.

3.4 Research quality

3.4.1 Validity and reliability

In order to build validity and reliability for the literature review of this study, the theories chosen are from scholarly journals and books written by renowned authors. To further build validity, various different authors’ views have been collected.

When it comes to case study validity multiple case studies are preferred. This way it is more likely to get valid findings since they are from multiple sources (Yin, 2013).
In terms of reliability, the weakness with qualitative research according to Marshall & Rossmann (1999) is that the situational changes do not allow qualitative research to be repeated in exactly the same circumstances in which it previously occurred. In order to achieve reliability, research biases were avoided. All the interview discussions were recorded and transcribed immediately afterwards in order to ensure transparency. Also leading questions or style was avoided by the researcher to keep the discussions as neutral as possible to avoid questioning bias (Maylor & Blackmon, 2005). In addition, in order to increase objectivity of the research, both CRM consultants/providers and companies using the systems were interviewed.

Beverland and Lindgreen (2010) list three ways of operationalizing reliability. First, a standardized interview protocol should be used. Secondly, constructs should be well defined and grounded in extant literature. Thirdly, an audit-trail should be provided by providing access to the data. Considering these three themes, only the third one can be seen as a challenge due to confidentiality of the individual cases.

Bansal & Corley (2012) stated that “Whereas quantitative researcher typically look at a handful of “trees” and try to draw the implications for the forest, in qualitative research, we are trying to see the forest through the trees”. The field of CRM is extremely complex and diverse. The theory around it has multiple viewpoints and the companies using CRM have vastly different approaches to it. This gives a challenge for the validity and reliability of the research since comparability is not very straightforward.
4. RESULTS

This chapter of the study reveals and categorizes the findings. In order to maintain confidentiality the company names are not revealed, but discussed as Company A, B, C, D and E. All of the companies are major industrial companies that have operations in Finland and they serve B2B customers. In addition to the case companies, the cross-case analysis is strengthened with interviews with CRM consultants (Consultant 1, 2 & 3) as experts who gave their perspective of the level of CRM in Finnish companies in a more general level. The case companies are presented in Table 13 and described in chapter 5.1. The sizes of the companies vary from 450 million euros in revenue all the way to 46 billion employee count ranging from approximately 1500 all the way to 124 000. As said, all the companies work in B2B markets where customer relationships are often longer term and deeper by nature, which strengthens the strategic importance of customer relationship management (Johnson & Sohi, 2001).

Table 13. Case companies.

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
<th>Revenue (2014)</th>
<th>Employees</th>
<th>CRM provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Manufacturing and Service</td>
<td>6 240 000 000 €</td>
<td>18000</td>
<td>Salesforce</td>
</tr>
<tr>
<td>B</td>
<td>Engineering and Service</td>
<td>2 600 000 000 €</td>
<td>12000</td>
<td>Oracle Siebel CRM</td>
</tr>
<tr>
<td>C</td>
<td>Engineering and Service</td>
<td>453 700 000 €</td>
<td>1500</td>
<td>Salesforce</td>
</tr>
<tr>
<td>D</td>
<td>Electrical Equipment</td>
<td>49 179 000 000 €</td>
<td>124000</td>
<td>Salesforce</td>
</tr>
<tr>
<td>E</td>
<td>Industrial Machinery</td>
<td>4 755 400 000 €</td>
<td>16000</td>
<td>Salesforce</td>
</tr>
</tbody>
</table>

4.1 Case descriptions

Company A has been using its Salesforce CRM system since 2008. Before implementation of Salesforce, the company had critical problems with the unity of customer information. Every department, division and country had their own ways of gathering customer information, some more developed than others, ranging from individual excel files of sales reps to more advanced systems used by specific teams. The need for a unified view of company’s customers resulted in acquisition of a new system that is now a corporate system used by all the selling teams across the world. The tool was first used
only by the sales force, but it has spread also to the delivery processes such as technical services, field services and support functions and marketing.

Company B has implemented Oracle Siebel CRM system during years 2006 and 2007. As in company A, also in this company the predecessor of new system was scattered excel files and smaller databases, but no company-wide way of gathering customer information existed. Special for this company is that the CRM system actually came as a by-product for the more critical service software. The technological decisions were mostly made considering the service software and the CRM system followed. Now the CRM is used globally in the company which has demanded a lot of work harmonizing the databases. The system is used by the sales force and the service department (service technicians and their superiors). In company B, according to the interviewee, the data quality in CRM is quite satisfactory and the predictions based on CRM data are becoming rather reliable thanks to continuous development and check-ups with the sales force in order to increase the amount and quality of information recorded into CRM.

Company C implemented its current CRM system in 2012. The Salesforce CRM replaced various systems and excel used by different regions and divisions before. The initiative for new system came from the top management level when they realized that the way of storing information didn’t give any applicable insights for managing the company’s sales. The company perceived that if there is not one global way of dealing with customer information, the cultural differences make comparing, monitoring and forecasting impossible for the managers. This lead to a project of integrating all the information under one, global system so that the top management can start monitoring for example offer base and sales pipeline more accurately. Using a uniform system, risks can be better prevented and the company brand becomes more cohesive throughout the organization. In company C, users of CRM are the sales force, marketing, management all the way to top management, product development and also increasingly the supply chain management, who use the system’s offer base and pipeline to forecast incoming orders when they optimize operations with suppliers and subcontractors. The most important sales channel for company C is trade fairs and technology days organized together with the existing customers. The sales cycles range characteristically from 6 months to up to 2 years, which gives its own requirements for the sales processes and systems
supporting them. In terms of CRM continuum (Payne & Frow, 2005), company C is the most strategic one in its CRM utilization at the moment. They have started the whole initiative from the higher management point-of-view and the customer data integration is rather advanced. This company uses external information sources to enrich their customer data and analyze market specific information compared to their own information in order to get a more strategic view of their customer base.

Company D, the largest company in this research, has started its Salesforce CRM rollout in 2014 and the CRM should be in use globally by the year 2017. The rollout is done one country at a time so whole business units won’t get the system at a same time, but for cultural reasons it was anticipated more efficient to implement the system this way. Before CRM customer information was, as in other case companies, gathered in individual excel –files as well as in different scattered Lotus Notes –based databases. Some of the units had their own CRM systems but there was no uniform way to collect and analyze customer information. Before choosing the system vendor, a thorough mapping of the existing systems was made and various providers were invited to tender for the contract. The main goal for CRM implementation is to gather all the customer information that is now split in different “silos” into one database in order to achieve a “stereo vision” between different business units. The aim is to achieve more flexibility, better sales support, transparency, customer focus and efficiency. In company D there are three different profiles for CRM users: Sales & service, reclamation (customer call center) and marketing. The changes in selling processes when implementing CRM have been massive, since the aim is to create one, global selling process. Therefore the project is run by a team that includes change manager, communication manager and training coordinator to ensure efficient kick off for the new way of working.

Company E started from very similar situation as the other case companies when they started their Salesforce –system implementation in 2013. Customer information was gathered in very mixed ways. There was no one specific place for customer information or one common tool for the sales force and the whole project started from the need to have common processes for the whole company, globally. Main goals were to streamline and support the sales peoples work and to achieve better predictability of future sales. Predictability of sales
and analyzing the trends have been crucially important for the company in the challenging economic situation of past years. The system implementation started from a rather small user group of 50 people and now has been implemented company-wide to all sales personnel. The system is used mostly only by the sales organizations at the moment, but all the way from the customer touch-point into the top management –level. Lead management or other marketing actions are not recorded into the CRM but the sales cases start straight from the opportunity –stage. Sales process in this company is divided into four phases, which are modeled to match customer’s buying process. The sales cases vary from few weeks into several years, depending on the size and quality of the project. The CRM system is mainly designed from the longer, large to medium –sized project –point-of-view. In company E the CRM implementation started with sales process optimization, which dictated how the system should be tailored and designed. Characteristic for this company case is that in the CRM initiative the needs of the operative side and the higher level management were considered side by side from the beginning of the project. Since the implementation project itself has just reached its end, the company still has quite a lot of work to match their processes and systems to work together and the benefits will probably be seen later in the future.

4.2 Cross-Case Analysis

In this part of the study, the company cases are analyzed and compared to each other on the basis of the themes listed earlier. The data gathered from the companies is enriched with comments from the consultants.

4.2.1 CRM implementation and effects on sales processes

In all the case companies, the situation before current CRM implementation was, that there weren’t a similar system in use before. Only company D had some individual systems in parts of its operations, but a global, company wide solution was missing.

According to one of the consultants (Consultant 1) this actually often is not the common case nowadays but many companies already have had a CRM system deployed, but the goals for business benefits or the level of utilization haven’t been met. This is also in line with Gartner’s (2003) study about many companies
failing with CRM implementation. So, for all of the companies in this study, the success of implementing CRM for the first time is yet to be seen. The needs for better ways of managing customer information were basically same trigger for CRM implementation in all of the companies. The interviewee from company D described the challenge a way which compliments the proposals of scholars (Francis Buttle & Maklan, 2015; Campbell, 2003):

“So now these silo-like CRM’s, the current CRM-systems are limited to one business unit or a specific segment of product of a business unit. With this global solution we of course aim to a situation where these silos are dissolved and we can actually see all the leads and customers. To gain a multi-view or a stereo-view. So that it’s not only an individual view of this one business unit about the customer. And then the next day another business unit visits the customer and they don’t have a clue that someone from the neighbouring office has visited them yesterday.” (Company D)

Also the interviewee from company A described the situation as a similar way:

“Well, we realized that our customer information is scattered, that we have a lot of local databases, excel files and who knows what, where customer information is stored. And in general for better vision and from the cross-selling point-of-view we justified that we need a unified vision to the customer information.” (Company A)

In company C the main driver for company-wide CRM has been the measurability and reliability of the information in a global setting.

“When we work on a global market, people live in different time-zones and work differently. If we don’t have a tool that gathers the information in a similar way you can’t trust the information. For example if in Taiwan someone says that this is a very hot case, if it hasn’t been defined what a very hot case means you cannot trust the data gathered nor the reports made from that data.” (Company C)
In all of the companies, the chosen CRM systems have been tailored for the specific needs of the company, though most of the companies have tried to keep the level of custom-made features to a minimum to prevent high costs of system updates. Both, companies A and D started their implementation with an out-of-the-box –version of the system, but modifications have been made as the implementation has progressed. Actually company A’s interviewee estimated that they have the most tailored CRM solution in Finland.

“We probably at least have the most tailored CRM in Finland, today. When we started the project we tried to go with an off-the-shelf package but little by little, every year we have invested significantly to the system, so. We have three different selling divisions. And all these three have different sales processes. So putting this in to practice is maybe the biggest challenge. And of course all of them have their own sales configurators. Integrating those in the services is actually still unfinished, but inevitably we will have at least five different configurators in the company…” (Company D)

In most cases, according to consultant 1, CRM-systems are first implemented to the sales organization in the companies. After this, possibly services and marketing come within the scope. This is the case in two of the case companies in this study. The companies first started using the tools only with the selling units but nowadays also different service teams and marketing are users of CRM as well.

“Then more and more the delivery process has also started using CRM. This means that technical services, field services and support functions have started using it. It has spread out and again we have made more functionalities. The critical mass has realized that CRM is actually the best place to find customer information. Marketing and of course sales support.”(Consultant 1)

When it comes to sales processes and their development when implementing CRM-systems, consultant 1 sees that the companies still have major problems.
Companies should develop their selling processes and engage into process development alongside CRM implementation.

“So if you’re implementing a CRM system and that is the only thing happening. If you don’t at the same time try to think through the processes or try to streamline them. If you are only trying to find a system that supports the existing habits as well as possible and you tailor it to fit the old model, you can’t really wait for that much benefits from the initiative. Here occurs the need for management support, there should also be pure process development going on at the same time. So that the only ongoing project is not CRM implementation but actually a sales process development project, which includes this software project. This should be the right way to put these in to hierarchical order.” (Consultant 1)

Consultant 3 agrees with consultant 1, although he mentions that there has been a lot of improvement in this matter during the last years. He also underlines the importance of management’s communication about the ongoing project.

“Before, people thought that the system makes you complete, that now when we have this CRM-system we are customer oriented and listen to our customers. And then the change process came kind of lagging behind, which should actually come in advance in the early stage. First there is the change process and only then the system should come as a support for that change. Nowadays they actually go pretty much side by side, but before it was so that first you have the system and then you start changing people.” (Consultant 3)

“And of course before the project even officially starts, we emphasize that you have to, the management has to tell the upcoming users and have a briefing well in advance. And if it’s a long project, let’s say one year, they should communicate about the steps that are happening. So that the organization, and the users know what is happening. So that it doesn’t surprise them from behind.” (Consultant 3)
In two of the case companies there has been no changes made in the selling processes when CRM-system is implemented, or the changes have been minimal. The major change is that now the information is recorded in a new way, but the processes themselves are still the same.

“When the project started, all the sales processes were documented for the first time. The processes were not changed, only documented and the CRM was built on this documentation. I don’t think that the CRM implementation had an effect on how we sell.” (Company B)

Then again one of the companies has actually done substantial changes into their current processes and they are aiming for a global process in order to achieve more valid forecasting and reliability. The sales process in this company is divided into two phases: strategic selling process and operative selling process, which consists of offer and order chain operations. CRM is used only in the strategic selling phase, orders and offers are not in the CRM system.

“The whole rollout is dictated by its globality. The sales process is not local Finnish sales process, but the whole process will be similar in all our countries. Of course there is for example some legal difference, but in principle the sales process is built to meet the global needs[...]This is more, this is not a tool question, rather a more holistic process approach.” (Company D)

4.2.2 CRM metrics

“Units, euros, percentages, time. Those are the most essential metrics we measure. From these you can have million different combinations to see what you can find.” (Company B)

The different metrics the sales management monitors in the case companies are presented in table 14. The metrics used by the companies are quite similar to each other and there weren’t that exotic ways of measuring the operations. One
of the measures worth bringing up is the Hot offers –measure used by one of the companies. This metric is used to help planning the demand-supply balancing in the company in order to match the production with anticipated demand.

“And then we try to monitor how long the list of these hot offers is. And then we try to reflect that in the supply side, to get this kind of DSB, demand supply balancing process forecasts. This way we can in some ways control our own factories, suppliers and subcontractors.” (Company B)

Table 14. CRM metrics used in the case companies.

<table>
<thead>
<tr>
<th>Sales funnel</th>
<th>Sales (€ / Pcs)</th>
<th>Leads by channel</th>
<th>Customer visits</th>
<th>Sales cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order intake</td>
<td>Margins (%)</td>
<td>Customer visits by country</td>
<td>Calls</td>
<td>Opportunities</td>
</tr>
<tr>
<td>Hit-rate</td>
<td>Delivery time</td>
<td>Opportunities</td>
<td>Hit-rate</td>
<td>Volume (€)</td>
</tr>
<tr>
<td>Sales (€) by region</td>
<td>Hit-rate</td>
<td>Leads</td>
<td>Active offer base</td>
<td>Development of sales pipeline</td>
</tr>
<tr>
<td>Sales cycle</td>
<td>Sales cycle</td>
<td>Customer visits</td>
<td>CRM utilization</td>
<td>Development by product group</td>
</tr>
<tr>
<td>Customer visits</td>
<td>Hot offers (Demand-Supply-Balancing)</td>
<td>Pipeline value</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All of the companies use sales funnel in CRM to monitor the current situation of sales cycles. Depending on the company, the different phases of the funnel can be strictly defined, or the opportunities may be valued quite subjectively. One of the companies has even divided the probabilities of the cases in two: Project probability (how probable is it that the project will be executed at all?) and sales probability (how probably we are the supplier if the project is executed?). In
this company the different steps the opportunities are moved in the funnel are precisely described and leave a little to sales persons own interpretation.

“For example from offer to hot offer, we have really clear specification of the percents, when you can define the offer as hot. In this sense, we have a really engineer–minded way of seeing this. Not so that“I feel that this is a hot offer”. You really check the percentages and then based on them you define the situation.” (Company B)

Also Company C has implemented this kind of strict instructions in order to maintain reliability of the sales funnel. They have divided the cycle into 5 steps before the case can be marked as won. Each step has its’ own attributes that have to materialize before the salesperson can increase the case’s probability. These attributes are defined so that there is little space for subjective interpretation.

Then again other companies see the setting of probability as rather a subjective matter and don’t see it as such a reliable tool for forecasting.

“Well that is for the most part a subjective estimate about where we are going. But we have defined how you can recognize in which phase you are moving and we have also very precisely explained how it affects the forecasts.” (Company A)

“It’s quite subjective, we have certain stages, let’s say 25%, 50%, 75% which then reflect to other systems as well. It is connected to the sales stage and of course to the approximation of the sales person about how probable the deal is. But I would say that it’s mostly a subjective matter.” (Company E)

On a more general level, consultant 3 estimates that only about 20% of their customers have had a strict, well defined way of setting probabilities. Considering the cases in this study, this notion supports the findings.

“In some organizations they have standard steps. If you have introduced your case, or if you have sent an offer, the probability for closing the deal gets higher and then these phases are used in the funnel. Then again, in many companies
there is nothing. It goes just with gut feeling. The salesperson can decide independently what the probability for closing this case is. Rarer are the cases where the process is standard and the system gives the probabilities. If you have ten customers, two of them have that and the rest to varying degrees, or have nothing.” (Consultant 3)

4.2.3 Data gathering and quality

All the companies, except one, in this study collect only the basic information about their customers in CRM. Information collected consists of name, customer ID, industry, billing information, currency, contact persons, country etc.

Only one of the companies enrich the customer information actively by buying data from external suppliers. Company C buys information about the customer’s financial status, market researches and investing researches. They have found that it is too laborious to try to collect all the relevant information by themselves so they have decided to get it from external sources. Company C also gathers more information themselves compared to other companies in the study. They register for example customer activity (attending different events, fairs etc.) and who from that specific company has attended these activities. In addition the company gathers information of the machinery their customers have, including machinery that has been delivered by competitors.

Data about the customer is mostly gathered by the sales teams and other employees working in the customer surface. Some of the information used in CRM is imported from other IT-systems such as ERP, service systems, billing systems.

“Well, in CRM we have only the very basic information. We don’t have any that in-depth background information in there. Actually now when the economy is challenging, I have actually been promoting that we could have a stronger insight for example on customers financial status.” (Company D)
One of the major challenges in the companies seems to be that the data is still in many cases duplicated and scattered in the systems. There are multiple different overlapping systems that are used in different phases of the selling process. Offers, orders, customer information, product information, marketing information can all be scattered in different places. The same customer or product might be inserted multiple times in the systems, for example using different names. The cleaning of duplications and unifying the information will still need a lot of work in the companies. This complements the findings of Dyché (2012).

“All the way from marketing to delivery, after sales, service or reclamation handling. Actually this whole cycle should be in there (in CRM). But that is really challenging. I’ve had internal conversations with tens of people from different organizations how they are doing this and it still feels that there is so many different systems side by side. Offers are made in this system, orders in this. Then I have to do these things in Excel in order to get this information together. And then the product information is here, customer information is there and. So all the information is very scattered. You’d think that today the systems would be so networked, but they just are not.” (Company A)

“It’s very difficult. We really have to put a lot of effort into getting these data cleaned. We are actually looking for a partner that could automate the cleaning. There are harsh examples where some customer or product has been input ten different times. For example product name can be written in ten different ways so that you don’t even understand that it can be written in so various ways.” (Company D)

“That is one challenge. Now we have finished with the project, the users have been trained and the system implemented so now we are talking a lot about so called adoption. How can we get more use for the system and more comprehensive use so that all sales people use it efficiently enough so that the forecasts are comprehensive enough? But we are getting close. In many areas I see that it (predictability) is good enough so that we can trust the forecasts without other analyzes. But in some product areas there is still work to do.” (Company E)
Only one of the companies (Company C) seems to be longer in their way of moving towards the strategic end of the CRM continuum (Payne & Frow, 2005) when it comes to information integration.

“During the past years we have achieved. We have had more than ten different systems we have used. Different production systems, service have had their own systems, product development their own, sales theirs etc. Now we have achieved a situation where we have only two systems for sales: A CRM system that manages customer information and another system that manages the product configurations. These systems are connected to each other.” (Company C)

4.2.4 CRM analytics and forecasting

The opinion on the quality of data varies a lot within the companies. Some of them are rather satisfied with the reliability of their data and see it as a reliable tool for forecasting future sales.

“When you now look at the percentages, how the salespeople value their own funnel. When I compare it to the realized numbers, I am very satisfied with the progress we have been making. You can actually on some level, some accuracy make predictions what kind of sales we are going to have next month. [...] So, yes, I’m quite satisfied with the CRM data we can use for forecasting. We can pretty well estimate how much sales we are getting in the next month.” (Company B)

On the other hand, other companies still have notable challenges when it comes to predictability and forecasting with their CRM data. In one of the companies, the interviewee sees that they can still get better, more accurate predictions based on statistical analyzes based on the past sales than their salespeople’s estimates on sales probabilities.

“Not yet today. We are in a development phase were we have just been shifting to this kind of rolling forecasting. We have had yearly budgeting before and this has
had less focus. But depending on sales type, we have been investigating that in transactional spare part and field service sales we get a more truthful picture by statistical methods.” (Company D)

For example customer lifetime value, a metric scholars mention repeatedly (e.g. Mukerjee & Singh, 2009; Ryals & Knox, 2007) when they are discussing CRM, is not really used in the companies in continuous way. One of the companies has done this but the calculations are not updated that often.

“We don’t do it computationally, but we have the readiness for doing it. We have done it a few years ago as a statistical exercise and now it’s manually updated. We have been meaning to do some review calculations to it. [...] There is a lot of CRM information in it but it’s so complex and we do it so rarely that it’s easier to do it in excel.” (Company D)

Even most of the companies still find it challenging to value their customers and do precise enough forecasting and analysis on the customer information, one of the companies see that they have quite good picture about their customer’s value and customer profitability, at least in Finland.

"Yes, we have made that kind of reports to some extent. We know approximately how valuable different customers are, who the most profitable customers to us are, what segment they are operating in, what is their customer class for us and so on. We do them once in a while. We have a pretty good gut feeling about it. Maybe not globally but in Finland.” (Company C)

However even this company sees that they still have to deal with more fundamental issues and development before they can concentrate more on deeper level analysis and exploitation of the data.

"Let’s put it this way. Now we’ve had this CRM for three years. We have so many things that are very fundamental that are still unfinished, before we can for
example start measuring effectiveness by salesperson. We have to get these basic things into order before we can start with the next level. If we now start with the next level we are not even ready with the first one. CRM is specifically such system that you have to have a certain development model: how it is implemented and on what level the utilization has to be after each phase.” (Company C)

One of the fundamental challenges when it comes to the funnel quality is cultural. Consultant 1 sees that the sales management is not as process oriented as it is in the USA. The sales managers don’t have a strong vision about how the salespeople should sell. This brings challenges when it comes to deploying the systems since they are mostly designed to support process–oriented sales. Especially before, the CRM systems have not actually been designed to help the salespeople per se, but to help the managers to control and monitor. Thus, if the salespeople are not motivated enough, the information input to the systems fades away by time. Also the cultural differences in the ways of interpreting the probabilities in sales funnel make predictability and comparability challenging themes for the companies.

“Mostly it is about the deployment, how the software fits the employee’s everyday actions. Most often there has been no emphasis on the fact that the data should be exploited, that CRM-data is the truth, but in the same time each unit and individual have been allowed to have their own shadow systems and used any kind of way they see proper for storing their customer and sales information.” (Consultant 1)

This matter is brought up by three of the case companies as well. The IT systems are not in any way the restricting factor when it comes to data quality. The challenges come from training, and the use of time. The most significant vulnerabilities when it comes to forecasting come from neglectful recording of the information. The critical factors for this is the work of the management and training. The employees should understand why the information recorded is important, what is it used for and what consequences it has for the broader picture. This way the motivation for filling in the information promptly is ensured.
“It’s a really well working system and from the managerial point of view the reporting options are very good. A much bigger obstacle to my mind is training. And another thing that is very distinctive for our company at the moment is lack of time. We have, I think our salespeople are way too loaded with work, they are too busy. [...] I think the system is good. As I said, I think it’s one of the best working systems in our company. It’s the people who are the weakest link. I don’t see the system as any kind of source of risk.” (Company B)

“One is clearly awareness about where it affects. Why I couldn’t just open another account in the system and create the invoice there since it’s the easiest way. But on the other hand it’s not. [...] There has to be checkpoints so that you can’t do stupid things just because you’re unaware. [...] But it’s about the instructions and forcing that are the (most important) tools we have now.”

The cultural differences in global the global working environment was brought up by one of the interviewees.

“It (sales funnel) is as reliable as an Indian customer. The differences are tremendous. In Finland if you have made a handshake, the probability of closing the deal is 99.9%. But in India even though you have made a handshake, it can take up to three years and nothing happens. The salespeople have to take this into account when they consider the probability of each customer. India is of course only one extreme example of the cultural differences in this matter.” (Company C)

4.2.5 Challenges and opportunities of CRM

In most cases CRM initiatives in Finland are not strategic by nature and CRM is not often seen as a notable strategic tool. Consultant 2 sees that the CRM systems are mostly implemented as an operative management tool and so called business intelligence or customer intelligence is considered as an individual theme.
“It would demand that the customer specifically is looking primarily a support system for management level [...] but too few seek for the solution in this order. The seek for that “sorcerer’s stone” is done from Business Intelligence or big data and they don’t see that. Or is it only so, that for us in CRM business it’s of course easy to draw the CRM as the core of everything, that this is the most important thing. But the customers don’t really see it that way.” (Consultant 2)

This phenomenon can be seen in real life in the case companies. The systems are mostly designed for the operational level in mind, only one company making a difference, where the initiative was actually given by the top management. CRM insights are not in most cases seen as a strategic asset, but for strategic insights the managers look for separate Business Intelligence –tools and software (for example Qlikview). In company C the whole CRM initiative came from the top management. In their company the management level is an active user of CRM and they use it for more strategic monitoring. Top management in this company actively follow the offer and order base of each product group and reflect it against the development of the whole industry in order to find issues that need to be considered in company level strategy. Also in company E the top management level uses CRM actively to compare the predictions to past trends and view the situation of the sales pipeline straight from the system itself instead of static reports.

"Changes in product level, so that they can start doing corrective maneuvers. Let’s say we know that a specific product is selling very well in the global markets. If our own offer base is decreasing, there has to be something wrong if the general trend in sales is increasing. Then we have to make actions or at least start asking what is happening when our base is diminishing.” (Company C)

“The most important thing they follow is that to what direction the sales are developing. What are the volumes, what are the predictions compared to the realized trends, are we going up or downwards. Is there some irregular trends by country or product group that should be given attention? The most important sales cases where the business area management could support the local sales team are also important to bring up. Those are probably the basic things the higher
management wants to see. The higher you go in the hierarchy, the more interested the managers are on the trends and the big picture.” (Company E)

According to consultant 2, in most cases, CRM projects are managed by the middle management. After the launch of the implementation project, higher level management often steps aside, which often leads to forgetting the more strategic vision of the whole project. He sees that in a general level, still most of the companies are more interested on their products rather than their customers.

“There is no vision, they don’t see it as practicable. They rather use the old way, that through their own guesses, intuition and bought reports. Not maybe seeing that the own information database could be something to build on. Maybe it still is emphatically so that organizations are more interested on the product than customers. In many cases where you make it possible that the company could for example examine sales by customer segment, they still ask how they can see it by product group and so on.” (Consultant 2)

The importance of senior management commitment to the CRM project is also underlined by consultants 1 and 3. They should give the reasons and requirements for using the system and its continuous exploit. This matter has been also featured in many scholar’s lists about reasons why CRM initiatives fail (e.g. Francis Buttle et al., 2006; King & Burgess, 2008; Wilson et al., 2002).

“You can say that 80% of the challenges are in the management side of things. There is not tight enough commitment from the management to why this system should be used in general or what are even the real demands for this system and its’ ongoing development.” (Consultant 1)

“There has to be a strong leader or a strong person who says that “this is the way we do it, period”. There can’t be any alternative ways. If there is even one alternative way of working, everything is lost. [...] Worst case is when the project
manager, sales manager and CEO come and say that “Now we implement this” and when training starts they leave the room.”

One major challenge for CRM consultant 2 sees in different user groups. Still in many cases the companies for example don’t exploit the possibility of integrating marketing processes into the CRM systems they have, even though this option is offered. This leads to a situation where the leads don’t flow automatically from the marketing channels to sales, but they are communicated to sales personnel by email or in worst cases by paper.

“If you think about sales force automation and the sales work and how it is supported by CRM-tools, many companies leave the marketing tools the software offers unused. Marketing department continue their job using the same, individual databases not caring about sales. And the leads are somehow with email or yellow notes transferred from marketing to sales. This is one observation about the challenges of CRM implementation. About half of the companies leave this opportunity to waste because they are seeking for a solution for the sales force. Marketing can be solved later or there is no need to solve anything since they have some system already.” (Consultant 2)

One of the companies sees most potential with CRM in understanding the internal buying process of the customers and then being able to synchronize this process with their own selling process. This requires exceedingly good, in-depth understanding of customer’s way of working, communicating and doing decision-making.

“Well, the customer-centricity. That is the first thing. We’re trying to change the mindset more to the direction that customer has their own buying-process. So we should be reflecting on that. Linking the customer’s buying process to our selling process so that they go hand in hand. So that we can see that now the customer is in this situation and we are in the opportunity phase, so what does it mean? He is still weighting different options and we should recognize that. So we’re underlining customer-centricity so that we could understand how the customer is
looking at us in different phases where we’re going in the selling process.”  
(Company D)

The meaning of remote measurement and synchronizing field service resource planning with CRM was mentioned as an opportunity by two companies. By using remote data the companies could proactively contact the customers and go through their possible needs using remote data. In addition to this, company A wants to encourage their customers to record information about their current situation themselves, thus making the customer relationship even more collaborative. Different additional data about the customer was seen as a source of competitive advantage in company E once they get the basic processes in order. This could include market information about the customer, news feeds and anything that could give additional insights to the sales person before contacting the given customer.

“At least I see that all kinds of information to the sales representative is important. It can be for example news feed connected to that certain customer or market updates. All of that would be beneficial to get in a visible form if you are responsible of that customer. If there was one simple place to gather all that information, not only the basic contact information but market information and whatever that is connected to the customer. The challenge is that how we map that information so that it’s linked to right places. Especially with big corporations that have tens of different companies inside them. This makes the mapping quite challenging.” (Company E)

One of the companies brought up the better need of valuing their customers based on their potential purchases and for example margins. This way the operations could be planned more systematically and the companies could concentrate more on the most valuable customers.

“All that kind of information which could give us something - if you think about lead-level things - which we now know nothing about yet. All kinds of information that gives us some kind of picture what the customers purchasing potential could be. Because one of the criteria for our coming segmentation should
be customers purchase potential, which would of course improve their grading in the segmentation.” (Company B)

This kind of improvement was also brought up by the consultants, but more from the system integration point-of-view.

“There would be a lot of potential in integrating the information from other systems and bring that information as a part of customer value valuation. All this, about how are the provided services used, at what margins the products are bought and all this other information available that could help valuing the customers. It’s not typically exploited area in today’s CRM-user organizations to my mind.” (Consultant 1)

When it comes to higher-level management, consultant 1 sees that only following sales funnels and the number of customer visits is not really interesting. More interesting facts are for example the satisfaction and development of the key accounts. For example the development of top 20 customers both financially and in terms of satisfaction: statistical deviation in these factors and the possibility to drill in to these changes in order to find out the causes behind them. The senior management should be considered as a similar end-user of CRM as the sales force and other operative users. The systems should be able to offer such kind of information that is not accessible by the terms of present way of reporting. This would require the management a deeper understanding how the information is built and how it should be read, which demands a deep commitment from the senior management level.

“But I kind of see it so that, if you process the information for the senior management too ready and just show them the charts that this is our business. It doesn’t give good enough picture about how we really are treating our customers, what is the customer experience they get when they buy from us or deal with us. It should be better clarified to the management that how this side of things work. How can they recognize the facts they should act on and where is the potential? How could we better automate this part of the process that our business is based
on and the customer value is created? When you consider the fact that most of the CRM-systems of initiatives fail because the management doesn’t constantly have the energy or interest to communicating about or supporting the using of the system. Kind of forcing people to use it. So this is a very critical question for the future.” (Consultant 1)

When it comes to higher level management using CRM, company C has had positive development in their employee motivation towards CRM when they have realized that the top management actually is interested in the information inserted in to the system and that they react if some information is not available. This way of motivating employees was found important also by Avlonitis and Panagopoulous (2005). This company also has CRM utilization as one factor when it comes to calculating bonuses so that if the employee hasn’t used CRM as instructed, he or she loses a part of bonuses.

“In the sales meetings we look at reports through CRM. It’s a very effective way when for example I go to the headquarters and we at one point of the meeting concentrate on sales and examine customers from a specific segment. Or we check out some bigger cases and what the salesperson has written about them. Then if we note that he or she hasn’t written anything we immediately send an email to that specific salesperson. When you do this a few times they (salespeople) realize that the information actually has to be there. Salespeople are pretty good at leaving out information if they think even a little that no-one is interested on it.” (Company C)
4.3 Summary of the results

To summarize the findings of this study, the different processes and practices of CRM are visualized in figure 14. All of these processes are not visible in any individual company in this study, but it is a combination of the practices perceived. The model is divided into the three sectors of CRM brought up by Buttle and Maklan (2015): Operative CRM, strategic CRM and Analytical CRM and the different processes related to them are listed under each sector. Operative CRM includes all the processes that happen in all the customer touch-points of the company, combining sales, marketing and service processes of the company. Also some of the case companies use the CRM information in supply chain management and product development processes, even though mostly in these companies CRM is used by the sales force. The CRM system works as an inventory for all the customer information, both internally and externally gathered. This information is then processed into customer insights that create customer intelligence. This is done by different types of analyses and data mining in the processes of analytical CRM. These insights are exploited by strategic CRM in the process of forming and developing business strategy and customer strategies.

Figure 14. CRM model in practice.
5. DISCUSSION AND CONCLUSIONS

In chapter 1.1, following research questions were defined for this study:

1. What processes and factors CRM consists of?
2. How is CRM used in case companies?
3. How is the CRM information exploited in different levels of organization?
4. What is the role of CRM in the future?

In this final chapter of the study, the main findings of the research are summarized on the basis of the research questions and the model presented in chapter 3, limitations of the study are discussed and recommendations for managerial implications and further research are presented.

5.1 Main findings

All in all it seems that all of the interviewees in the case companies have recognized the importance of more strategic CRM and the importance of data integration and forming a single view of the customer. But even though this might be the wish for future, at the present moment the companies struggle with multiple different technological systems that are used at the customer touchpoints and the customer information is vastly scattered across the companies. A single-view of the customer is still not reached fully in the companies and some of the customer-related processes are still done outside the reach of CRM in many companies. For example marketing and service functions may have their own systems and processes and the whole sales process might not be recorded in the CRM. Also the role of CRM is mostly still on the operative side as a SFA and sales monitoring tool for the management although the importance of CRM in the future as a more strategic asset was partly agreed by the interviewees.

Considering the companies from point-of-view of the CRM continuum (Payne & Frow, 2005) (see figure 2.), the situation today seems to be that the companies are still in the center-to-left area of the continuum. For most companies the situation is still that they have implemented a specific technology solution, but the information is not really integrated between different systems that hold
customer information. Some integration has already been made in some of the companies but full integration is still unachieved. Considering this from the point of view of the model presented in this study, the knowledge creation part of the model has not reached its full potential yet. The companies do gather the basic customer information into CRM systems but only one of them actually uses it as base of all customer information and sees it as an enabler of customer knowledge. In other cases CRM is mostly seen as an operative tool for customer interaction and a tool for sales management to monitor the work of their salespeople. Because of this, CRM data is for the most part used by the operative level and their management and the information gathered of each customer is not that profound. The case being this, the value of CRM information in strategic decision making stays thin when the higher level management see CRM information mostly as static reports of the sales funnel or offer base. As brought up by consultants, the higher benefit of CRM could be achieved if the management had better understanding of the systems, were able to drill deeper into the issues and the information gathering was more systematic so that it actually could give tools for higher level strategic development.

One of the challenges with CRM in the case companies are the cultural differences in different countries the companies operate in. This results in challenges for example in getting the sales funnel quality in a level that managers can do reliable predictions of the sales in a global level since in some countries the sales representatives are more optimistic with the probabilities than others. This has been prevented in some case companies by giving strict enough guidelines for the different phases so that they are not reliable on the sales representatives own subjective interpretation.

At the time of the research, only one of the companies was able to calculate customer lifetime values for their customer companies. Some did not even categorize their customers by their value. Few interviewees said that they recognize the value of this kind of thinking but it is something that is still quite far in the future for them as the data quality and fragmentation are such substantial issues for them. As one of the fundamentals of CRM is the recognition of the most valuable customers, there is a lot room for improvement still for the case companies in this matter. In a more general level, customer intelligence was not seen strongly as a part of CRM, but more as business
intelligence–aspect, meaning that the analytical side was not seen as part of CRM process but a separate function and responsibility of a separate business unit. Thus, the model presented does not fully match most of the case companies at the moment as it describes CRM as a more strategic and holistic way of combining operative, analytical and strategic CRM together.

Even though the companies are still struggling with process and data management issues, the importance of analyzing customer information and creating customer knowledge is at least to some level recognized in the companies. The initiatives in the companies are still rather new and development in progress, but in the future CRM could become a significant tool for creating insights for the senior management by making it possible to analyze different customer groups, comparing the situation to the situation in the market in general and making strategic shifts on the basis of these results. Also CRM can benefit the companies in terms of concentrating on the most profitable customers and automating processes without losing the feeling of tailored service. When the quality of predictions increases in the companies, in addition to sales management, CRM could benefit supply chain management and production management, as already seen in one of the case companies.

In conclusion, the holistic model for CRM presented in this study cannot be considered as a description of the current situation in the case companies but more as a vision for the future. The model combines the strategic, operative and analytical sides of CRM and answers the call of Zablah et al., (2004) to “develop measures and conceptual models that help unravel the, thus far, enigmatic phenomenon known as customer relationship management.”. The model could help managers to understand the dynamics of CRM in a more complete way and give them the understanding to give the initiatives the support needed for higher CRM benefits.
5.2 Managerial recommendations

- Lack of management support is one of the major causes of failure in CRM implementation. The CRM process should always have management-level support and be strategic by nature.
- Make sure that the employees using CRM understand what the information is used for and be sure to show them appropriate support in the implementation phase.
- When implementing CRM systems, the first step should be process development. Only when the customer-related processes have been mapped and developed a CRM system should be implemented. The system is not an answer to customer-centricity, but merely a support tool for working processes.
- The CRM system should fit the sales processes of the company, not vice-versa.
- In order to gain real advantages from CRM, all the customer-related information should be unified and integrated, from all customer touchpoints.
- Regardless the target of CRM initiative, companies should divide the CRM projects into phases, each delivering visible, measurable business benefits. This reinforces the added value of the initiative and helps to maintain the motivation and momentum.
5.3 Limitations

Even though the research was executed carefully and reached its goals, there were some unavoidable limitations. First, in order to gain more accurate and in-depth insights, more interviews should have been conducted. Another round with the same interviewees would have given a more lucid picture of the phenomenon, but due to time-restrictions only one round was conducted.

Also, the preparation of the interview questions could have benefited from a longer time to get familiar with the theory around CRM. This way the interviews could have given more precise insights on the subject. Also the number of interviewees was limited, thus a higher amount of interviews from each company would have given a more in-depth picture of the subject.

5.4 Further research

This study is only a thin scratch in the subject of CRM in Finnish industrial companies. There is still a lot that could be studied to get more insight as well as benefits for the technology cluster. A quantitative research with the same sample could be useful in order to get more insight on the use of CRM in these industrial companies. Interesting themes to measure could be the level of data integration, the perceived level of attaining the single-view of customer, the level of customer prioritization, how strategic the companies see CRM etc. Also more interviews could be done with different level employees in the companies in order to gain more insight on the matter. One interesting topic for future research could also be the cultural impact on sales people’s optimism with grading the opportunities in CRM systems and the impact of training and management involvement in these aspects.
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APPENDICES

APPENDIX 1 (INTERVIEW QUESTIONS)

Background
- Can you tell me about your background (education, former work experience, current work)

General Questions
- Who are users if CRM in your organization?
- Can you describe your sales process?
- What kind of KPI’s do you have considering CRM, what kind of measurements do you use?
- How was the system provider chosen?
- Why was the system needed?
- Can you describe the implementation process?
- Did you need to do tailoring to the system?
- Did you do changes to your sales processes when implementing CRM?

Databases
- Do you use data warehousing in your company?
- How?
- How is the CRM system integrated to other information systems in your company?
- How should the information be integrated in the future?

Analytical CRM
- What kind of analytical features the system contains?
- Does it enable deeper analysis?
- Do you use other systems to analyze customer information?
- Can and do you analyze customer profitability or customer lifetime value?
- What kind of development needs your company has in the future?
CRM Information

- What kind of information do you collect of the customer?
- Who gathers the information?
- How is it exploited afterwards?
- Do you buy data from external sources?
- How could this information be enriched? If everything was possible, what kind of information would you add to the system?
- How do you determine sales probabilities in your company?
- How well can you forecast future sales with this information?
- How could it be enhanced?

Using CRM

- What kind of information should different level employees have from CRM?
- How is the information visualized?
- Do you use individual tools for reporting of visualization?
- How unified is your view of your customers?
- What kind of information does the top management want from CRM?

Data quality

- How weak or strong factor is the CRM information from strategic point of view?
- How could the information be developed?
- How do you encourage employees to gather data and keep it high quality? Is it connected to for example bonuses?