

# A CUSTOMER-CENTRIC VIEW OF THE IMPORTANCE AND VALUE OF CRM ELEMENTS

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**Abstract**

The purpose of this study was to gain an understanding of what customers value in terms of the elements of customer relationship management, and how respondents can be grouped base on their answers. This was done by conducting a choice-based conjoint study, which was formulated based on a customer relationship management scale by Sin et al. (2005) on a proportional stratified sample of the customer base of Digia Plc, a large Finnish IT company. After the conjoint study, respondents were segmented through a k-means cluster analysis.

Based on the study, it is evident that customers place the largest relative importance on the attribute "Key Customer Focus" and gain the highest utility from industry specific configurations, although there are slight deviations of preferences in terms of different clusters. These findings are in line with previous customer-centric research in other fields. In addition, as customer assign at least a moderate level of importance to all attributes, this study supports existing CRM studies highlighting the importance of holistic CRM. Finally, the lowest level of importance gained by the attribute "CRM Organization" is not in line with existing literature and therefore demonstrates the importance of a customer-centric view.

This study offers a unique perspective into the Finnish information technology markets, as the one of the first customer-centric studies concerning CRM elements within a larger framework.

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**Keywords** Customer Relationship Management, CRM, Customer-Centric View, Conjoint

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### Tiivistelmä

Tämän tutkimuksen tarkoituksena oli selvittää, mitä eri asiakkuudenhallinnan elementtejä asiakkaat arvostavat ja kuinka asiakkaita voidaan ryhmitellä heidän arvostuksiansa perusteella. Tutkimus toteutettiin choice-based conjoint-menetelmää käyttäen ja se rakennettiin Sin et al. (2005) kehittämään skaalaan pohjautuen. Otoksena käytettiin painotettua ositettua otantaa Digia Oyj:n asiakastietokannasta. Conjoint-analyysin jälkeen vastaajat segmentoitiin k:n keskiarvon klusterointimenetelmällä.

Tutkimuksen perusteella on selvää, että asiakkaat pitävät tärkeimpänä attribuuttia ”Asiakaskohtaisuus ratkaisuisissa” ja saavat korkeimman utiliteetin tasosta ”Asiakkaalle tarjotaan mahdollisuutta toimialakohtaisiin konfiguraatioihin osana ratkaisuja”. Nämä tulokset ovat linjassa aiemmin julkaistujen asiakaskeskeisten tutkimusten kanssa eri toimialoilta. Tutkimuksesta selviää myös, että asiakkaat pitävät kaikkia asiakkuudenhallinnan attribuutteja vähintään kohtalaisen tärkeinä, mikä tukee nykykäsitystä asiakkuudenhallinnan kokonaisvaltaisuuden merkittävydestä. Attribuuttia ”Organisaation asiakaslähtöisyys” vastaajat pitivät vähiten tärkeänä, joka tuloksena ei ole linjassa olemassa olevien tutkimusten kanssa ja joka osoittaa asiakaskeskeisen tutkimusnäkökulman tärkeyden.

Tämä tutkimus antaa ainutlaatuisen näkökulman suomalaisen IT-toimialan asiakkaisiin yhtenä ensimmäisistä asiakaskeskeisistä asiakkudenhallinnan tutkimuksista.

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**Avainsanat** Asiakkuudenhallinta, CRM, Asiakaskeskeisyys, Conjoint

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# 1. Introduction

This study will begin by reviewing the importance of customer relationship management in strategic IT partnerships. This will be followed by a discussion on the importance of the researched subject as well as by pointing out the research gap in current literature. Finally, the first section will be wrapped up by presenting an overview of the study in general as well as a going through a brief review of the structure.

## 1.1. Customer relationship management in strategic IT partnerships

Aligning business strategy and information technology can be seen to positively influence profit, productivity and other important business key performance indicators (Tallon & Pinsonneault 2011). Due to this, the information technology of companies can be seen to gain an increasing amount of attention and its strategic importance continues to grow in present day companies (Kearns & Sabherwal 2006).

Naturally, when companies see the rising importance of IT, it also affects the way they regard related products and services as well as different types of suppliers. For IT suppliers this sets new expectations as to how relationships should be managed in order for customer needs to be fulfilled in adequate ways. It is evident that in order to function, these types of relationships require close collaboration between the customer and the supplier in addition to a well nurtured customer-supplier relationship for the cooperation to be as smooth as possible. Understandably, this can prove to be problematic due to resource prioritization and the hectic business environment of today. Nevertheless, if IT is in fact regarded as strategic, also the providing suppliers have the possibility of being regarded as such by the customer.

A strategic supplier relationship can be defined as a long-term relationship, which is based on joint problem solving and mutual benefits through which both companies gain competitive advantage (McCutcheon & Stuart 2000). Compared to regular relationships these can be seen to differ for example in the following ways: they require both parties involved to perceive that they are gaining value, and instead of only exchanging payments for products and services, also systems and capabilities are shared and purchased (Monczka et al. 1998).

In addition, the positive relationship of strategic partnerships and strategic purchasing with regards to firm performance has been proven in academia (Carr & Pearson 1999). In order for a strategic buyer-seller relationship to function to its fullest extent, the importance of inter-organizational trust can be seen as essential (Zaheer & Perrone 1998, Ellram 1990). Moreover, proper partner selection and evaluation must not be overlooked due to issues of trust and commitment as well as the required openness as a part of the relationship (Spekman 1988).

As it is evident that customers expect more and more from an IT supplier, it is vital to be able to understand just what it is that they value and regard as important in terms of being subjects of customer relationship management. When this is understood, the relationship can be truly taken to a level in which both perceive that they are gaining significant value.

## 1.2. Importance of subject and research gap

As discussed by Avery et al. (2014) in *Harvard Business Review*, customers expect companies to understand both what kinds of relationships customers want as well as how these relationships should be managed. Nevertheless, as the authors discuss this is very rarely understood. They refer to this as a lack of “relational intelligence”, in which companies lack understanding of the relationship as well as ways to nurture it. According to the authors, this knowledge can be gathered by capturing data as well as by conducting surveys and executing interviews. As stated, strategic relationships are based on the idea of creating mutual value. Therefore it is important that companies understand both the nature of their customer relationships as well as the way the relationships should be managed. Many companies act based on assumptions of what customers want, but this can understandably be seen as dangerous. This study aims to generate the required knowledge to fill this gap of relational intelligence.

Customer relationship management, or CRM, can be seen as a widely studied subject during the past years (e.g. Reinartz et al 2004, Mithas et al. 2005, Boulding et al. 2005). Within this field, studies concerning the different elements and frameworks of CRM have been published (e.g. Payne & Frow 2005, Sin et al. 2005) as well as studies concerning the relationship of CRM and firm

performance, customer satisfaction, customer loyalty and customer retention (Chen & Popovich 2003, Rauyruen & Miller 2007). There is a consensus regarding the importance of CRM in general as well as regarding the strategic nature of the subject (e.g. Chen & Popovich 2003, Payne & Frow 2005, Ryals & Knox 2001). These studies have provided valuable information regarding CRM and its different elements as well as in terms of understanding the implications of adopting CRM processes. Nevertheless, all these studies have been conducted from the point-of-view of a company implementing CRM activities as opposed to adopting a customer-centric point-of-view, which can be seen as a clear shortcoming in current literature.

At the moment, there is a clear gap in academia regarding a customer-centric point-of-view of CRM studies in general as well as in terms of understanding the relation between CRM activities and customer attitudes towards them (Kim et al. 2012). Gaining a customer-centric point-of-view can be seen as extremely important and this obvious shortcoming in the field of CRM has been discussed by many (e.g. Avery et al. 2014, Kale 2004). Moreover as Kim et al (2012) discuss, as CRM activities are in fact targeted at customers, the lack of customer-centric views on the subject can be seen as surprising. When analyzing a subject with two obvious parties involved (the first one being the company executing CRM and the second one being the customer as the subject of CRM) it would seem foolish to neglect one of these. Due to the reasoning presented above it is natural that this field of study needs to be further examined.

Based on the prior research gap, this study will focus on the following question:

*“What different elements of customer relationship management do companies value in an IT supplier and how can these companies be grouped based on their preferences?”*

This study aims to fill this research gap by contributing a customer-centric view to the existing CRM literature by aiming to uncover customer attitudes and expectations towards different CRM elements. The results of this study offer an extremely important complimentary view to existing CRM literature which serves as an excellent starting point for future customer-centric CRM studies.



### 1.3. Review of the study and structure

This study was conducted as a choice-based conjoint study, assessing the importance and the utilities of the predefined attributes and levels of the scale presented by Sin et al. (2006), which depicts the various elements of CRM. Based on their answers, the respondents were grouped utilizing a k-means cluster analysis. The research was conducted in co-operation with Digia Plc, which is a large Finnish IT and software company. Digia Plc has over 1000 employees and is publicly listed in the Helsinki Stock Exchange. In order to complete this study, Digia Plc agreed to provide its contact base for the study.

The main finding of this study was that customers place the largest relative importance on the attribute “Key Customer Focus” and gain the highest utility from industry specific configurations. In terms of the different clusters, there is slight deviation among preferences, but also a certain level of similarity when compared to the aggregate level results. These results are generally in line with previous customer-centric studies in other fields. In addition, this study showed that CRM is seen by customers in a holistic way as all attributes gain at least a moderate level of importance, which supports existing CRM literature highlighting the importance of balanced and holistic CRM. Slightly surprisingly, customers saw the attribute “Organizational CRM” as the least important attribute out of the four. This finding is not in line with existing CRM studies, and proves the importance of gaining a customer-centric view on the subject.

As mentioned, in addition to the aggregate level, the obtained results were segmented through cluster analysis in order to understand how respondents could be grouped based on their answers. Nevertheless, the focus of this study was not to provide a selection of different types of CRM models for different types segments, rather to review and set a foundation for understanding what customers value in terms of CRM activities and how these valuations differ. Based on this knowledge, future studies can be conducted in order to understand how these preferences can be formulated into different types of CRM activities for different types of customer segments, as well as with regards to what these segments could possibly be. The prior themes are naturally out of the scope of this study, as they require the evaluation of much more than just customer preferences.

The research is structured in the following way: A theoretical overview of CRM is presented in section two. This is followed by selecting and presenting the theoretical model that served as the base for the study. Section three discusses the chosen method as well as reviews the way the study was designed. This is followed by reviewing the process and outcomes of adjusting the selected scale into a managerial context from a Finnish IT industry point-of-view. Section four focuses on presenting the results. It starts off by reviewing the conjoint importances and utilities, which is then followed by a k-means cluster analysis. After this, section five presents the theoretical implications. The study will be then concluded by presenting the managerial implications in section six as well as the limitations and possible future research in section seven. Finally, the study will be wrapped up with a brief conclusion in section eight.

## 2. Theoretical Background

As mentioned, the theoretical base of this study relies on relevant literature regarding CRM, which will be used to set a background for the subject. The following section will aim to review the prominent literature around CRM in order to set a foundation for preparing, conduction, understanding and interpreting the study. After reviewing and discussing the most relevant themes, the scale chosen for the study will be presented and reviewed.

### 2.1. From relationship marketing to customer relationship management

Customer relationship management can be seen to be based on the ideology of relationship marketing (Ryals & Knox 2001). Relationship marketing was derived from on the ideology of dual value creation into an ideology emphasizing the importance of customer relationships (Boulding et al. (2005). Relationship marketing can be seen as a concept that emphasizes the importance of relationship and customer retention in creating a profitable and long lasting relationship (Ryals & Knox 2001) and it became popular as a term in the 1990's (Gummerson 2004). On a general level, its success can be measured through a company's profitability, and on a more concrete level,

though customer loyalty and word-of-mouth communication (Hennig-Thurau et al. 2002). As in the case of effective CRM (which will be covered later), also relationship marketing can be seen to have a positive effect on firm performance (Sin et al. 2002). When going further into the roots of this positive performance, it can be seen to be most influenced by relationship quality (Palmatier et. al 2006).

By the mid 1990's, CRM began to emerge as a term and it gained significant popularity (Boulding et al. 2005). When compared to relationship marketing, CRM can be seen as the way relationship marketing strategies and values are implemented into everyday business for example in terms of managing, personalizing and reaching customers, as well as in terms of customizing offering (Gummersson 2004). Depending slightly on the viewpoint and the author, CRM has also been defined as the processes that set the foundation for ensuring that relationship-marketing activities can be implemented (Ryals & Knox 2001). The difference between these two viewpoints lies in the way CRM is defined. As is evident in the case of the two prior ways the role of CRM is defined in comparison to relationship marketing, the prior emphasizes CRM's roles as a more abstract mindset that guides customer work, while the latter brings forth CRM as a more concrete set of processes and tools that enables an organization to implement relationship marketing activities. Regardless of the exact definition, it is evident that there is a strong link between relationship marketing and CRM. One foundation of this link is the fact that, as in the case of relationship marketing, CRM activities can also be seen to be based on the idea of dual value creation (Boulding et al. 2005). This will be used as one of the guiding principles when assessing CRM elements as a part of this study.

As can be seen from the prior example, even though CRM has been widely studied in recent years (e.g. Gummerson 2004, Chen & Popovich 2003), the definition of customer relationship management is one that can nevertheless be defined as vague. Depending on the study and the field in which the study has been completed, CRM can refer to very different things. At one end of the spectrum, CRM can be regarded as merely an implementation of an IT system, while the other end sees it in a far more strategic and holistic way of managing customers and creating value through cross-organizational integration of processes (Payne & Frow 2005). As discussed previously, the way CRM is defined naturally affects the way it is positioned in academia with

regards to relationship marketing. In a managerial context, the way CRM is defined on the other hand naturally effects the entire company and the way customers are managed.

Regardless of the definition, the importance of technology is widely discussed in terms of CRM and it cannot be overlooked when assessing various definitions. One extreme sees technology as the driver and heart of CRM, while the other end sees it merely as a tool to support successful CRM initiatives (Ryals & Knox 2001). When properly implemented, CRM technology such as CRM applications can positively affect for example customer satisfaction and positively build customer knowledge (Mithas et. al 2005). On the other hand, the importance of technology should not be overemphasized; a technical implementation of a standalone CRM system will hardly deliver expected results, but it should be used to support various information management processes (Jayachandran et al. 2005).

Even though there are different definitions of CRM with varying emphasis on the role of technology, the importance of understanding the depth, the cross functional and holistic nature as well as the strategic importance of CRM is generally speaking noted widely in the field of marketing (e.g. Chen & Popovich 2003, Payne & Frow 2005, Ryals & Knox 2001). This is the definition and base that will be used in this study due to the fact that it can be seen to adequately highlight the strategic nature of CRM, which is vital in the context of this study.

## 2.2. Personalized CRM

The need to personalize CRM activities is based on the fundamental fact of heterogeneity in customer behavior: different customers have different needs that have to be answered in different ways (Boulding et al. 2005). In academia, there is a consensus that CRM activities should be focused and personalized in terms of different types of customers (e.g. Venkatesan et al. 2007 & Ryals & Knox 2001). Moreover, selecting and segmenting customers in order to create tailored CRM efforts as well as prioritizing these segments based on their value and profitability for the company can be seen as one of the most important facets of CRM (Parvatiyar & Sheth 2001).

When discussing customer segmentation, it is important to discuss just how far segmentation should be taken. In the modern world with sophisticated technological tools, moving towards fully personalized “segments-of-one” in CRM activities has also been discussed at one end of the spectrum (Dibb 2001). Nevertheless, the importance of tailoring CRM activities does not mean that all customer relationships should automatically be moved towards the creation of individualized relationships; this can be seen as both time and money consuming, and requires a careful tradeoff analysis (Frow & Payne 2009). Then again, this discussion can once again be attributed to the difference in CRM definitions. If CRM is seen as an activity mostly happening around a CRM system, the idea of segments-of-one seems understandable due to available information and the possibility of process automation. On the other hand, if CRM is seen as strategic and holistic as is in the case of this study, it is completely unrealistic to aim for segments-of-one when taking into account resource, money and time constraints.

When adopting the prior strategic and holistic view of CRM, it is natural to segment customers into relevant groups and prioritize resources between these segments. When assessing the allocation of CRM resources, prioritizing should be done based on relationships that create the maximal mutual value (Parvatiyar & Sheth 2001). This again returns back to the idea of dual value creation, which can be seen to be the core of CRM (Boulding et al. 2005). When acting based on this idea, CRM activities are targeted where they belong.

Ways to segment customers based on required CRM activities are plentiful. Academia has plenty of studies reviewing different types of customer segments and assessing the needs of personalized CRM activities within these segments (e.g. Rigby et al. 2002, Karashnikov et al. 2009). For example, differently classified customers, such as key customers and regular customers, have been seen to require different types of CRM activities and resources (Homburg et al. 2002). Additionally, customers in different lifecycle stages have also been seen to require different types of CRM in order to adequately serve customer needs and in order to guide the customer through the different stages (Reinartz et al. 2004). Another way to segment customers in terms of CRM activities is to group them according to profitability (Rigby et al. 2002). Additionally, the importance of taking segmentation a step further by digging into customer data and formulating tailored micro-segments based on customers’ needs and wants has also been highlighted (Ryals &

Knox 2001). There has also been interest with regards to understanding how companies in different industries should be managed in terms of CRM activities (Karashnikov et al. 2009).

### 2.3. Implementation and implications of CRM processes

Why can adopting a CRM process be seen as so important then? Adopting CRM initiatives can be proven to positively affect revenue, customer satisfaction and customer retention, as well as lowering operational costs (Chen & Popovich 2003). Additionally, CRM activities have been shown to highly affect other metrics such as customer loyalty (Rauyrueen & Miller (2007). In addition, systematic CRM that is executed on a day-to-day basis facilitates consistent and high quality customer service. (Chen & Popovich 2003). In other words, it would seem evident that adopting CRM processes would be beneficial for companies on a general level.

Nevertheless, the link between adopting CRM processes and achieving expected business performance results is not as straight forward as one might think. Even though companies have been putting a large amount of resources into the implementation, the amount of failed CRM initiatives can be seen as significant, as has been discussed by many (Kim et al. 2012, Reinartz et al. 2004, Boulding et al. 2005, Kim & Kim 2009). The difference between the two, yet again, can be attributed to the difference between the ways CRM is understood. In order to ensure a successful implementation, more strategic elements need to be taken into account, as focusing solely on implementing CRM technology will not lead to the expected outcomes (Reinartz et al. 2004). In other words, seeing CRM in too narrow a manner will most likely prevent the company from achieving the possible positive effects described at the beginning of this chapter.

The success of implementing CRM initiatives can be seen to depend on two things 1) the existing processes of a company as well as 2) the pre-existing capabilities (Boulding et al. 2005). Naturally, different companies have different types of maturities in terms of adopting CRM processes, which understandably affect the gained results of this implementation. From a slightly different perspective, the study by Reinartz et al. (2004) shows that successful implementation requires realigning organizational aspects, such as incentives and customer oriented behavior, as well as a strong people-orientations as opposed to a tech-orientation. The importance of a strong people

orientation is also highlighted by others (eg. Shum et al. 2008), which highlights the importance of understanding how CRM initiatives affect the organization on a larger level. Nevertheless, implementing CRM on a strategic level does not necessarily mean the need to make things complicated: Boulding et al. (2005) for example state, that the basis of successful implementation does not in fact require sophisticated methods, but rather a strong understanding of customer knowledge in order to enable dual value creation. This anchors also the aspect of implementation back to the fundamental ideology of CRM.

After implementing CRM processes, it is natural that there is a need to measure performance. In order to holistically understand and measure CRM performance, companies need to start by identifying the core factors in adopting a CRM process as well as their inter-relationships (Kim & Kim 2009). Nevertheless, when shifting into a managerial environment there is a concern that measures regarding CRM performance are not widely enough used nor well enough understood (Payne & Frow 2005).

To meet this challenge, companies are offered various metrics which can be adopted based on their CRM maturity. On a basic level, a company can start off for example by setting up a structured way to discover up-sell and cross-sell opportunities resulting from cross organizational CRM processes (Reinartz et al. 2004) or by measuring the metrics discussed at the beginning of this section such as customer satisfaction, customer loyalty or customer retention. Nevertheless, the aim should be to gain a deeper understanding through a more strategic set of measurements. On a more fundamental level, this could be done by following a structured CRM scorecard such as the one designed by Kim & Kim (2009) that consist of four organizational perspectives as well as their related KPI's.

## 2.4. Pitfalls of CRM

Based on the prior description of CRM as well as its implementation and measurement, it is evident that the adoption of functioning CRM process needs to be well planned and carefully implemented in order for it to achieve its goals. As mentioned, if properly implemented both customers and companies benefit through mutual gained value. Nevertheless, if a customer is

promised a certain level of service, which is not delivered, negative feelings will naturally arise. Moreover, if companies do not manage certain aspects of CRM in a proper manner (e.g. customer are taken advantage of in the name of CRM), seriously damaged or even destroyed relationships may result (Frow et al. 2011).

As mentioned, one of the largest pitfalls can be seen to be linked to the improper implementation of CRM (Boulding et al. 2005, Schum et al. 2008). Implementing CRM without having a customer strategy and implementing CRM without having the organizational structure, processes and people restructured to fit the new mind set can be seen as the two most important pitfalls to avoid in adopting CRM processes (Rigby et al. 2002). These points are in line with previous literature on the subject and underline the importance of careful planning and understanding the holistic nature of CRM.

After avoiding the pitfall of unsuccessful implementation, a company must focus on other key aspects of CRM. Issues such as customer privacy and trust, gathering only relevant information as well as the usage of customer information are vital to consider in terms of CRM (Boulding et al. (2005). As we live in an age of information abundance, customers are increasingly careful regarding their privacy. In addition to data and privacy related issues, certain behavioural aspects such as customer favouring, exploitation of different kinds, dishonesty and confusion are also behaviour models that can potentially destroy relationships (Frow et al. 2011). After setting up functioning CRM processes that are well implemented and are trustworthy in terms of data and privacy related issues, these behavioural aspects can be seen to rise in importance.

It is also worth noting, that it is not only the company executing CRM activities that can adopt such dark side behaviour: customer can also misuse CRM processes by for example taking advantage of service providers in different ways (Frow et al. 2011). Overall, all these points regarding the potential pitfalls highlight the importance of mutual trust; In order to truly create dual value a customer must be able to rely on a company acting and behaving with its best interest in mind. Additionally, a company must be able to trust customers not to take advantage of the relationship. If a high level of trust is not present in these relationships, CRM initiatives will very likely turn against themselves. This trust can be seen as the foundation of not only CRM initiatives, but the entire relationship: as discussed in Section 1, the basis of taking a buyer-seller relationship



towards a strategic nature requires a large level of inter-organisational trust (Zaheer et al. 1998, Ellram 1990).

## 2.5. Theoretical Framework

Different scales describing the elements of CRM have been developed during the past years by many authors (e.g. Sin et al. 2005, Wang & Feng 2012, Iriana & Buttle 2007, Coltman 2007) but as mentioned, this study utilized the scale by Sin et al. (2005) as the base of the conjoint attributes. Sin et al. (2005) state that until their study was published, no scale with a similar level on validity and comprehensibility had been published. In other words, their scale is a natural one to use when beginning to assess CRM from a customer point-of-view. Additionally, they base their definition of CRM on a strategic and holistic viewpoint, which is in line with the definition used in this study. Furthermore, this scale was described as serving as a good base to be used as a diagnostic tool for future, and therefore suits the purpose of utilizing it from customer-centric point-of-view.

The four different elements of the scale (presented in table 1.) served as the base of the attributes and levels utilized in the choice-based conjoint study. The elements of the scale are presented below based on the descriptions of the authors and are supported by discussion in current CRM literature.

### 2.5.1. Key Customer Focus

Key customer focus refers in this case to focusing on providing added value to selected customers through personalization. This can be executed for example in the form of personalized marketing and products, joint new product development as well as building personalized relationships requiring a strong mentality of customer-centricity. On a general level, academia states that CRM activities need to be personalized between different types of customers (Venkatesan et al. 2007 & Ryals & Knox 2001) and that in fact personalization can be seen as one of the most important

areas of CRM (Parvatiyar & Sheth 2001). For instance, the study by Reinartz et al. (2004) shows that customers at different life-cycle stages require different type of CRM activities.

### 2.5.2 CRM Organization

CRM organization refers to the ideology of arranging the structure of the company, its processes, resources and personnel all around customer relationship management. This can be seen as the alternative to the traditional way of organizing the company from an “inside out” point-of-view requiring a holistic customer point-of-view. The importance of seeing CRM as encompassing the entire organization has been highlighted by many in order to ensure achieving expected results (e.g. Chen & Popovich 2003). Moreover, CRM processes have been said to more likely to affect firm performance in a positive way if the organization is aligned in an adequate way in terms of incentives and organizational schemes (Reinartz et al. 2004)

### 2.5.3. Knowledge Management

Knowledge management refers to the way in which knowledge is gathered, shared and applied in business. In more practical terms, this encompasses the way the company gathers information about customers needs and preferences and how it uses the information to improve their service and the relationship. This also encompasses the ways in which information is shared within the company. The importance of these information processes has been highlighted by e.g. Jayachandran et al. (2005) who state that they are vital to consider when implementing effective CRM processes. Nevertheless, the gathering, utilizing and sharing of this knowledge can be seen to require the organisation to have a culture that supports effective knowledge management (Stefanou et al. 2003).

### 2.5.4. Technology-Based CRM

Technology-based CRM refers to the process of gathering, utilizing and applying customer data as well as using IT to improve customer relationships. These can be used for example to provide better customer service, to automatically recommend new products/services or to set up various customer information systems displaying relevant information about the ongoing relationship. As

state in section 2.1, the role of technology in effective CRM has been widely discussed in academia. When utilized properly, it can be seen to positively affect for example customer satisfaction and positively build customer knowledge (Mithas et. al 2005), but this importance should not be over emphasized in holistic CRM (Jayachandran et al. 2005).

Key Customer Focus	CRM Organization	Knowledge Management	Technology-based CRM
<ul style="list-style-type: none"> <li>• Customer-centric marketing</li> <li>• Key customer lifetime value identification</li> <li>• Personalization</li> <li>• Interactive cocreation marketing</li> </ul>	<ul style="list-style-type: none"> <li>• Organizational structure</li> <li>• Organization-wide commitment of resources</li> <li>• Human resources management</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge learning and generation</li> <li>• Knowledge dissemination and sharing</li> <li>• Knowledge responsiveness</li> </ul>	<ul style="list-style-type: none"> <li>• Technology-based CRM</li> </ul>

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*Table 1. CRM scale by Sin et al. (2005) with a description of each element*

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### 3. Methodology

The following section will start by reviewing the choice-based conjoint method which was used in this study. Additionally, a walkthrough of the sampling method and sampling process will be provided in addition to a review of the study design. Finally, a brief outlook will be offered on the way the scale by Sin et al. (2005) was adopted into the context of the Finnish IT markets.

#### 3.1. Methodology

Conjoint analysis can be described as a method that aims to uncover a respondent's structure of preference within a certain set of choices, consisting of various attributes and their levels (Green and Srinivasan 1978). This structure can be further analyzed by reviewing outputs such as part worth values, degrees of fit and relative importances (Rao 2014, 79).

Since the 1970's conjoint analysis has been seen as one of the most prominent ways of measuring trade-offs in terms of multi-attributed products and services (Green & Srinivasan 1990). On a general level, the idea is to present the respondents with two or more profiles consisting of different attributes and attribute levels, and they are asked to choose the profile that they prefer (Toubia et al 2004). In other words, the respondent chooses the profile that maximizes his/her total utility. Since the method was first established, it has gained popularity due to the various fields that it can be applied in (Gustafson et al. 2007, 3). In the case of this study, CRM activities will be seen part of a service offered to a customer. In addition, one of the areas that conjoint studies can be applied in is market segmentation (Gustafson et al. 2007 page 3), which will also be utilized in this case. After conducting the study and obtaining the results of the valuation and preferences of the different attributes, the market will be segmented utilizing cluster analysis, which will be further described in section 4.2.

In terms of the conjoint analysis method, there are different ways through which data can be collected which all provide the researcher with different types of results. These methods include for example full-profile, partial profile and stated preference formats, which need to be assessed with regards to the managerial problem as well as the entity that is presented to the respondent (Houser & Rao 2004). From the prior list, the format of stated preferences is also known as choice-

based conjoint study. In the case of this study, this is the format of conjoint analysis that will be utilized. This format can be seen to offer several advantages: It involves realistic trade-off decisions, the part-worth utilities show impact on choice, and it offers flexibility in terms of attributes, levels and choice contexts (DeSarbo et al. 1995). Based on these reasons, this specific format was evaluated as the one selected for this study.

As opposed to asking respondents how they value different attributes on a more traditional Likert scale, the benefits of choice-based conjoint are apparent. If respondents were presented with a Likert scale of CRM attributes, they would naturally be prone to valuing all attributes to a certain level and thus resulting in misleadingly high scores. As mentioned, choice-based conjoint analysis forces the respondents to make trade-offs between different attributes and their levels. When respondents are forced to make such a trade-off, more in-depth and profound needs become present. In addition, making trade-offs is more realistic when comparing the study to the real world: companies are continuously forced to make complex decisions on where to invest and how to keep customer satisfied by doing the right things to nurture the relationships. This method therefore offers extremely valuable information for companies pondering how to target their limited CRM resources.

The design of the different attributes and levels can be seen as crucial in terms of designing a functioning conjoint study (Rao 2014, 43). Due to this, a significant amount of effort was put into making sure that they function as intended. As the scale by Sin et al. (2005) that was used defines the attributes in a generic manner, the main focus was on molding the wording of the attributes and defining the various levels, in a way that both reflect a certain level of managerial understanding with regards to IT purchasing. The importance of “making the attributes actionable from a managerial point-of-view” has also been highlighted in academia (Rao 2014, 44). As will soon be discussed, this was done by reviewing the model by Sin et al. (2005) with executives from Digia Plc.

The end result of the choice-based conjoint analysis that was utilized in this study was a list of relative importances and a description of part worth utilities. Part worth utilities refer to the utilities of the different attribute levels presented in the study, which can be seen as encompassing a very good predictive ability (Moore 1980). On a more general level, the utilities can be seen to describe the perceived benefit gained from each predefined level of an attribute.

The relative importance of an attribute on the other hand refers to the range of the part-worth utilities that are part of each given attribute (Rao 2014, 14). On a more general level, it can be described as the perceived importance respondents give each attribute when compared amongst each other. The relative importance of the different attributes is an extremely interesting measure and is one that will be utilized in a very central manner in this study in order to gain an understanding with regards to attribute preferences in the selected CRM scale.

### 3.3. Sample

In terms of obtaining a sample, Digia Plc agreed to provide their customer database with contact information for the study. Digia Plc has a large database with an extensive amount of customer contacts within their CRM system, which was naturally utilized in close collaboration with Digia Plc and within the norms and laws set by the Finnish authorities. Customers were designed an introductory email stating the background and aim of the study which included a mention of how the email addresses were obtained and on what basis they were used. If requested, the study group was prepared to send the contacts a link to the privacy policy statement of Digia Plc.

The sample itself was formulated by utilizing a proportional stratified sample of Digia Plc's customer base. This sampling method was decided to be used in order to gain a representative sample of the population, due to the fact that the database had a significant amount of contacts that were very heterogeneous in terms of industries and companies. The basic idea of stratified sampling is to split the sample into non-overlapping subpopulations, then take a sample of each subpopulation and then combining them all into one stratified sample (Kothari p. 16 2004). Naturally, proportional stratified sampling refers to assigning different proportions to these subpopulations, which vary depending on the study.

The customer base that was used as the base of the sampling was defined to consist of all contacts that are linked to companies, which Digia Plc has invoiced within the year 2016. After this, the sampling process was continued by extracting all contacts who had opted out of email contacting or contacting in general. This procedure was the last stage of data preparation before the stratified sampling.

The remaining contacts were then split based on their industry into the different subpopulations that were going to be used in the sampling. For sampling purposes, Digia Plc agreed to provide the weights of how much revenue each industry provided in relation to Digia Plc's total revenue. These weights were used in order to define how large a proportion each subpopulation made up with regards to the total amount of the sample. This was calculated by assuming a sample size of 3000 contacts, and working out the necessary amount of contacts for each subpopulation. After working out the number required from each subpopulation, random sampling was utilized in Microsoft Excel to obtain the various subsamples. These were then combined into the master sample, which represented a proportional stratified sample of Digia Plc's customer base with regards to different customer industries.

As mentioned, the list of contacts were approached by email. The mass sending was executed with Digia Plc's mass marketing tools, and sent under the name of the researcher. Contacts were informed of the background of the study and they were given the contact information of both the researcher and Digia Plc in case of any doubts. After sending the email with the invitation link, the aim was to obtain a 10% answer rate that was seen to represent a statistically large enough population. The study was open for two weeks exactly and contacts were sent a reminder after one week.

### 3.2. Study design

The study itself was designed in the following way. Before the respondents were presented the conjoint random tasks, they were provided with a short introduction stating the purpose and method of the study. In addition, the different attributes were presented in the introduction to further clarify the chosen method. Finally, due to the fact that price was not used as an element in this case, contrary to many other choice-based conjoint studies, respondents were guided to regard each conjoint CRM profile as having the same price. This was done in order to make sure that customers would not discard or accept levels based on a price that they would expect the level of service to have. The study was formulated in such a way, that after the brief introductory guideline, the respondents were presented with selected demographic questions, which were

then utilized to gain a deeper understanding of differences based on e.g. respondent's organizational levels, and the company revenue of the respondent. This was then followed by the main body of the questionnaire which consisted of the choice-based conjoint random tasks that were provided for the customers.

When designing the study, extra effort was put into making the study simple and understandable as well as into make sure that the visual appearance was minimalistic and clear. This was done to ensure that all respondents truly understood what they were doing and that as small a proportion as possible would exit the survey before completing it. Additionally, the visual elements were kept minimalistic in order to avoid leading the respondents in any way towards any specific choice. The final appearance can be seen in Figure 1.

Two weeks prior to the initiation of the actual study, a pilot study was conducted to make sure that the attributes, levels, the introductory guideline, as well as the visual layout was sufficiently clear. The pilot study was sent to 10 respondents who represented different stakeholders involved in the study. Feedback was requested on the instruction, layout, wording as well as the general understandability of the study. This feedback was used to design the final study. The study itself was designed using Sawtooths SSI WEB software.



**Valitse alla olevista kahdesta asiakkuudenhallinnan kokonaisuudesta itsellesi mieleisin strategisen IT-kumppanuuden näkökulmasta**

(1 of 10)

<b>Asiakaskohtaisuus ratkaisuisissa:</b>	Asiakkaalle tarjotaan mahdollisuutta <b>puhtaaseen räätälöintiin</b>	Asiakkaalle tarjotaan mahdollisuutta <b>toimialakohtaisiin konfiguraatioihin osana ratkaisuja</b>
<b>Organisaation asiakaslähtöisyys:</b>	Asiakaslähtöisyys lävistää <b>rakenteen, prosessit, resurssisuunnittelun ja toimintatavat</b>	Asiakaslähtöisyys ilmenee <b>toimintatavoissa</b>
<b>Tietämyksen hallinta:</b>	Tietoa kerätään <b>projekteista ja palveluista</b> , ja sitä käytetään toiminnan kehittämiseen	Tietoa <b>kerätään projekteista ja palveluista</b> , ja sitä käytetään toiminnan kehittämiseen
<b>Teknologia asiakkuudenhallinnassa:</b>	Yrityksellä on järjestelmissään <b>oleelliset tiedot asiakkuuden tilasta</b>	Asiakkaalle tarjotaan järjestelmiin pohjautuva <b>reaaliaikainen ja kaksisuuntainen tilannekuva</b> asiakkuuden tilasta


← 0%  100% →

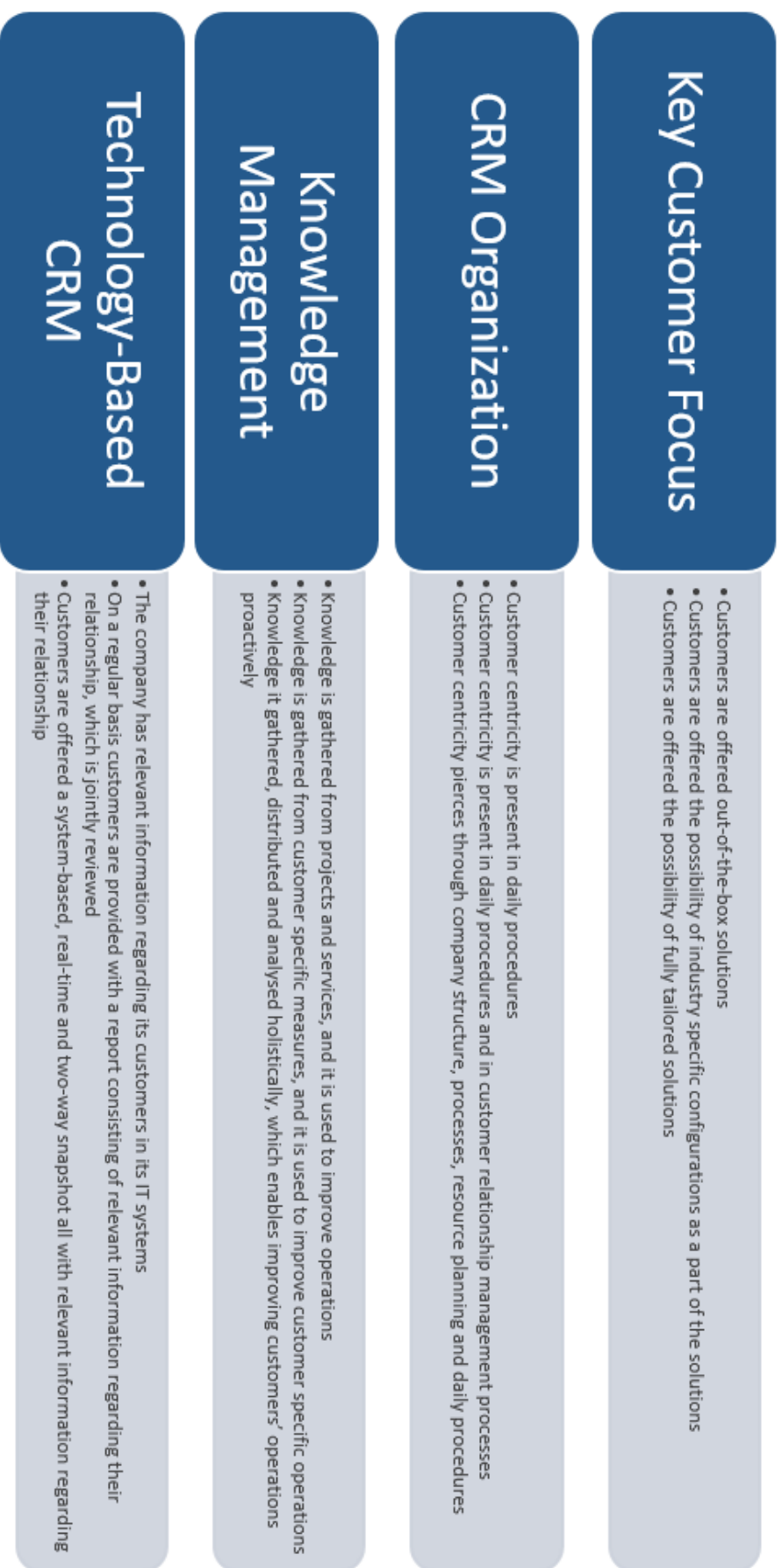
Figure 1. An example of the visual appearance of a random task of the study

### 3.4. Adaptation of the scale

The attributes and levels of this study were designed based on the scale by Sin et al. (2005). Nevertheless, as the model by Sin et al. (2005) was constructed by interviewing business executives, the original wording used to describe the attributes was designed from the point-of-view of an organization implementing CRM instead of a customer being the subject of various CRM activities. When designing the final levels based on the content of each attribute in the model, extra effort was put into making sure that each level was also natural from the point-of-view of a customer being the subject of CRM activities. The four attributes and the related levels utilized in the choice-based conjoint analysis were defined in an afternoon work shop with three executives from Digia Plc in order to make sure that the previously stated needs were met in an adequate manner.

The underlying guideline that was used when defining the levels was that they were realistic, actionable and that they encompass the possibility of a trade-off (Van der Pol & Ryan 1996). In addition, the aim was to define each level of the pre-described attribute in order to offer the respondent the possibility of highlighting as specifically as possible what they value and regard as important. The attributes as well as the levels were also translated into Finnish and molded into the context of a company evaluating IT services for example in terms of relevant jargon.

The attributes and different levels that were defined in the workshop with Digia Plc can be seen in Table 2. As mentioned, the three levels of each attribute presented Table 2. represent potential levels of customer relationship management that an IT supplier could potentially provide its customers. All in all, four attributes each offering three levels offer a possibility of a very large amount of different scenarios. This would understandably be unrealistic to put into a questionnaire, so in order to create a plausible survey, Sawtooth SSI WEB was used to create 10 random tasks for each respondent, each consisting of 2 different profiles.



*Table 2. The final attributes and levels based on the model by Sin et al. (2005)*

## 4. Results

This section will review the obtained results of the conjoint study. To begin with, the importances and utilities will be presented and analysed on an aggregate level. This will be followed by a cluster analysis in order to understand how customers can be grouped based on their preferences. The resulting clusters will be presented and named, which will then be followed by a brief analysis of their different preferences and the implications of these preferences.

### 4.1. Importances and utilities

The following section will describe the results of the study on an aggregate level in terms of the relative importance of each attribute as well as the individual utility of each level. As mentioned, the relative importance describes how important customers regard each attribute as a part of the presented CRM scale. The utilities on the other hand, describe the perceived benefit of each individual level.

Table 3. offers an overview of the results. It starts by presenting each attribute as well as its relative importance. In order to gain a clear understanding of the results, the levels of each attribute as well as the corresponding utilities are presented in the same table. The utilities presented in this section are calculated with Sawtooth softwares Hierarchical Bayes (HB) estimation. The utilities in Table 3. are scaled by utilising zero-centred diffs scaling, which is the default utility scaling method used in Sawtooth SSI web. The final response rate was 6,37%.

Attributes	Importances	Levels	Utilities
Key Customer Focus	38.59 %	Customers are offered out-of-the-box solutions	-16,31
		Customers are offered the possibility of industry specific configurations as a part of the solutions	32,37
		Customers are offered the possibility of fully tailored solutions	-16,06
CRM Organization	17.67 %	Customer-centricity is present in daily procedures	-27,17
		Customer-centricity is present in daily procedures and in customer relationship management processes	10,67
		Customer-centricity pierces through company structure, processes, resource planning and daily procedures	16,49
Knowledge Management	21.75 %	Knowledge is gathered from projects and services, and it is used to improve operations	-23,45
		Knowledge is gathered from customer specific measures, and it is used to improve customer specific operations	-9,70
		Knowledge it gathered, distributed and analysed holistically, which enables improving customers' operations proactively	33,15
Technology-Based CRM	21.99 %	The company has relevant information regarding its customers in its IT systems	-9,66
		On a regular basis customers are provided with a report with information regarding their relationship, which is jointly reviewed	-4,70
		Customers are offered a system-based, real-time and two-way snapshot all with relevant information regarding their relationship	14,36

*Table 3. The relative importances and utilities of the attributes and levels*

As Table 3. presents, the single most important factor affecting preference over CRM models is the first attribute, “Key Customer Focus”. The respondents gave this attribute an importance of 38,59%, which is clearly higher than the following three, which are “Technology-based CRM” (21,99%), “Knowledge Management” (21,75%) and finally “CRM Organization” (17,67%). The second and third closest attributes are so close to one another, that there is no statistically significant difference between the two. The final attribute falls slightly behind the next two, although in a statistically significant manner.

Based on the importance’s it is clear, that as customers are reviewing potential suppliers, the most important factor that affects their CRM preferences is how well the solution satisfies the company and is “just right for us”. This can be seen as intuitive, since the reason customers embark on a joint CRM process is based on the initial decision of investing in some type of a solution. Therefore, it is understandable that customers place a high value on making sure that the reason they have initiated the relationship is on a level that they are satisfied with, and that this level encompasses an adequate amount of personalization. Nevertheless, what is slightly surprising is

the fact that out of the most important attribute, the level that gained the highest utility score (32,37) was the level “Customers are offered the possibility of industry specific configurations as a part of the solutions”, which was initially positioned at the medium level. Then again, the level that was initially positioned at the highest level within this attribute “Customers are offered the possibility of fully tailored solutions”, received more or less the same utility score as the initially positioned lowest level “Customers are offered out-of-the-box solutions”. This is a very interesting finding, as one might think that as price was not a factor considered in this study (this was also explicitly highlighted in the survey), customers would want as much personalization as possible. Nevertheless, based on the results it is clear that customers value most highly industry specific configurations as a part of the solutions. This could be based on the fact that they perceive high levels of personalization as being rigid and time consuming, and that it is not necessary to “re-invent the wheel”. Another reason could be negative experiences of fully personalized solutions. The IT industry is full of horror stories of fully personalized solutions that were extremely expensive, that took years to finish, and that keep falling apart due to their own complexity. Customer clearly trust that companies have a large amount of industry specific best practice knowledge, which they hope that the company would bring forth as a part of their CRM activities. The next attribute “Technology-based CRM” with an importance of 21,99% offers no exceptional surprises. Understandably, customers regard a certain level of technology in CRM as important, but it is seen clearly less important than the most important attribute which was almost twice as important. Regarding this attribute, the initially positioned lowest level gained the lowest utility score (-9,66), the medium level gained the medium score (-4,7) while the highest level gained the highest score (14,36).

The following attribute, “Knowledge Management”, with an importance of 21,75% doesn’t offer any surprises either. Again, this is also regarded as important to a certain extent, but falls behind the most important attribute, which is regarded as almost twice as important. Similarly to the previous attribute, the levels of this attribute are also in line with the initial positions. The initially positioned low level gained the lowest utility score (-9,66), the medium level gained the medium score (-4,7), and the initially position high level the highest score (14,36).

The least important attribute “CRM Organization” with an importance of 17,67% can be seen as a slight surprise, as one might think that customers would place a larger value on customer-

centricity as the guiding principal from an organisational point-of-view. Nevertheless, one possibility is that customers do truly value the idea of customer-centricity, but that they do not care about the organisational aspect as it is. In other words, if customers are happy with a supplier's level of customer-centricity in general, they don't care how the supplier has internally organised its organisation to support this customer-centricity, as long as it works. Of course it is the company's best interest to make its organization support CRM activities due to factors of efficiency. In addition, sooner or later customers will notice if the organization does not support these activities in an effective way. Other than that, the utility levels go as expected. The initially positioned lowest level gained the lowest utility score (-21.17), the medium level gained the medium score (10,67) and the initially highest positioned level gained the highest utility score (16,49).

#### 4.2. Cluster analysis

When analysing conjoint study results, there is a natural need to group the answers in different ways and move above the individual level, but still below the aggregate level results. On a certain level, it is interesting to understand how specific respondents have answered, but the first level that provides truly relevant information is the aggregate level. Nevertheless, as this is a cross industry study targeted at various sized companies and respondents with various roles, the aggregate level results will only reveal so much. In order to further interpret the results and to understand, how different types of respondents can be grouped based on their answers, this study relies on cluster analysis. In the field of marketing research, cluster analysis can be seen as a common tool through which different entities can be grouped in order to set a foundation for future research (Punj & Steward 1983). Additionally, clustering attribute importances in order to create subgroups can be seen as a useful method of analysis also in conjoint analysis (Rao 2014 page 79).

On a deeper level, cluster analysis, which can be split into hierarchical methods and relocation methods, refers to splitting of data into meaningful subgroups without necessarily having prior knowledge about what information these groups will contain or how many groups these will be

split into (Fraley & Raftery 1998). With regards to the relocation methods, K-means clustering can be seen as the most popular method due to it being simple and efficient as well as due to the empirical success it has gained (Jain 2010). K-Means clustering is based on the idea of reducing the within-group sums of squares (Fraley & Raftery 1998). Due to the previously listed advantages of k-means clustering, it was used in segmenting the aggregate level results in this study. The cluster analysis was conducted with IBM's SPSS 23 software, while the output data was further refined with other relevant tools.

As the only attribute that stood out with regards to relative importance was "Key Customer Focus", the aim of the cluster analysis was to discover more subtle preferences between different respondents. The cluster analysis was based on the four individual importance levels of each attribute, which were presented in the Table 3. A one-way MANOVA was used to test the significance of the differences between each attribute importance. In terms of demographics, the company size of the respondents (Table 8.) as well as the organisational level of the respondents (Table 7.), were analysed and presented as a part of each cluster.

Finally, the mean each of each attribute level that gained the highest aggregate level utility score was calculated per cluster. In this analysis, the utility scales were normalized in order to make them comparable to one another by making the part worth vectors equal in Euclidian length. This was done by calculating the Euclidian norm of each row and dividing each part worth by the rows norm. Nevertheless, as can be seen from Table 10., only the means of the highest level utilities from the attributes "Key Customer Focus" and "Knowledge Management" were significantly different at a .05 level.

As a part of the cluster analysis process, two, three, four and five cluster solutions were tested and considered. Due to the sample size, it was evident that splitting the respondents into four clusters or more resulted in too small a clusters. Moreover, when analysing the differences between the two and three cluster results, it was clear the three cluster solution provided clearer and more interpretable results. Based on the prior reasoning as well as MANOVA testing, the final number of clusters in the k-means cluster analysis was selected as three. As can be seen from the one-way MANOVA test in Table 4., there was a statistically significant difference in attribute importances with regards to the different clusters,  $F = 71,990$ ,  $p < .0005$ ; Wilk's  $\Lambda = 0.153$  partial  $\eta^2 = .61$ .



The results of the cluster analysis can be seen in the Table 5. The respondents were split into three clusters based on their preferences, and the final sizes were the following: Cluster 1 N=71, Cluster 2 N=35, Cluster 3 N=85. The following section will review and name each cluster as well as analyse each of them in a more profound way.

**Multivariate Tests<sup>a</sup>**

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>d</sup>	
Intercept	Pillai's Trace	.985	3047.710 <sup>b</sup>	4.000	185.000	.000	.985	12190.841	1.000
	Wilks' Lambda	.015	3047.710 <sup>b</sup>	4.000	185.000	.000	.985	12190.841	1.000
	Hotelling's Trace	65.896	3047.710 <sup>b</sup>	4.000	185.000	.000	.985	12190.841	1.000
	Roy's Largest Root	65.896	3047.710 <sup>b</sup>	4.000	185.000	.000	.985	12190.841	1.000
QCL_1	Pillai's Trace	1.184	67.415	8.000	372.000	.000	.592	539.321	1.000
	Wilks' Lambda	.153	71.990 <sup>b</sup>	8.000	370.000	.000	.609	575.924	1.000
	Hotelling's Trace	3.336	76.726	8.000	368.000	.000	.625	613.812	1.000
	Roy's Largest Root	2.431	113.038 <sup>c</sup>	4.000	186.000	.000	.709	452.151	1.000

a. Design: Intercept + QCL\_1

b. Exact statistic

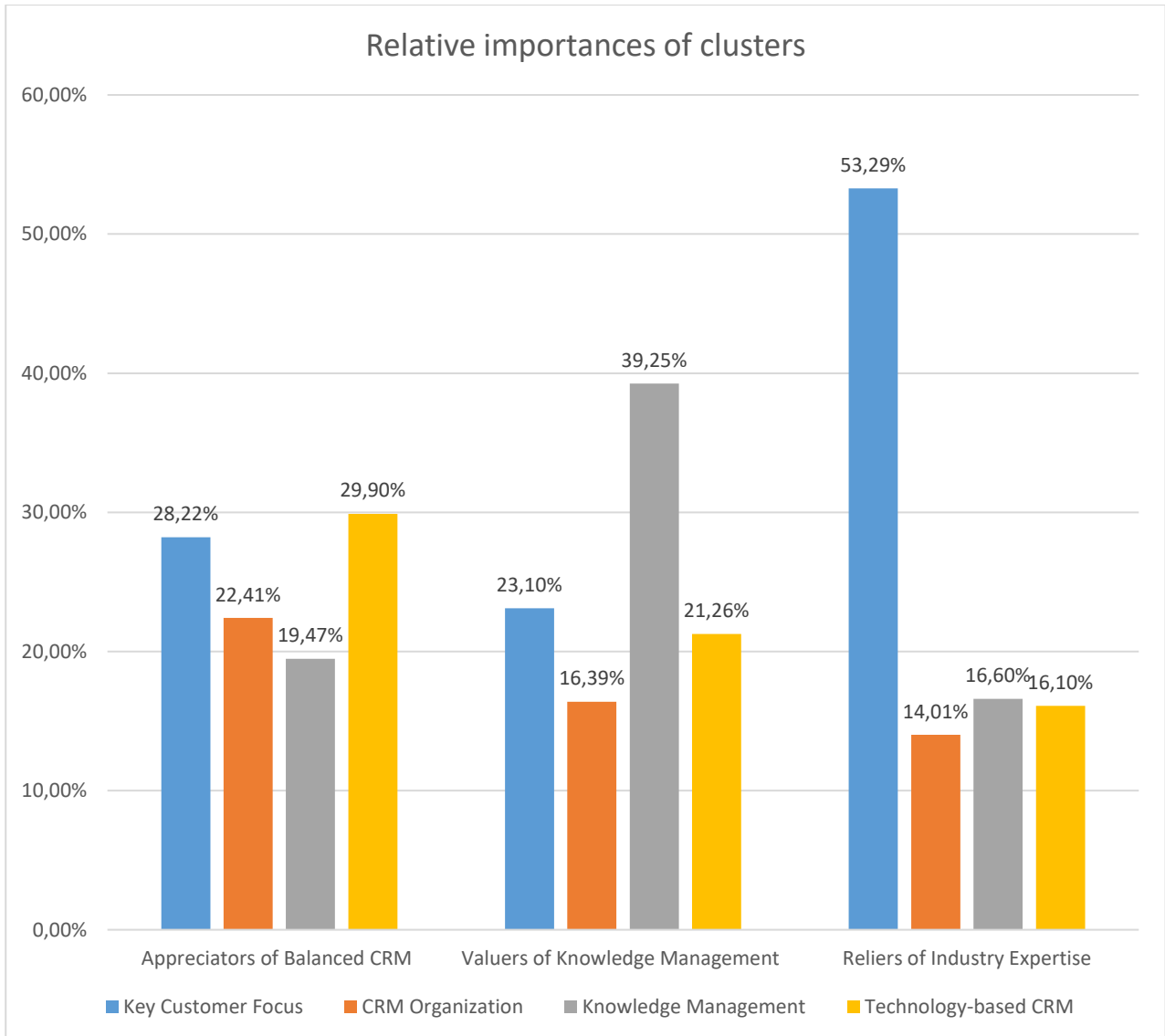
c. The statistic is an upper bound on F that yields a lower bound on the significance level.

d. Computed using alpha = .05

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*Table 4. One way MANOVA measuring statistical significance between clusters*

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*Figure 2. Relative importances of each cluster*

	<b>Appreciators of Balanced CRM</b>	<b>Valuers of Knowledge Management</b>	<b>Reliers of Industry Expertise</b>	<b>Sig.</b>
N=respondents	71	35	85	
Key Customer Focus	28.22%	23.10%	53.29%	.000
CRM Organization	22.41%	16.39%	14.01%	.000
Knowledge Management	19.47%	39.25%	16.60%	.000
Technology-based CRM	29.90%	21.26%	16.10%	.000

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*Table 5. K-means cluster final results*

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#### 4.2.1 Reliers of Industry Expertise

Cluster 3 represents the largest of all the cluster, with an n=85 respondents. This cluster places a very large importance on the attribute “Key Customer Focus”, resulting in a relative importance of 53,29%. This cluster on the other hand does not see the remaining three attributes “Knowledge Management” (16,60%), “Technology-based CRM” (16,10%) and “CRM Organization” (14,01%), as very important. When analysing the mean of the highest level utilities (Table 10.), it is evident that this cluster gains a very large level of utility from industry specific configurations as a part of the solutions. This cluster will be called “Reliers of Industry Expertise”

Respondents within this cluster see “Key Customer Focus” as the single most important attribute in terms of preferences over CRM models, which can be seen to overpower all other attributes in a fairly aggressive manner, and gain a large utility from industry specific configurations. These

companies seek adequately personalized relationships with partners with strong industry expertise and a knowledge of best practice. They are fairly indifferent about other aspects of CRM as long as their partner provides them throughout their joint relationship with new trends and future directions within their industry. In this sense, they “outsource” a certain part of their daily actions by expecting their strategic supplier to tell them where the industry is going in terms of IT and digitalization. With these customers, companies must be careful to constantly bring forth their expertise and passion to understand where the industry is going. If this is neglected and a competitor with these similar traits comes along, the company is in danger of vendor change. In addition to understanding industry trends, the company must naturally have a strong understanding of the core processes of the industry. Merely understanding trends on a superficial level is not adequate in becoming a strategic IT partner for this segment.

The majority of the respondents (47,1%) represent companies that are classified as very high in terms of revenue (Table 8.), while the SME segment (28,2%) and the high segment (24,7%) fall behind. Additionally, the majority of the respondents can be seen as belonging to organisational support functions (Table 7.) with a percentage of 43,5%. Companies with a high level of revenue are understandably strongly inclined towards valuing best practices in industry specific solutions, as the adoption and implementation of different IT initiatives can be seen as very costly. Companies with high levels of revenue are also often large and structurally complex in other ways, so having a partner that provides solutions that are adequately personalized and truly fit into the customer’s industry can save a large amount of money, time and effort. The high number of respondents in this cluster belonging to organisational support functions can be seen as representing both people participating in and people planning the implementation of the solutions as in the case of IT personnel, business development personnel and finance among other departments. In order to ensure a good implementation, these respondents place a high value on ready solutions that have already been implemented in other companies in their own industries.

#### 4.2.2. Appreciators of Balanced CRM

Cluster 1 represents the second largest cluster of the sample with an n=71 respondents. On a general level, these respondents perceive the different attributes in a fairly equal manner, although slightly emphasizing the importance of the attributes “Technology-based CRM” (29,9%) and “Key Customer Focus” (28,22%). The remaining two attributes “CRM Organization” (22,41%) and “Knowledge Management” (19,47%) are regarded as less important. When observing the mean of the highest level utilities, this cluster can again be seen as fairly even without strong inclinations or disinclinations of any kind. This cluster will be called “Appreciators of Balanced CRM”

The preferences are not as clear with regards to this segment. All four attributes are between 19,5%-29,9% in terms of importances which implies that this cluster puts a larger value on a holistic model. This cluster seeks IT suppliers that are able to provide adequate levels of CRM services in all four areas and expects a company to maintain and develop all of the attributes to make sure that they are offered as good a CRM service as possible. Nevertheless, compared to other segments, this one is the only one that regards “Technology-based CRM” as the most important attribute. Thus it is evident, that these customers put a large value on having modern solutions to monitor their partnership, which might be a pre-requisite for trusting the company as a service provider; a company that nurtures and maintains their customer relationships with modern and digital tools must be competent also with the modern and digital IT solutions they provide. This cluster also values the importance of “Key Customer Focus” and gains a high utility from industry specific configurations as a part of the solutions, although neither is as strong as in the case of the cluster “Reliers of Industry Expertise” As a part of joint relationships, also customer of this cluster expect a certain level of industry expertise from IT suppliers.

In terms of company size, this cluster is far more equal than the others. Out of the 71 respondents 38% were from companies with a very high level of revenue, 31% from a high level and 31% from an SME level. Also different organisational levels were the most equally represented within this cluster (e.g. Support functions 29,6%, Top Management 25,4%, Operative management 23,9%).

Based on these results it is evident, that there is a fairly equal level of respondents from all organisational levels and company sizes that value a functioning and balanced CRM model.

#### 4.2.3. Valuers of Knowledge Management

Cluster 2 represents the smallest cluster with an n=35 respondents. This cluster clearly regards the attribute “Knowledge Management” (39,25%) as the most important, followed by the attributes “Key Customer Focus” (23,10%) and “Technology-based CRM (21,26%). The attribute “CRM Organization” (16,39%) is clearly regarded as the least important within this cluster. In terms of mean level utilities (Table 10.), this cluster gains a very large level of utility from holistic knowledge management, which enables companies to proactively develop customers’ businesses. This cluster will be called “Valuers of Knowledge Management”.

Even though this cluster is small, it calls for an adequate level of “Knowledge Management” in a loud manner. For these respondents, knowledge and information must be managed and passed on as a part of CRM in an effective way in order for them to be satisfied with the relationship. They are willing to sacrifice other attributes of CRM, if a supplier can guarantee them a holistic knowledge management process which enables the supplier to proactively develop their business. In order to satisfy these customers, it is vital to make sure that needs, thoughts and requests are heard and answered systematically. They also highly value a company that proactively gives them suggestions based on these needs, thoughts and requests. This cluster sees a supplier having functioning processes of knowledge management as a pre-requisite for CRM relationships. On the other hand, they place very little value on a company having a customer-centric organization in other ways. This cluster most likely values the outcomes of a customer-centric organisations, which can in fact be seen as e.g. a high level of knowledge management, but is indifferent in terms of how the organisation of the supplier functions internally (for example how much effort they put into a single service request) as long as everything works according to their needs and schedules.

With regards to company size in terms of revenue, this cluster is the most uneven. 68,6% of the respondents belong to companies with a very high level of revenue, while 20% belong to companies with a high level, and 11,4% belong to companies in the SME segment. In terms of organisational levels, the levels that stand out most are the two highest “Organisational support

functions” (42,9%) and “Operative management” (31,4%) as well as the very low level of “Top Management” (5,7%).

The proportion of companies with a very high level of revenue is clearly the largest when compared to other segments. This is no surprise, as companies with a very high level of revenue tend to be large also in other terms as previously mentioned. Complex organisational structures require an excellent level of communications between the customer and the supplier especially if the company supplies different solutions to various parts of the organisation. In terms of organisational levels, support functions are often the daily users of the provided solutions (e.g. IT, marketing). It is natural for them to expect that all issues, hopes, and thoughts are heard and actively answered in order for daily activities to run as smoothly as possible. Additionally, operational managers are the ones that are responsible for making sure that everything works on a daily level.

	<b>Appreciators of Balanced CRM</b>	<b>Valuers of Knowledge Management</b>	<b>Reliers of Industry Expertise</b>	<b>Total</b>
<b>Top Management</b>	25.4%	5.7%	10.6%	15.2%
<b>Operative Management</b>	23.9%	31.4%	23.5%	25.1%
<b>Operative business</b>	12.7%	14.3%	12.9%	13.1%
<b>Operative support functions</b>	29.6%	42.9%	43.5%	38.2%
<b>Other</b>	8.5%	5.7%	9.4%	8.4%
<b>Total</b>	100.0%	100.0%	100.0%	100.0%

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*Table 7. The amount of different organisational levels within each cluster*

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	<b>Appreciators of Balanced CRM</b>	<b>Valuers of Knowledge Management</b>	<b>Reliers of Industry Expertise</b>	<b>Total</b>
<b>SME</b>	31.0%	11.4%	28.2%	26.2%
<b>HIGH</b>	31.0%	20.0%	24.7%	26.2%
<b>VHIGH</b>	38.0%	68.6%	47.1%	47.6%
<b>Total</b>	100.0%	100.0%	100.0%	100.0%

*Revenue levels explained:*

*SME = Small & medium level enterprises < 49 999 999 €*

*HIGH = High revenue enterprises 50 000 000 – 499 999 999 €*

*VHIGH = Very high revenue enterprises > 500 000 000 €*

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*Table 8. The amount of different sized companies in terms of revenue within each cluster*

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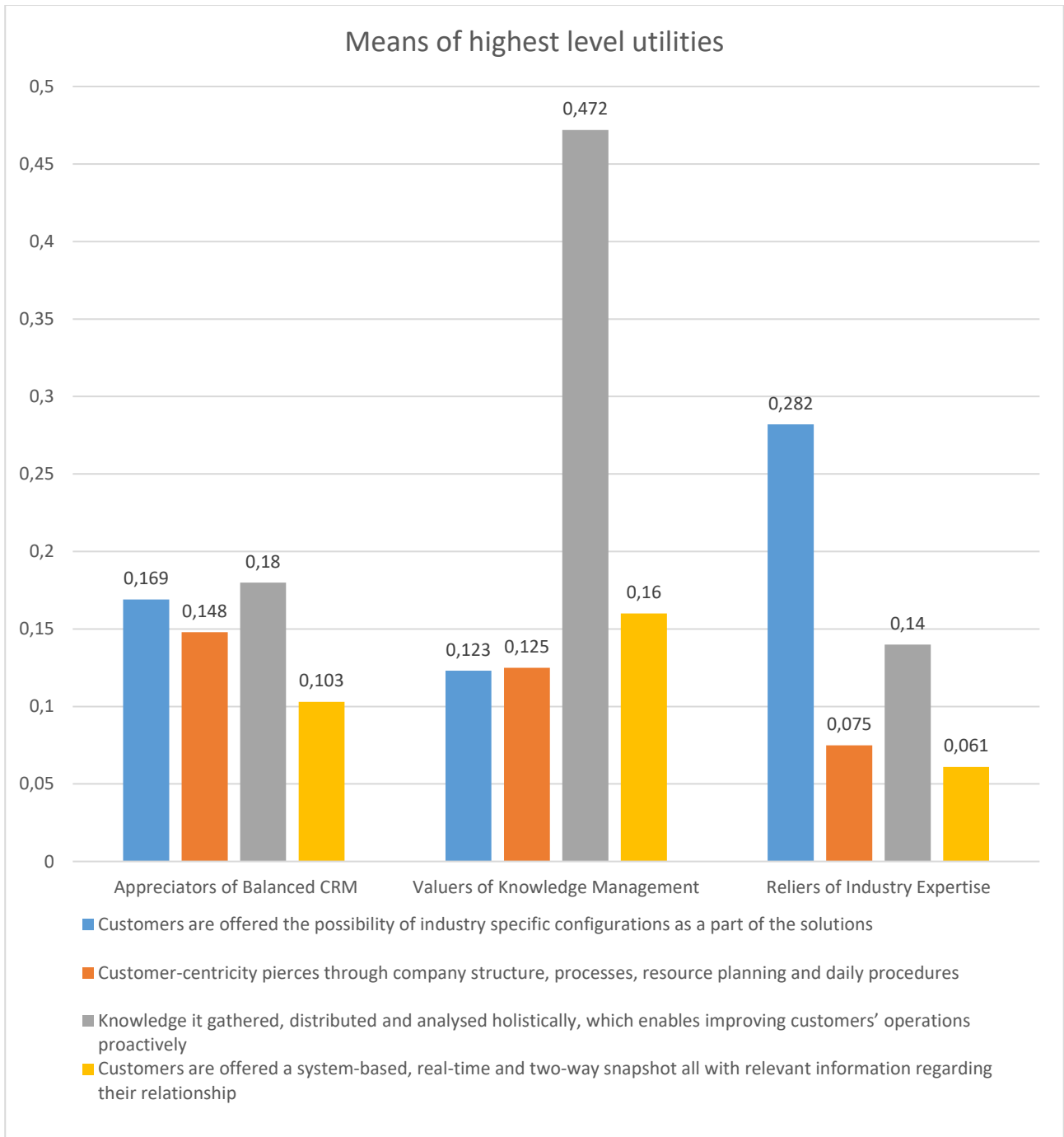


Figure 3. Visualization of the means of the aggregate level highest utility scores per cluster

	<b>Appreciators of Balanced CRM</b>	<b>Valuers of Knowledge Management</b>	<b>Reliers of Industry Expertise</b>	<b>Row sig</b>
<b>Customers are offered the possibility of industry specific configurations as a part of the solutions</b>	0,169	0,123	0,282	0,016
<b>Customer-centricity pierces through company structure, processes, resource planning and daily procedures</b>	0,148	0,125	0,075	0,082
<b>Knowledge it gathered, distributed and analysed holistically, which enables improving customers' operations proactively</b>	0,18	0,472	0,14	0
<b>Customers are offered a system-based, real-time and two-way snapshot all with relevant information regarding their relationship</b>	0,103	0,16	0,061	0,25

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*Table 10. Means of the aggregate level highest utility scores per cluster as well as the significance of each row*

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## 5. Discussion

The aim of this study was to understand what customers value in terms of elements of CRM, and how these customer can be based grouped on their answers. More specifically, this study aimed to understand the relative importances of the different elements of CRM as presented by Sin et al. (2005) as well as the utility levels of each element. Apart from the study by Kim et al. (2012), very little concern has been given to the customer-centric view of CRM. Due to the lack of customer-centric studies, this study offers a significant contribution to existing literature in terms of how customers see CRM as an entity, as well as in terms of how different elements of CRM are positioned with regards to their relative importances and their perceived utilities. Based on the findings presented below it is evident that encompassing a customer-centric view into CRM is extremely important if CRM is to be assessed in a holistic manner.

This study is based on the scale by Sin et al. (2005), although it is utilized in a different context compared to the original study. The aim of this study is to see how customers themselves see the different predefined elements as opposed to the original study which was formulated based on companies executing CRM. In addition, this study adopts the previously mentioned scale into a new cultural and industry specific context. Based on the findings, it is evident that the scale suits customer-centric studies in good manner. Additionally, the results gained from this study provide a very important complementary view to the original scale which could not be gained in any other manner.

### 5.1. The importance of a holistic approach to CRM

Based on this study, it is evident that customers value a holistic approach to CRM. Even though the attribute “Key Customer Focus” was preferred above others, all attributes gained at least a moderate level of importance. The relative importances of the attributes were positioned between 17,67% and 38,59%, which further supports the discussion in academia that CRM has to be seen in a strategic and holistic manner (e.g. Chen & Popovich 2003, Payne & Frow 2005, Ryals &

Knox 2001). Nevertheless, as discussed in section 2.1, depending on the study and the field the definition of CRM can differ significantly in terms of the importance of technology and the perceived level of strategic importance (Payne & Frow 2005). Based on this study, it is nevertheless clear that customers themselves value all elements of CRM, and therefore it is evident that CRM needs to be treated in an increasingly strategic and holistic way.

Another interesting finding with regards to the discussion of the definition of CRM is the previously discussed role of technology. As discussed, a large amount of discussion has touched on the role of technology in CRM (Ryals & Knox 2001). This study clearly shows, that customers do not see technology as the driver of CRM, but position its importance in the same area as the attributes “Knowledge Management” and “CRM organisation”. This finding supports the discussion that states, that technology should not be overemphasized when discussing CRM (Jayachandran et al. 2005). The fact that CRM is mostly studied from the point-of-view of a company executing CRM activities can easily lead to overemphasizing technology. Companies are prone to get excited about new technology and while doing so often forget the fact that customers gain nothing from technology as it is, rather only from the results that it facilitates. This is a clear example in which a customer-centric view brings an extremely important point-of-view to the discussion.

## 5.2. There relevance of Key Customer Focus and Industry Specificness

One of the key findings of the study is related to the importance of the attribute “Key Customer Focus” in the study. In terms of this study, customers see that the level of personalization as a part of the solutions is the most important element of CRM. This generally supports the consensus in academia, that CRM needs to be personalized according to different customer segments (e.g. Venkatesan et al. 2007 & Ryals & Knox 2001), although in this study the level of personalization was only assessed as part of one of the four attributes as opposed to CRM as an entity. Nevertheless, customers clearly do not want to be treated in a generic way, but are expect an adequate level of personalization with regards to the solutions they are offered as a part of CRM. On a fundamental level, the reason that companies engage in CRM activities in the first place is

due to the fact that they exchange some sort of product or service. As this can be seen as the base of the relationship, it is understandable that companies place a large importance on the product or service suiting their needs in an adequate way.

Moreover, there has been a large amount of discussion in academia with regards to what level and what kind of personalization in terms of CRM is adequate (e.g. Homburg et al. 2008, Reinartz et al. 2004, Ryals & Knox 2001). When observing the perceived utilities of the study, it is evident that this adequate level of personalization in terms of the solutions can be seen as offering customers industry specific configurations, as the highest level of utility within the attribute “Key Customer Focus” was gained from the level “Customers are offered industry specific configurations as part of the solutions”. This study supports the finding of Kannan & Tan (2002) who show that industry specific knowledge ranks high when customers evaluate future suppliers. Based on this finding, it is evident that customers place a large value on industry specific knowledge also from a CRM point-of-view.

Another very interesting finding in this study relates to the other utilities of the previously discussed attribute “Key customer Focus”. The highest utility score was gained from the level “Customers are offered industry specific configurations as part of the solutions” while the initially positioned highest level within this attribute “Customers are offered the possibility of fully tailored solutions” gained more or less the same utility score as the initially positioned lowest level “Customers are offered out-of-the-box solutions”. This indicates that even though price is not a factor in the study, customers would not choose as personalized solutions as possible but prefer to rely on industry specific configurations. This is most likely due to the fact that customers see fully personalized solutions as time consuming and because they see themselves benefiting from industry specific best practices. Similar findings have been done in other fields, although not in a CRM context. For example, the study by Appleyard (2003) demonstrates that buyers in the semiconductor industry can be seen to prefer industry specific configurations rather than fully customized ones due to the fact that these are more likely to lead to knowledge accumulation. This finding implies, that the importance of industry specific configurations over full customization can be generalized into other contexts and industries.

### 5.3. Organizational CRM seen as least important

Another finding of this study shows that customers place the least relative importance on the attribute “CRM organization”. This can be seen as slightly surprising, as the importance of realigning organizational aspects in a manner that supports CRM has been discussed in academia by many (e.g. Boulding et al. 2006, Reinartz et al 2004), although these studies have been conducted from a company perspective instead of a customer perspective. Due to this clear contrast within the field of CRM, this finding demonstrates the importance of gaining a customer point-of-view in addition to the traditional company point-of-view.

From an organizational perspective, it is evident that the organization needs to be realigned in a customer-centric manner if a company wants to have functioning CRM processes. Cross organizational processes must be thought out, incentives need to be redesigned and the organisational structure must be adjusted to allow effective CRM. Nevertheless, as this study shows customers can be seen to value the outcome of these realignments instead of the realignments themselves. Although this is a clear contrast to the existing CRM literature, the discussed importance of the finding has been identified on a more general level in academia for example by Deshpandé et al. (1993) who state, that when analysing a company’s business performance, the way customers see a company’s level of customer-centricity is more important than the way the company sees its own customer-centricity.

With regards to CRM literature and studies, this is an extremely relevant finding. As mentioned, it provides a solid example of an element of CRM, whose importance drastically differs when comparing the previously discussed two points-of-view and it also brings an entirely new perspective into one of the most discussed CRM elements. Furthermore, this finding support the discussion by Kim et al. (2012) who explicitly highlight the importance of bringing a customer-centric view to CRM studies on in order to understand how customers and companies values differ in terms of different elements.

#### 5.4. Clusters in line with previous theory

In addition to offering a significant contribution to CRM literature in terms of offering a customer-centric view in a general level, this study also contributes by analysing the ways in which these customers can be grouped. As discussed in section 4.2, the k-means cluster analysis was conducted based on three clusters. The results show that different types of customers have different types of preferences in each of the three different clusters. On a general level, this supports the discussion by (Boulding et al. 2005) who state that the heterogeneity of customer behaviour can be seen to result in different types of customers requiring different types of CRM activities.

Nevertheless, even though there are clear differences between the clusters, all of them place at least a moderate value on all of the described elements. This further confirms the need to see CRM in a strategic and holistic manner, as discussed by e.g. Chen & Popovich (2003), Payne & Frow (2005), Ryals & Knox (2001). In other words, customers regardless of the cluster they belong to see CRM as an entity that consists of various attributes, even if they assign slightly different levels of importances to them. An interesting finding is also the fact that the importance of technology does not clearly stand out in any of the clusters. This further supports the discussion in academia, that the importance of technology in CRM should not be overemphasized (Jayachandran et al. 2005). Out of the three clusters “Reliers of Industry Expertise” and “Appreciators of Balanced CRM” are formed each around one of the main findings of the aggregate level results, while the last cluster “Valuers of Knowledge Management” brings a new perspective to the aggregate level findings.

The cluster “Reliers of Industry Expertise” follows more or less the aggregate level results by emphasizing the importance of “Key Customer Focus” clearly above the other attributes and gaining the highest utility score from industry specific configurations as a part of the solutions. This cluster represents mostly companies with a very large level of revenue as well as respondents in organizational support functions. As discussed in the aggregate level results, this cluster supports previous studies which highlight the importance of industry specific knowledge (Kannan & Tan 2002) and studies that highlight the importance of industry specific configurations over fully customized solutions. (Appleyard 2003). This study contributes to existing literature by further

defining the demographic structure of customers who put a large value on the importance of industry specific expertise from a CRM perspective.

In addition to the prior cluster, the cluster “Appreciators of Balanced CRM” is formed around one of the main findings of the aggregated level results. This group represents respondents who value all attributes more or less equally and so highlighting the holistic nature of CRM. This cluster supports previous studies which emphasize the importance of strategic and holistic CRM (Chen & Popovich 2003, Payne & Frow 2005, Ryals & Knox 2001) by giving more or less equal importance to all attributes. This cluster includes respondents from across all organizational levels as well as revenue related company sizes. Due to the diverse demographic of the cluster, this cluster further supports prior studies on the importance of holistic CRM by proving that appreciators of balanced CRM are present in all organizational levels and in all company sizes.

The final cluster “Valuers of Knowledge Management” is the one that offers an alternate view point to the aggregate level results. These respondents represent the smallest cluster but they put a large emphasis on the attribute “Knowledge management”. The importance of managing customer knowledge and the effect it has on competitive advantage has been acknowledged from a marketing perspective in previous studies (Campbell 2003). In addition, effective customer knowledge management has been seen to create value for the company, the shareholders as well as its customers (Gibbert et al. 2002). The results of this study imply that the importance of knowledge management is also present in CRM, and especially in companies with a very large level of revenue as well as with respondents in operative management and support functions.



## 6. Managerial implications

As opposed to the previous section discussing the theoretical implications, this section will present a brief overview of the managerial implications of the study. It will start by reviewing the ways in which this study sets a foundation for customer-centric CRM, and continues by going through the meaning of the different customer segments from a managerial point-of-view.

### 6.1. Setting a base for customer-centric CRM

When observing the importances and utilities of the study on an aggregate level, it is evident that the single most important factor affecting preference over CRM models is the attribute “Key Customer Focus”. Slightly surprisingly, the highest utility gained from the level “Customers are offered the possibility of industry specific configurations as a part of the solutions” implies that industry specific expertise has a very significant effect on the way customers perceive CRM models. This is a clear message to companies developing CRM initiatives that can be seen to have implications throughout the organisation.

Based on the results, it is evident that companies must make sure their offering and services encompass a strong industry orientation and that they offer their customers industry specific configurations. This finding implies that customers do not want a passive IT supplier, but rather one that understands their industry, their business and their everyday problems. Customers also expect that a strategic IT supplier keeps up with IT related industry trends and actively keeps its service and offering up to date. As mentioned, customers expect reactivity and even expect suppliers to know their IT and digitalization related needs better than they themselves.

Companies seeking to become such strategic IT suppliers need to adjust their entire organisation accordingly. This not only effects product and service development, but also areas such as industry specific consultation and pre-sales capabilities, which further help create dual value through a deeper understanding of for example the core processes of the industry. Sales personnel and account managers need to bring forth this industry specific expertise and adequately highlight the benefits of adopting these best practices. When presenting new products and services to

customers, the importance of industry specific best practices need to be highlighted and the benefits brought forth.

The knowledge of this specific customer need can also be utilized in marketing and communications. Various target groups should be approached with industry specific messages that bring forth the company's current expertise and capabilities. In everyday interaction between the supplier and customer, this can be brought forth by giving insight as to where the industry is heading in terms of IT and digitalisation. If the suppliers offering, services and marketing communication are not up to date, it offers competitors an easy possibility to grab business opportunities.

In terms of the other attributes, it is clear that they fall behind "Key Customer Focus" in relative importance. Nevertheless, it is evident that customers value all remaining CRM attributes, "CRM Organization", "Knowledge Management" and "Technology-based CRM" to a certain extent. In other words, customer see importance in all attributes and this importance can be seen to be at a fairly equal level within the remaining three attributes. This implies, that companies should remember to treat CRM in an adequately holistic manner. When designing concrete CRM models for different customer segments, all elements need to be taken into account and implemented in order for CRM to be as effective as possible. For managers, this implies that there are no quick wins, as all elements need to be carefully thought out as a part of the process.

Moreover, this implies that technology should not be given too large a role in CRM. Many companies still see CRM as a synonym for CRM systems, which is a misconception that must be fixed. As it is evident, customer do not see CRM as a technological system, but as a holistic way of providing mutual value. Instead of starting the design of CRM models by evaluating different technological options, companies should start by defining their goals based on mutually gained value. Only after these are defined should the supportive role of technology be assessed. In other words, companies need to understand the facilitating role of technology and focus on making it simply one part of an otherwise holistic CRM model.

The finding regarding the low importance of the attribute "CRM Organization" further emphasizes the message to managers that customers are not interested in the presented attributes themselves, but in the value that these attributes potentially provide them with. This is an important factor to remember in terms of CRM in general. For a company this means that the

importance of this attribute needs to be evaluated based on how the customer sees the end results instead of how the organisation is arranged internally. As an example, if the organization is arranged from a CRM perspective but a customer service request is lost due to other reasons, customer will naturally not see any value of the organizational alignment itself.

## 6.2. Gaining further understanding from different preferences

In addition to the aggregate level results, also the cluster analysis offers a significant amount of managerial implications. The cluster analysis offered three distinct clusters 1) Reliers of Industry Expertise 2) Appreciators of Balanced CRM and 3) Valuers of Knowledge Management, which all encompass certain differences in terms of relative importances when compared to one another. Although all clusters have their preferences in terms of attribute importance, none of the three differ drastically from the general level results: all clusters give at least moderate importance to all of the attributes regardless of their individual preferences.

The first cluster, “Reliers of Industry Expertise”, represents respondents who place a very large importance on the attribute “Key Customer Focus” and gain a high utility from industry specific configurations as a part of the solutions. The second cluster, “Appreciators of Balanced CRM”, on the other hand can be seen as respondents who highly value a balanced model of CRM, with slight inclinations towards the attributes “Technology-based CRM” and “Key Customer Focus”. The third cluster, “Valuers of Knowledge Management”, represents respondents, who strongly highlight the importance of the attribute “Knowledge Management” over all other attributes.

Regardless of the differences in preferences between the individual attributes, it is evident that the results show a certain level of similarity. Based on the cluster analysis, it is clear that all three clusters regard “Key Customer Focus” as the most important or second most important attribute. The only larger deviation from the general level results is present in the cluster “Valuers of Knowledge Management” and in their very strong calling for the attribute “Knowledge Management” but on the other hand, this cluster represents a small segment of the total population. Therefore, it is evident that although all customers cannot be fully satisfied with the

same type of CRM activities, the aggregate level results portray customer preferences and relative importances in a fairly adequate way.

Based on the obtained results, managers can begin to decide how to segment their customers in terms of CRM activities as well as how to devise different concrete CRM models for different customer segments. As mentioned, this study was not focused on providing different types of CRM models for different types of segments based on the obtained results, rather it aims to build a base for understanding what customers value in terms of CRM activities and how these can be seen to differ. Nevertheless, now that managers have a fundamental understanding on what their customers truly value, it will be much easier for companies to decide 1) how to segment their customer base in terms of CRM activities 2) what activities should be at the heart of these CRM segment specific CRM models and 3) how to prioritize these resources and capabilities. Section 2.2. offers a theoretical overview on what academia has to say with regards to how customer can be segmented from a CRM point-of-view and on what basis prioritization of CRM resources should be done.

## 7. Limitations and Future Research

As is the case in similar academic studies, also this one has certain limitations that need to be noted in terms of the study itself as well as the chosen method. To begin with, the study was conducted based on a preselected model by Sin et al. (2005) which was built in a different geographical and cultural context, even though it was stated as being high on validity and reliability. As Sin et al. (2005) themselves state, further assessing the model across different countries and industries would be useful to further improve the comprehensiveness of the model.

In addition, although this study represents a good sample, it would be interesting to study the generalizability of these results on a more general level than solely from the perspective of an IT supplier. Additionally, gaining an understanding of how these results would compare to results obtained in B2C markets would be of interest in terms of future research. Another possible direction would be to replicate this study in other countries and cultural contexts in order to see how these results are positioned with regards to the ones obtained in this study.

Additionally, in order to gain a deeper insight into the valuation of CRM and its different elements, future research could be done by singling out one of the four attributes to uncover deeper customer thoughts and preferences. Additionally, qualitative study could be utilized to uncover motivations and reasons behind choices and preferences. As the aim of this study was to uncover customer preferences, another natural direction for future studies would be to assess how these preferences should be translated into concrete CRM models for different segments, how these segments should be defined and how they should be prioritized.

On a more concrete level, an interesting area of future studies would be to analyse the importance of personalization of CRM as an entity from a customer point-of-view as opposed to only with regards to one of the elements. In addition, further studies could be conducted based on the various differences between the importances assigned by customers and companies. One example of this would be to go deeper into the reasons why customers do not see organizational realignment as important as companies in terms of CRM.

With regards to the method, a choice-based conjoint study offers a fairly deep analysis of importances and utilities. Nevertheless, it can always be argued that the attributes and attributes levels do not correctly portray the different facets and levels of CRM. In addition, the risk of subtle changes in the way attributes and their levels are understood is always present when translating the model into industry specific jargon and another language. Additionally, choice-based conjoint studies can possibly offer unrealistic trade-offs due to the logic behind the method. Finally, the complexity of the attribute levels combined with the average length of conjoint studies can serve as a risk in the case of respondents losing focus towards the end of the study and answering on a more random basis.

All in all, this study offers an excellent standing point for future research in the field of customer relationship management as well as in similar choice-based conjoint studies. Due to the fact that the field of CRM has a clear lack of studies conducted from a customer-centric view, this study both builds a foundation for knowledge as well as sets solid base for future studies.

## 8. Conclusion

As mentioned, the aim of this study was to gain a better understanding in terms of what different elements of customer relationship management respondents value in an IT supplier and how these respondents can be grouped based on their preferences. The study was conducted in cooperation with Digia Plc, who provided their contact base for the study. A choice-based conjoint study was conducted on a proportional stratified sample of this contact base, aiming to uncover the relative importances and utilities based on the scale by Sin et al (2006) depicting the various elements of CRM. To begin with, the results were presented and analyzed on an aggregate level. After this, the respondents were segmented through a k-means cluster analysis after which they were named, analyzed and interpreted.

The research gap addressed in this study was the clear gap in CRM literature regarding a customer-centric view of CRM as an entity. A large amount of studies have been conducted in the field of CRM (e.g. Reinartz et. al 2004, Mithas et al. 2005 , Boulding et al. 2005), and there are many models available depicting CRM as a comprehensive framework (Payne & Frow 2005, Sin et al. 2005), but there is a clear lack of studies on how customers themselves perceive different elements of CRM and how they could possibly be grouped based on their answers (Kim et al. 2012). This study made a significant contribution to fill this gap and provided an extremely valuable complementary view to existing CRM literature.

When observing the results of the study, there a large number of interesting findings. It is evident that respondents value “Key Customer Focus” as the most important attribute while gaining highest utility from industry specific configurations. The rest of the attributes are valued on a more or less equal level. These results are in line with previous customer-centric studies in other fields. In addition, this study shows that CRM is seen in a holistic way by customers, which supports the discussion in academia regarding the importance of balanced and holistic CRM. Finally, the importance of the attribute “CRM Organization” was seen as the lowest out of the studied attributes. This was not in line with previous CRM studies, but on the other hand proves the importance of a customer-centric view in the fields of CRM. In terms of the cluster analysis

calculated based on relative importances, there are three distinct clusters which each have their own preferences based on the different attributes. Regardless of the subtle differences, the results of each cluster encompass a certain level of similarity when compared to aggregate level results and generally support previous findings in the field of CRM.

Based on the results of this study, companies in the IT industry can gain an understanding on what to emphasize in terms of their CRM activities, how to prioritize and target their limited resources, and above all how to maximize dual value creation through functioning customer relationship management processes.

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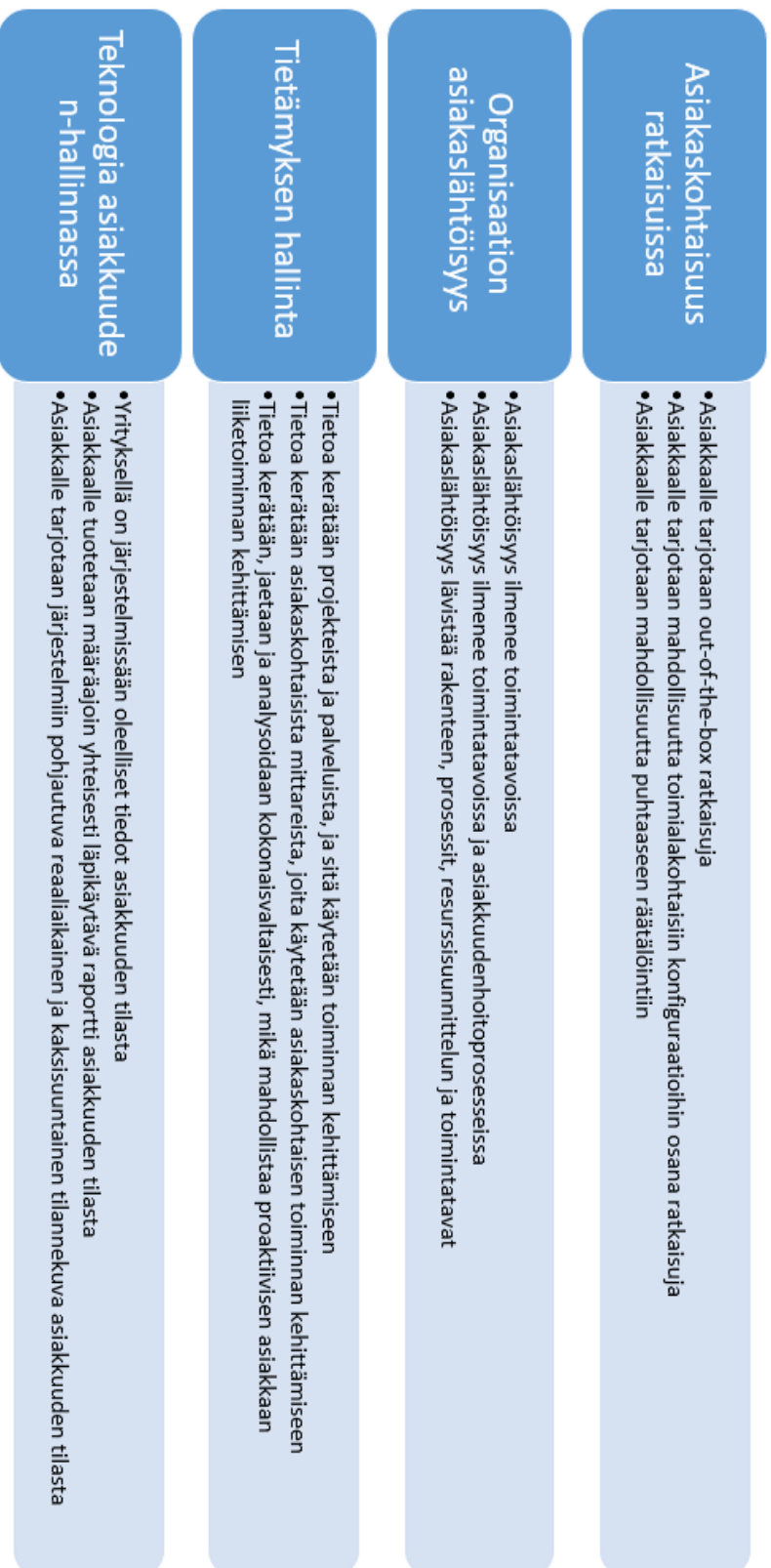


Figure 4. Original wording in Finnish for attributes and levels