

Social CRM as supporting process for innovation

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PREFACE & ACKNOWLEDGEMENTS

Since starting as a developer almost 10 years ago my role changed. From software developer, I became a team lead, and from team lead I became a manager. Next to that, also the products, technology and ways of delivering service to our customer changed. The last couple years this was centred around CRM. Since we started focusing on CRM at BusinessBase, my employer, our knowledge about CRM grew, from giving attention to technology and the application we changed to advise on processes. But when I started my master at the Rotterdam School of Management I also began to wonder how CRM fits within everything we learn about innovation and business strategy. How does it support business strategy? Not only for BusinessBase, but also for our customers. Because my interest is mainly with innovation (I guess that has something to do with my software development background) my thesis subject became Social CRM and the influence on innovation. This thesis is the result of the research I did at BusinessBase and six of our customers.

This research could, besides the organizations that were part of it, not have been performed without the guidance from Raymond van Wijk, my coach. Although my scheduled half year became a couple of months more, he guided and helped with my research until the end. Just by being critical and pointing me in the right direction whenever that was needed. I would also like to thank my co-reader, Gerrit van Bruggen, for the positive criticism and the trouble he has taken to review my work. Their guidance has ensured that I was forced to stay critical on my own work and to improve the quality.

Finally, I would also like to thank everyone in my surroundings, my wife, family, friends and colleagues. I spent a lot of time studying and gave less attention to them. The last two years went by very fast. Although I am very happy this is over, it was a useful period. By looking at strategy, innovation processes and organizations at a different level and from another perspective, but also by cooperating with students from different companies in different roles and branches, gave me the possibility to grow and learn.

Timo Bax

SUMMARY

In the last decade, the environment for organizations has become more dynamics then before. To compete and survive, organizations needs to gain an advantage. Not only by developing new products and services, but also need to continuously improve existing products and service. Both exploratory and exploitative innovation is needed to survive. When innovating, customers can both be innovator and information source. To leverage those roles strong relationship between organization and customer are needed. Social CRM is a customer-centric strategy that yields those close and interactive relationship. Multiple studies have focused on exploratory and exploitative innovation, and just as many studies were performed on Social CRM and performance outcomes. Notwithstanding all the results, only a few studies looked at how Social CRM influences or contributes to exploratory and exploitative innovation. Therefore, this study focuses on organizations that leverage strong relationships resulting from Social CRM to innovate in products and/or services.

The research question of this study is how Social CRM strategy, processes, activities and information technology influence or contribute to exploratory and exploitative innovation. To research this a qualitative study was performed, more specific using an inductive multiple case study. The study was done at multiple customers of BusinessBase using semi-structured interviews as primary data source. Within the six customer organizations several roles were interviewed. The data collected from the interviews was complemented with data from social media, company websites, CRM-systems, sales, implementation and changes documents. After data-analysis the following conclusions were drawn.

The results of this study show that both acquisition and retention contribute to exploratory and exploitative innovation. When the relationship between customer and supplier is perceived as partnership it is more likely that a customer problem will translate into a supplier opportunity. Due to the market-following stance a focus on the retention of existing customers will not result in more exploitative innovation, but will allow customers to be more aware of changes in technology, trends and market. In this way, this shapes their ideas and allows them to translate this to needs.

Especially in the case of product innovation questions and demands from existing customers resulted in more exploratory innovations. When technology is quickly changing, customers will be involved to check the feasibility and to reduce the initial investment and thus the risk. But, only a few of the product innovations turned from a customer-specific product into a more standard product available for multiple customers. Possible reasons for this include the lack of internal drive to enable this transformation, the fear for cannibalization of service revenues and the non-existence of a R&D department.

When developing new service offerings, information gathered at customer sites and stored in CRM is used extensively. Both through data stored in CRM-systems and questions from customers. In the case of exploratory service innovation, information from meetings, systems and possible segments are used to shape the service offering. The usage of this information and customer involvement speeds up the development process but also the quality. Customers are most likely impacted by and involved with delivery of services and will benefit from service innovations. Due to this, they will be in the position to measure, see and evaluate the results of such an innovation.

Social CRM can be an important source for organizations that emphasize customer service and customer satisfaction. Information extracted from interactions is analyzed to identify possible problems and improvements in services. When used to move the power of interaction to the customer through customer engagement this lowers the need for an extensive customer service department, but also creates new ways of analyzing additional data, that in turn can be leveraged

again to enhance engagement. To use information like this, investments in resources to integrate data sources and analysis are needed. Organizations also need to make choices on which data to analyze, with the possibility that important will be ignored.

Finally, this research also shows that Social CRM can be a limitation for innovation. Limited views on what Social CRM is, usage limited to only a few departments, problems with data purity and limited usage of all kind of social channels can cause information to be not available for innovation purposes. By viewing, implementing and using Social CRM from a strategic perspective in a cross-functional way, enable organizations to leverage Social CRM to its real capabilities and therefore also to contribute to both exploratory and exploitative innovation.

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1 INTRODUCTION

In the last decade, the business environment has changed dramatically. With the rapid rise of new technologies like social media both organizations and consumers have the possibility to access information for free and apply it for their own use. The results in the competitive landscape are shortened product life-cycles, globally expanding markets (Li, Lin, & Chu, 2008), fast changing customer needs and new competitors entering the market (Danneels, 2002; Teece, 2007). In such a dynamic environment, to compete with other firms, to survive and to gain a competitive advantage is no longer only about products, services and processes, but also on the ability to develop new competences, products and services and explore new markets to be prepared for future demands and also continuously improve current competences, products and service for existing demands (Danneels, 2002; Li, Lin, & Chu, 2008; March, 1991; Teece, 2007).

Customers can play different roles in innovation processes. First, customers can take part in the innovation process, either by being the functional source of innovation by developing an innovation by themselves and transferring it to a manufacturer (Von Hippel, 1988) or being actively involved as co-innovator (Cui & Wu, 2015). Second, customers can be the source of information during the process, as they have a better understanding of their needs than the manufacturer (Von Hippel, 2005). Next to that, it is also critical for making innovation successful through commercialization that the innovation matches customer needs (Hausman & Johnston, 2014; Von Hippel, 1988). In both roles alignment and multiple interactions between the involved parties is needed to cooperate and exchange information (Von Hippel, 1988). To turn alignment and interactions into intellectual capital creation, interfirm learning, resource exchange, product innovation and knowledge exploitation a strong relationship between organization and its customer is important (Palmatier, Dant, Grewal, & Evans, 2006; Yli-Renko, Autio, & Sapienza, 2001).

To build and maintain those strong relationships Customer Relationship Management (CRM) can be used, because the goal of Customer Relationship Management is to let organizations build and maintain close and interactive relationships with their customers. Social CRM integrates a range of social media and channels, like Twitter, LinkedIn and Facebook, and web 2.0 into CRM (Lehmkuhl & Jung, 2013), which resulted in more customer engagement through two-way, more direct interactive communication instead of the more one-way interactions from original CRM (Trainor, 2012; Rodriguez, Peterson, & Krishnan, 2012). Social CRM is thus a customer-centric strategy consisting of cross-functional processes, activities and capabilities supported by IT, social media and data (Greenberg, 2010; Trainor, 2012). Social CRM can support organizations in the innovation process to have more intense interactions through multiple social, online and offline channels, to store information extracted from those interactions to enhance knowledge management of customer processes (Payne, Storbacka, & Frow, 2008), to detect changes in needs or uncover unmet needs by analysing the data (Garrido-Moreno, Lockett, & Garcia-Morales, 2014; Hausman & Johnston, 2014) but also by including the customer in the value-adding process (Sashi, 2012).

While Social CRM can influence and contribute to innovation, it also offers possible complications and limitations. The attention for selecting and retaining the most profitable customers can result in a narrow focus on only the most profitable customers and their needs. This can limit the organizations strategy because the resource allocation will focus on meeting those customer's needs instead of innovation needed for newer or less important customers (Christensen & Bower, 1996). Because of the use of social media, the amount of data that can be collected and stored is growing fast. The scale of the data can limit organizations in processing and interpreting the data because additional resources like analysis tools are needed (Altman, Nagle, & Tushman, 2014). The scale also

forces decision makers to prioritize the information because they are not able to interpret everything and thus shunt away possible important information (Van Knippenberg, Dahlander, Haas, & George, 2015). Social CRM can therefore both positively and negatively influence innovation.

Multiple studies regarding exploratory and exploitative innovation are available. Also, previous research on Social CRM and CRM has focused on performance outcomes. Less research focused on the influence of Social CRM on innovation. Ernst, Hoyer, Krafft & Krieger (2011) suggested that the CRM processes customer information management, customer segmentation and multi-channel management should be integrated with new product development. But how Social CRM improves new product development is subject for further research. Lin, Chen & Chiu (2010) showed that different CRM practices like joint-problem solving and technology-based CRM contribute to innovation capabilities. Again, how this contributes is neglected. Finally, Arnold, Fang, & Palmatier (2011) showed that the strategic customer orientation of acquisition versus retention effected radical and incremental innovation, but also that they interact in a complicated manner to influence innovation. While they were the first to look at radical and incremental innovation, they did not take other CRM activities into account. When looking at the IT component of CRM, research on information technology showed that IT has added value for the innovation processes, for example through the management of innovation knowledge, innovation production and external innovation collaboration (Kleis, Chwelos, Ramirez, & Cockburn, 2012). None of those studies looked at how the actual processes influence innovation. Also, all the mentioned papers looked at only CRM and not Social CRM. With the addition of Social to the concept of CRM and the transition to modern technology and specifically, social media, innovation processes are expected to have changed (Benner & Tushman, 2015).

This research contributes to the existing field on CRM research for a couple of reasons. First, this research provides an insight in how and in which circumstances Social CRM contributes to or enhances exploratory and exploitative innovation. Second, because of the addition of modern technology and social media in innovation processes, this research adds to the field of innovation research a renewed look at the role of information processing in innovation and the influence of social media and information derived from it.

Resulting from this the research question will be:

How does Social CRM influence exploratory and exploitative innovation?

2 THEORETICAL BACKGROUND

2.1 EXPLORATORY AND EXPLOITATIVE INNOVATION

Most people define innovation as a result, meaning that innovation can be an idea, structure, administrative process, practice, process or product perceived as new (He & Wong, 2004; Kleis, Chwelos, Ramirez, & Cockburn, 2012; Zaltman, Duncan, & Holbek, 1973). But just as important as the result is the way to get to that result. This process can be looked at as a journey, not one that is predefined, but one that will be uncertain, a random process and through continuous, dynamic learning (Cheng & Van de Ven, 1996). It is a process of search, problem solving in which an organization challenges its own technical capabilities and knowledge (Abernathy & Clark, 1985; Katila, 2002). Innovation can thus be looked at as a process of learning, in which organizations discover possible alternatives, gather and master highly specific information and knowledge about customers, markets and technologies and use the gathered information and knowledge to test possible outcomes (Cheng & Van de Ven, 1996; Laursen & Salter, 2005). Having a higher order learning orientation is needed for innovation, with learning orientation defined as the degree in which an organization challenges its own beliefs and practices (Argyris & Schön, 1978; Baker & Sinkula, 2002). Therefore, innovation can be looked at as type of organizational learning in which problems and opportunities are identified and knowledge is transferred in the organization and finally transformed into actual innovations (Danneels, 2002; Katila, 2002; Zhou & Wu, 2010). Important steps in the innovation process, needed for creative action, consists out of the search for both information and the generation of ideas and knowledge (Sheremata, 2000). This process of search is non-linear and non-sequential and may require multiple iterations, also going back to earlier stages (Maggitti, Smith, & Katila, 2013). Not only the proactive search for information is needed, organizations can also benefit from social interactions and processes by individuals with the external environment through different available channels, for example through e-mail, meetings, phone calls and shared technology (Cohen & Levinthal, 1990; Khodakarami & Chan, 2014; Mom, Van Den Bosch, & Volberda, 2007; Nonaka, 1994).

Exploratory innovation is defined as radical, with a focus on emerging customers and markets, new products or services, the gaining of new or departure from existing knowledge (Jansen, Van den Bosch, & Volberda, 2006), the search for new routines, discovery of and experimentation with new technologies, processes or products (March, 1991; McGrath, 2001). Translated back to the organizational learning element it can be stated that exploratory innovation is about new knowledge and competences that can result in new products, services, processes, markets or even new product-market combinations (He & Wong, 2004). The outcomes of exploratory innovations are uncertain, because the outcomes cannot be predicted and will take more time (March, 1991). Next to that, the acquisition of information is important because it increases the changes of identifying new opportunities (Gielnik, Krämer, Kappel, & Frese, 2014). As a result, exploratory innovation requires more knowledge resources within an organization, because with more personnel and more internal communication information from outside can be transferred more easily into the organization (Dewar & Dutton, 1986).

Exploitative innovation is about the existing knowledge and competences: incremental innovation, with a focus on existing customers or markets, enhancement and extension of existing knowledge and skills (Henderson & Clark, 1990; Jansen, Van den Bosch, & Volberda, 2006; March, 1991) and improvement of existing product-market positions (He & Wong, 2004). In this case learning is about the deepening of the existing knowledge and competences that enhances existing products, services or markets. Results are more proximate in time: predictions can be made more accurate and returns

are therefore perceived as positive (March, 1991). Involvement of the environment is more important for incremental innovation, because less knowledge resources are needed to transfer information into the organization as the information is more related to the existing knowledge available in the organization (Dewar & Dutton, 1986).

The current knowledge of an organizations influences the balance between exploratory and exploitative innovations. As organizations learn they update their routines that guide behaviour with what they have learned in the past (Levitt & March, 1988). But, these routines may also influence how effective the acquisition of information will be, as this is influenced or constrained by the cognitive capacities of prior knowledge and experiences resulting in an inappropriately focus in search (Gielnik, Krämer, Kappel, & Frese, 2014; Slater & Narver, 1995). Therefore, search further away and distinct from the current knowledge with lack of constraint and the usage of multiple sources is more likely to generate new ideas and concepts and thus exploratory innovation (Sheremata, 2000; Katila, 2002). While on the contrary, search more close to the existing knowledge will likely favour exploitative innovation.

2.2 INNOVATION & CUSTOMERS

Customers play different roles within innovation. First, they can be the source of an innovation. A customer has developed something, but does not see an opportunity to market the innovation themselves. Instead, they transfer the innovation to a manufacturer to commercialize the innovation (Von Hippel, 1988). Second, customers can be used as co-innovators, where organizations work together with one or more customers to develop an innovation (Cui & Wu, 2015). In both cases a strong relationship between manufacturer and customer plays an important role, as will the quality of interactions between both parties involved (Von Hippel, 1988). Third and the most highlighted role of customers, is the customer as information source. When, for example, the quality of a new product is measured, one of the most important criteria is if it meets the customer demands (Sheremata, 2000). Customers are also important providers of marketing information about trends, new ideas, improvements and other information through which they contribute to innovation and affect the ability of an organization to earn economic results and create value (Ahuja, Lampert, & Tandon, 2008; Arnould, 2005; Bierly III, Damanpour, & Santoro, 2009; Vargo & Lusch, 2008). A deep understanding of a customer's problems, needs, processes and how they interrelate is thus an important factor in the success of innovations. Customers and end-users can contribute because they have a better view on and expression about their needs than the innovating organization. This difference in knowledge levels has the tendency for innovators to develop solutions for well-known needs instead of developing new solutions that match the needs of the customer (Von Hippel, 2005). A way of bridging the knowledge gap is by setting up multiple interactions between employees of the organization and customers. The resulting interactions between individuals cause ideas to develop and accelerates the development of new knowledge through real-time interactions (McQuarrie & McIntyre, 1992; Nonaka, 1994; Srinivasan, Anderson, & Ponnnavolu, 2002). The acquisition of information about needs and demands is not a one-time thing: because of changes in technology and markets a continuous monitoring of customers, their needs and the market is needed to leverage the continuous creation of customer value (Galunic & Rodan, 1998; Slater & Narver, 1998). The usage of customers as information source also has its difficulties. First, customer information about needs is mostly tacit, which makes it hard to transfer the information into the organization (Cui & Wu, 2015). Second, customer demands are dynamic, which means needs and preferences change rapidly (Mithas, Krishnan, & Fornell, 2005) making it hard to get a good understanding of needs and combine the information from multiple customers to create knowledge. Finally, the dynamic nature of needs

and preferences can be limited by technology as the gathered information may suggest a complete reconsideration of technology (Cui & Wu, 2015).

When an organization attracts new customers, they are likely to have new questions, wishes and needs that are more diverse and further away from the existing knowledge and possibly need the implementation of new technology, skills and processes. When this happens, organizations will need to expand their existing knowledge base with new knowledge resulting in exploratory innovation (Day, 1994; Teece, 2007). But, an organization that can develop exploratory innovations must have a customer competence, through which the organization knows its customers very well and has very good relations (Danneels, 2002). Though, this may not be enough to react to changes in the environment. When developing new knowledge, organizations should not only seek input from new customers instead of their existing customer, but also determine if the focal market is one the organizations wants to enter (Danneels, 2002). In addition, organizations also need to learn new technologies (Rosenkopf & Nerkar, 2001) and have a market imagination to understand what customers want in the future (Clark & Fujimoto, 1989). Customers can also hinder exploratory innovation. Too much focus on customer influence or customer information may cause organizations to forget about the environment, even interpret the environment through the customer's eye and let important customers limit resource allocation for exploratory innovations (Christensen & Bower, 1996; Clark & Fujimoto, 1989; Prahalad & Hamel, 1994).

Customers can influence the focus of an organization on exploitative innovation in a couple of ways. First, close customer relationships will result in a focus on exploitative innovation through improvement of existing products and services to keep in line with the expressed needs of existing customers and maximize customer satisfaction compared to competitors (Baker & Sinkula, 1999; Voss, Sirdeshmukh, & Voss, 2008). Within organizations that develop products based on customer requests or are mass-producers, innovation processes tend to shift towards existing customers. This causes exploitative innovation to be more frequent than exploratory innovation (Burgelman & Sayles, 1986). Second, which information is acquired from and about customers is guided by the current knowledge resulting in the utilization of information that is consistent with this current knowledge (Brockman & Morgan, 2003; Sinkula, 1994). Thus, organizations will more likely use information from past experiences than new information, in turn focusing development efforts to improvement of already known needs (Ulwick, 2002; Von Hippel, 2005). Finally, the absence of a higher order learning orientation in combination with, for example, a market or customer orientation can shift the focus to exploitative innovation and will lead to incremental adaptive behaviour. Incremental adaptive behaviour will limit learning constraints to the adaptive variety, which usually means incremental learning centred around the existing knowledge (Baker & Sinkula, 1999; Slater & Narver, 1995).

2.3 SOCIAL CUSTOMER RELATIONSHIP MANAGEMENT

CRM and Social CRM have its roots in the paradigm shift in marketing from the marketing mix with its four P's to a relationship based approach. The marketing mix assumptions were that customers are available in great numbers and are passive (Harker & Egan, 2006). The result of this approach was that organizations lost the connections with their customers, customers became anonymous and organizations did not know what their customers wanted (Chen & Popovich, 2003). Relationship Marketing started from the discussion about how organizations in B2B should market services. When selling a service, the setup costs for a service are higher resulting in higher acquisition costs than for a physical product. For example, (Blattberg & Deighton, 1996) showed that it is cheaper to retain customers than to acquire new customers. This shifted the attention to customer equity and customer lifetime value. Only when a customer is retained an organization can gain profits from those customer, thus making the long-term relationship between organizations and its customers more important (Grönroos, 1989; Harker & Egan, 2006; Nguyen & Mutum, 2012). Both Relationship Marketing and CRM view relations as strategic or business assets that can be managed and need investments (Blattberg & Deighton, 1996; Payne & Frow, 2013; Rust, Zeithaml, & Lemon, 2000; Ryals & Payne, 2001).

With the global emergence of Information Technology CRM was introduced (Payne & Frow, 2005). Information Technology provided organizations with the means to store the necessary data about customers that enabled them to determine the value of a customer (Ryals & Payne, 2001). CRM can thus be seen as the integration of strategy and ongoing processes using IT (Boulding, Staelin, Ehret, & Johnston, 2005) to build customer loyalty based on a customer portfolio (Rigby, Reichheld, & Schefter, 2002) with as goal to maximize profits, both on the individual customer level as on organization level itself (Rigby, Reichheld, & Schefter, 2002; Zablah, Bellenger, & Johnston, 2004). Organizations achieve those goals not only with standardized products and services, but also by being more flexible to customer needs and offering customized products and service (Chen & Popovich, 2003; Peppard, 2000; Rigby, Reichheld, & Schefter, 2002). Within this perspective, information technology is primarily supporting processes (Bolton & Tarasi, 2007; Jayachandran, Sharma, Kaufman, & Raman, 2005; Zablah, Bellenger, & Johnston, 2004).

Social CRM integrates social media, like Twitter, LinkedIn and Facebook, and web 2.0 into CRM (Lehmkuhl & Jung, 2013) offering more customer engagement through two-way, more direct interactive communication between customers and organizations (Rodriguez, Peterson, & Krishnan, 2012; Trainor, 2012). This provides customers with more ways to interact, both with other customers and organizations, to initiate communication and manage data themselves, essentially shifting more power back to the customer (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011; Malthouse, Haenlein, Skiera, Wege, & Zhang, 2013; Saarijärvi, Karjaluo, & Kuusela, 2013).

2.3.1 Strategy

CRM has one central assumption regarding the customer-centric strategy: customers are the central focus of an organizations activities instead of products and the mass market (Chuang & Linb, 2013; Ernst, Hoyer, Krafft, & Krieger, 2011; Kale, 2004; Sheth, Sisodia, & Sharma, 2000). This focus on customers should organizations enable to respond to, learn from and understand the needs of its customers (Jayachandran, Sharma, Kaufman, & Raman, 2005; Reimann, Schilke, & Thomas, 2010), essentially providing organizations with the information that can be used within innovation processes. But, per Slater & Narver (1998) being customer-centric also has its limitations because it focuses only on the expressed desires from customers within the market served and not on latent and expressed needs with a broader view of the market. If an organization is only guided by its

current customers and their expressed needs this might be more close to existing knowledge, possibly resulting in more exploitative innovation.

The result of a customer-centric strategy should primarily be the profitable acquisition of new customers or the retention of existing customers resulting in a profit-maximizing portfolio of customers (Zablah, Bellenger, & Johnston, 2004). Acquisition and retention can both influence innovation and the balance between exploration and exploitation. First, acquisition can attract new customers with new questions, wishes and needs that are more diverse and further away from the existing knowledge and possibly need the implementation of new technology, skills and processes (Day, 1994; Teece, 2007). Second, as retention is about existing, profitable customers, the knowledge needed is also much more close to the existing knowledge (Arnold, Fang, & Palmatier, 2011). The primary driver of retention is customer satisfaction (Mithas, Krishnan, & Fornell, 2005), but to satisfy existing customers organization usually invest in process, service or products innovations that benefit those customers (Benner & Tushman, 2003; Mithas, Krishnan, & Fornell, 2005). Also, the usage of customer satisfaction surveys discourages risk taking, therefore influencing organization learning (Slater & Narver, 1998). Finally, the focus on customer profitability will influence the balance between acquisition and retention as retention is said to be a priority within a CRM strategy, because retention is cheaper than acquisition (Day, 2003; Winer, 2001). In addition, when focusing on customer profitability and long-time customer value organization will try to avoid risk-taking to enlarge certainty (Arnold, Fang, & Palmatier, 2011; Ramani & Kumar, 2008).

The goals behind Social CRM are focused on creating and maintaining a profitable portfolio of customers. Because of the different in profitability between acquisition and retention, the majority of organizations will primarily focus on retention efforts as the costs of retention are less and a customer usually become profitable after a couple of years. A CRM strategy will therefore most likely have a focus on existing customers and because of that result in more exploitative innovation.

2.3.2 Processes

Although literature on CRM describes the implementation of a customer-centric strategy through processes around customers, what those processes are is not agreed upon. For example, Payne & Frow (2005, 2013) define CRM processes as strategic processes between organization and customer. Zablah, Bellenger & Johnston (2004) state that the activities are not clear and Keramati, Mehrabi & Mojir (2010) split the activities in operational and managerial. But they all have in common that a process-oriented approach is needed to ensure the effective execution of the strategy and the creation of the desired outcomes (Keramati, Mehrabi, & Mojir, 2010; Zablah, Bellenger, & Johnston, 2004). In general, CRM processes are centred around information acquisition, knowledge management, interaction management and decision making. First, information acquisition is the basis of the other processes. Just like with organizational learning, the acquisition of customer data and information is needed to create knowledge and to make information-based decisions. Second, the acquired knowledge is used to create and disseminate knowledge within the organization, either related to a single customer or focused on market intelligence (Keramati, Mehrabi, & Mojir, 2010). Although some organizations choose large investments in IT to facilitate CRM, Payne, Storbacka & Frow (2008) suggest organizations to organize around knowledge about customer processes instead of those investments. Third, interaction management focuses on the integration of multichannel interactions (Payne & Frow, 2005), but also wants to improve the quality of the interactions and strengthen the relationship with the customer (Keramati, Mehrabi, & Mojir, 2010; Zablah, Bellenger, & Johnston, 2004). The final process is centred around making decisions, based on customer data, information and knowledge, to either evaluate the strategic goals and profitability on organization level, but also the profitability per customer to determine priorities between customers and if a

single customer is profitable enough compared to the goals (Zablah, Bellenger, & Johnston, 2004). The described process steps can also be used to leverage innovation. Information acquisition gathers information about customers, their behaviour and needs. Knowledge management facilitates insights in current and/or changing demands and needs. Interaction management helps to build the relationship and thus supports information acquisition. While, finally, decision making can use information about customers and segments to determine if a possible innovation has potential within the current customer portfolio. The available information can then be used to develop products and services (Davenport, Harris, & Kohli, 2001; Nambisan, 2002).

Previous studies have shown that formalization of rules and procedures within processes has a positive relationship with exploitative innovation (Jansen, Van den Bosch, & Volberda, 2006), mainly because process management tries to create a situation that focuses on certainty and predictability (Benner & Tushman, 2003). Earlier research did not show a negative relationship between formalization and exploratory innovation, but instead showed that the rules can facilitate replication and diffusion of knowledge within an organization (Jansen, Van den Bosch, & Volberda, 2006). Especially the CRM processes are focused on formalizing knowledge and interaction management, with rules on how to create and disseminate knowledge within an organization and the interaction channels with the customer with as goal to create a set of ready and reliable relationships, interactions and communication with customers (Payne & Frow, 2013), which should facilitate the acquisition of information. The way the main CRM processes are described should not limit or favour exploratory and exploitative innovation, but as discussed before, decision making about the prioritization of customers based on profitability might favour certainty over uncertainty and variety and therefore exploitative innovation.

2.3.3 Cross-functional

For organizations that choose to implement a CRM strategy, scholars all stress the importance of changes in the organizational structure. For example, Day (2003) mentions the common focus on customer-facing contacts only, while also incentives and all other internal functions also influence customer relationships. Others reference the same cross-functional approach and to make sure CRM is not only a marketing or IT department thing (Harker & Egan, 2006; Payne & Frow, 2005; Sheth, Sisodia, & Sharma, 2000). Information about customers should be shared across functional departments (Chen & Popovich, 2003) and all major business processes with customer-facing elements should be restructured and functional barriers should be taken down (Jayachandran, Sharma, Kaufman, & Raman, 2005; Kale, 2004).

This cross-functional approach related to innovation can both be an advantage and disadvantage. First, advantages arise because multiple functions and members of an organization will be in touch with the customer. This means that all functions involved with customer data and interactions could be a source of innovation as multiple functions have access to the information because internal skills, activities and resources are linked to those of customer, which should allow an organization to generate knowledge about the customer (Awuah, 2001). The cross-functional approach will then be more contextual driven, but also offers possibilities for innovation (Gibson & Birkinshaw, 2004). Also, because of the close relationship between multiple functional areas information sharing needed for decision making can be impeded and implementation be executed more efficiently (Slater & Narver, 1995), but also to create buy-in on innovations (De Clercq, Thongpapanl, & Dimov, 2011). Besides the formal relationship between functions, the cross-functional relationships can also result in more informal social relations, overlap in knowledge domains and interactions between individuals, what can result in a positive effect on both exploratory and exploitative innovation (Jansen, Van den Bosch, & Volberda, 2006; McGrath, 2001; Nonaka, 1994). In addition, cross-functional cooperation

can be supported by IT. This can provide the management of innovation knowledge by providing ways to store innovation knowledge, but also communication and interaction by linking those multiple units to each other (Kleis, Chwelos, Ramirez, & Cockburn, 2012; Nambisan, 2003; Srivardhana & Pawlowski, 2007).

Second, disadvantages arise because different functional areas have a different focus, knowledge base and culture (Griffin & Hauser, 1996; Gupta, Raj, & Wilemon, 1986) because each functional department will have its own goals and corresponding pressure to reach those goals. When the goals will not match, this may result in inertia and have a negative effect on innovation (Zhou & Wu, 2010). De Clercq, Thongpapanl & Dimov (2011) discussed the needed balance between cross-functional and opposing social and cultural forces and found that structural and relational context influence the innovation performance of an organization. The way an organization manages those contexts in a cross-functional structure will influence innovation processes. In addition, when CRM is only used by specific departments this might limit the information flow from outside the organizations as the information will be specific for those departments.

2.3.4 IT, Social Media and Data

Social CRM provides a transaction-based system to store large sets of information on characteristics about customers and their behaviour and purchases. This data can be used in a variety of ways to contribute to innovation. First, by segmenting the data on specific characteristics and using the available values the data can be used to create new customers through personalized communication and targeting (Chen & Popovich, 2003). Second, by analysing customer data an organization can adapt the current products, services or offerings to the needs of the customer (Reimann, Schilke, & Thomas, 2010), but also by focusing on the future value creation and connecting data measures to the current offerings an organization can recognize new possibilities in products and/or services (Boulding, Staelin, Ehret, & Johnston, 2005) and make decisions based on this data about new product developments or changes to the current products and service (Bose, 2002). Third, by using data analysis organization can analyse the current behaviour of existing customers to identify potential early adaptors for innovations (Altman, Nagle, & Tushman, 2014).

Organizations can also benefit from the more direct and interactive communication channels, as CRM and IT make it also possible for organizations to interact with customers through traditional channels like e-mail, phone calls and letters (Winer, 2001) and social channels. It will allow them to add more context to the transactional data stored in their CRM-systems, enabling them to not only create knowledge from transactions but also from interactions (Greenberg, 2010; Malthouse, Haenlein, Skiera, Wege, & Zhang, 2013). The changes in both interaction and customer status caused by the emergence of social media and Web 2.0 has had a large effect on the way innovation processes work. Especially the creation of online communities has given way for a more open way of innovation (Benner & Tushman, 2015). The community is used to interact with other innovators, exchange ideas and knowledge or even work together by developing those ideas into new knowledge (Laursen & Salter, 2005; Nonaka, 1994). These diverse interactions are not bound to a local context anymore, participants are more global and span larger distances giving more access to various sources and types of information against a lower cost (Altman, Nagle, & Tushman, 2014). But not only communities provide access to more and distant information, also social networks, blogs and wikis can play a role (Djelassi & Decoopman, 2013). Organizations can use the information from social communities in a variety of ways. First, the available information on communities extends the existing knowledge of an organization because it will be more diverse and can be used in different stages of for example a new product development process or an open innovation process (Trainor, 2012). Second, by participating in cooperation with the community, customers and partners,

innovations are developed that can be used in its business model, because it integrates problem-related knowledge to need-related knowledge. An added advantage of the involvement of communities and customers might result in more customer satisfaction and therefore stronger relationships (Trainor, 2012; Sashi, 2012). Another way of exploiting these sources is to improve existing knowledge, use it for improving current products and service or get feedback on products and services (Altman, Nagle, & Tushman, 2014; Djelassi & Decoopman, 2013). Third, the information can serve as input for sense making. Organizations use the information to scan the environment for new developments in technology, opportunities and market trends (Malhotra, Gosain, & Sawy, 2005). Fourth, because customers also have the possibility to interact, especially in B2C markets, social media also provide a way for organizations to scan for previously unknown or changed customer needs or use social data to find out why customers buy a product (Hausman & Johnston, 2014). Finally, social media offers marketers ways of promoting and branding their organizations, products and services. Social media provide a way of bringing innovations to the market (Michaelidou, Siamagka, & Christodoulides, 2011; Rapp, Beitelspacher, Grewal, & Hughes, 2013). Combined, the usage of information from communities, social networks, blogs and wikis can be used in innovation processes, both for exploration and exploitation (Mount & Martinez, 2014).

But, in this way innovation is mostly based on historic data stored in multiple, possibly integrated systems. Innovation based on historic data and interactions only has its limitations. First, the information CRM provides is unstructured. Additional effort and resources are needed to analyse, summarize, aggregate and combine the information into a format suitable for decision making (Laursen & Salter, 2005). This also stresses the importance of information combination across multiple information systems, for example ERP, and not only CRM (Carneiro, 2000; Bose, 2002; Chen & Popovich, 2003; Kale, 2004). Second, the addition of social media to the CRM concept provides organization with additional problems when trying to learn from information. Because the costs of storing data have almost reached zero (Altman, Nagle, & Tushman, 2014) and the amounts and variety of unstructured data available is growing (Mount & Martinez, 2014) organizations face choices on which data to store and more importantly analyse. In most cases, additional resources are needed to process the growing amounts of information and use it for productive ends (Altman, Nagle, & Tushman, 2014; Van Knippenberg, Dahlander, Haas, & George, 2015). Besides managing the process of collecting and analysing information, organizations also need to make choices about the specific data they base their decisions upon. They must prioritize the importance of information, resulting in ignoring information (Van Knippenberg, Dahlander, Haas, & George, 2015). Organizations and their members are known to show cognitive and motivational biases in their attention for information and making choices about it and eventually also in decision making based on the available information (De Dreu, Nijstad, & van Knippenberg, 2008; Ocasio, 2011). When the choices are close to the existing knowledge of an organization, the choices made are expected to favour exploitative innovation. Third, the question can be asked if learning from information only is possible because innovation based on information is not sufficiently understood. On the contrary, innovation is explained as a process in which problems are defined and subsequently solved using active knowledge development (Nonaka, 1994). Information is a part of the knowledge development process and thus a part of the input needed for this process. Too much emphasis on the role of information in the innovation process might shift attention away from the interpretation of information: information collected from social media will again be unstructured and chaotic, how an organization gives meaning to the collected information and defines problems to solve as part of the innovation process becomes an important part of the usage of information (Nonaka, 1994). Finally, another possible complication of information is the fact that in a transaction based information system, most of the available data will be historic and because choices had to be made when

analysing the information, the information will most likely be a limited representation of history. As organizational learning theorists have shown: only learning from experience and history has its limitations. For example, because people tend to ignore past failures and overemphasize successes (Levinthal & March, 1993). In the case of Social CRM in a fast-changing business environment the historic data might also give a false presentation of the environment while in fact the environment already has changed and the available information no longer provides a valid representation.

Concluding, Social CRM data can provide organizations with input for their innovation processes, but only looking at the data will not be sufficient. Spending additional resources on ways to analyse and interpret the data are needed. But, just analysing data will not result in innovation, organizational learning processes show that the articulation and combination of information with tacit knowledge between individuals within an organization will play an important role (Nonaka, 1994). The way external information can be leveraged determines the innovation performance of an organization (Cohen & Levinthal, 1990), but because customer information is only a part of available external information the way customer information is combined with other sources and the available tacit knowledge determines the influence of Social CRM data on exploratory and exploitative innovation. How effective the usage of data will be, is thus determined by strategic choices on how and which data is analysed, combined and summarized.

2.3.5 Introduction in an Organization

The introduction of CRM itself within an organization is an innovation on itself as a specific customer-centric strategy will be introduced and IT and CRM processes are implemented. Especially when individuals within the organization start interacting more with customers and acquiring information about those customers, innovation might be spurred. This is caused by an initial focus on change, for example by making improvements in efficiency, in which the organization makes tacit knowledge explicit (Benner & Tushman, 2003). Another reason for this is that the organization most likely will not have the information and knowledge available for making decisions about priorities between customers and thus processes will not be centred about favoured customers. After a while, though, when decision will be made and the initial focus on change has disappeared, the process orientation might shift to enhancement of the process, which is pure exploitation (Benner & Tushman, 2003).

3 RESEARCH DESIGN

The goal of this research was to gain an understanding how Social CRM and its underlying constructs influence exploratory and exploitative innovation. To show those connections over a longer period and because a single organization might not represent a valid basis for the development of theory, an inductive multiple case study was used (Eisenhardt, 1989; Yin, 2013). This allowed comparison based on unique and common characteristics and recognition of patterns or relations between constructs within and between cases (Bryman & Bell, 2015; Eisenhardt & Graebner, 2007). The research was done at BusinessBase, the second largest Microsoft Dynamics CRM competence centre in the Netherlands. BusinessBase provides companies with advice to improve the use of (Social) CRM as strategy and process, but also implements and integrates CRM systems and applications for their customers. In the Netherlands, approximately 33% of all organizations use some sort of CRM software, a number that was 25% four years ago.

3.1 SAMPLE SELECTION

The selection of organizations in the sample was based on the expectation that they replicate or extend literature (Eisenhardt, 1989). In this way, the cases were not too similar so the different cases can be compared and all represent different circumstances regarding and possible innovations resulting from the usage of Social CRM. All organizations use Social CRM systems, channels and/or processes for at least one year, either integrated with none or multiple other IT-systems. By including organizations with different using periods, the organizations will have developed different levels of matureness in the use of CRM. But also, when an organization uses CRM for a longer period the chance for more innovations resulting from CRM processes or data will be larger. While organizations with a shorter period will likely have less influence of a system but still can involve customers as part of their innovation processes. A second criteria is the usage of Social Media or related channels for outgoing communication. Every organization uses at least two channels. Without the use of social channels an organization is only using CRM and not Social CRM. Finally, the organizations are from different Dutch branches. All with different levels of innovation. Marketing Automation and ICT are generally known for being dynamic markets with a high level of innovation based on technology. The telecom market is determined by four larger operators, leaving less room for technological innovation but more for services and price innovation with a heavy focus on both acquisition and retention. Finally, energy is a new market in the Netherlands as the market was released about ten to fifteen years ago. This caused the market to develop very fast in the last years with all kinds of new products and services. All companies either do business in B2B or in B2C. In B2B an organization will have less customers, but with more different stakeholders and with a focus on a lengthier relationship from both sides. In B2C on the contrary, the pool of potential customers will be much larger. In most cases, there will be a single stakeholder or decision maker and the customer does not have a focus on a lengthy relationship but a focus on a good product or service, while the supplier wants to keep customers for a longer period. The majority of organizations in the sample are B2B, with a single organization doing business in B2C and one organization has a combination of both, although both B2B and B2C are placed in different units of the main organization. All organizations that took part in this research are part of those three markets and can be found in table 1.

Organizations	Branch	Type	No. Employees	CRM since	Interviews
SimOnly	Telecom	B2C	20 employees, 60 service agents	2008	CEO Director of Operations Manager Sales & Marketing
Telecom & ICT	Telecom & ICT	B2B	32	2011	Operations Director Commercial Director, Sales Manager Process & Application Manager
IT Outsourcing	ICT Outsourcing & Services	B2B, B2C	150	2013	CFO Director IT & operations Sales Operations Manager (Application Manager) Product Marketing Manager
Marketing & More	Marketing Automation	B2B	80	2011	Managing Partner Manager Client Manager Delivery (Application Manager)
Marketing Processes	Marketing Automation	B2B	42	2013	Owner CEO Employee Marketing & Sales, ICT Manager (Application Manager)
Energy Consultancy	Energy Consultancy	B2B	15	2015	Owner Account Manager Employee Service Desk (Application Manager)

Table 1: Cases

3.2 DATA COLLECTION

The main source of data were 21 in-depth interviews to gain deeper insights into the motivations, reasons and processes used. The interviews were semi-structured and based on the constructs found in literature on Social CRM and innovation separately. This type of interview with a predetermined set of questions will ensure all constructs will be addressed, but also gave the opportunity to ask more open or additional questions in response to answers made by the interviewee (Bryman & Bell, 2015). All questions were grouped in several main constructs like strategy, social channels and innovation processes. This grouping into constructs provided a way of grouping answers during analysis. Finally, because multiple cases were studied the semi-structured format also ensured cross-case comparability. The set of questions was tested in two interviews with the directors of BusinessBase, as BusinessBase is also a user of Social CRM besides being a provider. This allowed the researcher to check if the questions were clear, understandable and did not contain definitions or words that could be misunderstood. The test interviews were recorded and analysed, after which question were added and removed. The final interview setup can be found in appendix I.

Within each organization typically four roles were interviewed. First, members of upper management, usually a CEO or CFO have a good overview of the company, know the strategy, how Social CRM fits into that strategy and how important innovation is for the organization. Second, operational management usually is focused on existing customer and retaining them. Next to that, operational management will focus on finding and implementing improvements to existing products, services and processes which should be reflected in more exploitative innovation in favour of existing customers. Thirdly, sales or business development has a focus on the acquisition of new customers from either the same or different markets the organization is active in. New customers are also expected to result in more exploratory innovations. Both operations and sales were asked for

innovations in which customers were involved to try to understand how their focus on a relationship type with customers influenced those innovations. Finally, every organization has an application manager, responsible for maintaining the CRM-system and supporting users while using it. The application manager has more knowledge about how the application is used, with which other systems it has been integrated, which kinds of data are stored and if data is being analysed. The interviews each took between 30-45 minutes and were held at the office of the organization. All interviews were recorded on tape with permission from the interviewee and afterwards fully transcribed without nonverbal communication.

All gathered interview data was complemented with data from documents. First, to determine the motivations, goals and processes before, during and after the implementation phase documents regarding selection, sales, implementation and changes were analysed. Those documents helped to understand why an organization choose a specific CRM system and what were the initial goals behind the choices made. Documentation on changes showed how the usage of the system changed over time, for example, due to the introduction of new products or services. Second, the websites of the organizations in the sample provided the researcher with organizations publicly stated vision, mission and especially the products and services they sell to their customers. The website also provided a first introduction into how an organization favoured certain social channels because of their placement on the website. Third, the actual social media usage showed how the organization leverages social media, if it uses it for one-way or two-way customer interaction and eventually how data and interaction details are stored in CRM. Fourth, the actual data in the CRM system showed what data is available and stored in CRM. For the main types of data, like customers, quotes and interactions a count was performed to determine the total numbers of available records. After that important characteristics of data were considered, like for example the division between outgoing and incoming interactions and the availability of customer's characteristics like branch and revenue. Finally, reports, dashboards or Business Intelligence tools are a basis for decision making as they provide management and employees with high-level information regarding the current situation and possibly indications for future developments. For every organization in the sample a list was made of available options for analysis and the actual information it contains.

3.3 DATA ANALYSIS

Data analysis was performed by creating detailed write-ups per individual case, which provided insights in each individual case with as goal to let the unique patterns per case emerge (Eisenhardt, 1989). The first step in creating the write up was creating a combination of the interviews and document analysis. All answers on the same questions were grouped based on first the question and second the underlying construct. The combination of answers was complemented with the results of the document analysis and allowed triangulation between the different answers and for example actual data. The combination of answers and document analysis was studied by the researcher, after which an extensive write-up was created. Again, the constructs used in the interview setup were used to group descriptions and details together. Also, for each individual case all the given innovations were identified and described as part of the write-up.

After that a first cycle of coding was performed per individual case using multiple types of codes like attribute coding, in vivo and descriptive (Miles, Huberman, & Saldana, 2013). After the first cycle the codes were grouped into categories during a second cycle of coding. All results were placed into tables to get an overview of the used codes per cases and to allow for comparison between cases. Next to coding the write up, the innovations gathered from the interviews were analysed and per innovation labelled as exploratory or exploitative, using both the definition from March and the

statements regarding newness during the interviews. Next to that, values were assigned describing the source of the innovation (internal, customer, market), the type (product, process, service) and if customers and data analysis were involved. Those values were also gathered into a table which allowed the researcher to see which types of innovations were mentioned more and which sources were more common for exploratory and exploitative innovations. The results of coding both the write-up and the innovations allowed for comparison between both and linking findings. After analysis, the results were compared to existing literature, resulting in the results that follow.

4 DATA ANALYSIS & RESULTS

4.1 THE VIEW ON SOCIAL CRM

4.1.1 The Meaning of CRM

When asked about what Social CRM means for their organizations, almost every respondent describes CRM as an aid or as a software application for especially the sales department. It helps to control sales processes and visualize the sales pipeline, enables to store agreements and conditions made with customers and provides insights into who customers are. The focus is not on creating a better relationship with the customer, but to optimize internal processes. The CEO of Marketing Processes explains: 'it is a tool to optimize your marketing and sales' and the owner of the same company: 'now, it is particularly software. A disciplined method to properly capture data from customers, prospects and leads'. Only two of the six organizations go beyond this, and describe a direct link to the customers. For example, the sales manager of Telecom & ICT says: 'it is the portal to our customers', while the Managing Partner of Marketing & More adds: 'it is the central point of our customer contact strategy'. But, overall CRM is mainly described as a software application by each organization.

In the above view on CRM, the focus is on the acquisition process of new customers. Especially the B2B organizations want to grow and to grow they need to acquire new customers. To reach this goal CRM is an important tool, as it provides ways to control the sales process. For example, by storing potential customers and information about them. Only when asked about a possible focus on either acquisition or retention, CRM is also linked to retention. All organization either say retention is more important than acquisition or place it on the same level as acquisition. The Commercial Director of Telecom & ICT describes:

The most important thing is to keep the back door closed. We also get a large part of our turnover from inside. Retention can result in expansions, cross-selling, upgrading with new products and services

None of the five B2B companies describe CRM as a starting point for retention, but they all stress the importance of retention to prevent a decrease in existing customers. SimOnly on the other hand uses CRM for automating retention. CRM is used to contact existing customers and provide them with an offer to renew their contract. This implementation is an example of enabling customer engagement, where SimOnly informs the customer about the available options and from there on the customer is in the lead and can determine if, when and how he interacts again with SimOnly. But this process is also an example of how Social CRM can make retention processes, especially in environments with large quantities of customers, cheaper and less labour-intensive using modern technology. The Manager Sales & Marketing of SimOnly describes the new retention process using CRM:

The organization was convinced that we needed a call centre with 1,200 men to call all customers. I did not believe this and proposed a one-month trial. During this month, I proved that it was a completely loss-making case. After that I proposed a technology based solution and showed that this can be done with technology, with a good CRM, with beautiful workflows and can work very efficiently and effectively.

Within B2B this will be different due to the number of customers, but none of the organizations that took part in this research leverages CRM in their retention processes. A description of how the retention process is related back to CRM is provided by the CEO of Marketing Processes:

We have around 40-50 customers. for which I do not need a CRM system. Simply said: we also have one list of 40-50 customers in Excel. And one time per month we have a sales meeting where we discuss those customers very shortly: have you seen or spoken to them? Or is there something going on? In short, therefore we ensure that we are sufficiently in touch with customers.

Organizations recognize the importance of retention, they use processes around it, but unlike when creating structure in the acquisition process, the retention process is up to the amount of attention of individuals. In that way, there is no way to check if someone has been in touch with a customer and what the content of that interaction was. Energy Consultancy recognized this danger and changed thy way this was organized. An account manager explains:

We setup our own service desk differently with three people, who now also function as an inside sales department. To allow focus on the smaller group of customers for retention. Often the focus is on those customers who shout the loudest and the ones who want a lot of attention. There is the danger that you give less time and attention to smaller customer who often participate in the collective agreements. That is just as important, but we obviously have no time to visit each individual customer so now we do it from the office and where necessary, an account manager can still make a visit.

4.1.2 The Application of CRM Principles

Although CRM is mainly described as a software application and not a process or activity by the organizations in this research, they still use certain CRM principles. The starting point of CRM is a customer-centric strategy. During all the interviews questions were asked to determine if an organization has a customer-centric strategy. Each interviewee had his own interpretation of the term, which makes it hard to determine the actual centrality. Next to that, when asked about if the organization is customer-centric or product-centric not all the cases came to a cohesive conclusion. For example, SimOnly and Telecom & ICT had answers pointing to both customer-centric and product-centric during different interviews. In most cases this is caused by a different interpretation given to the term customer-centric. An example of this can be found within SimOnly. The Manager Sales & Marketing describes the organizations as a hybrid between product-centric and customer-centric:

Customer-centric means that you listen carefully to what your customers want, that is what we partly do. Because if we would listen to them, we would now have fast internet, we would have unlimited internet. I can give a whole list of what customers really want, but what we do not provide at the moment. We meet customer expectations on pricing, so there we are customer-centric, but not on everything.

If the meaning of customer-centric would be that an organization only listens to his customers SimOnly would not be customer-centric. To determine if an organization is customer-centric also depends largely on what is the actual focal group of customers and how the organization deals with them. The same problems occur within the other organizations. Especially within the B2B group, which are mostly service orientated organizations focusing on customer specific solutions, every customer is described as unique. Customer-centricity does not have a clear definition within the organizations, which makes it hard to determine the actual centrality strategy. Table 2 shows how organizations look at their own strategy.

Organization	Centricity	Explanation
SimOnly	Different views	CEO: 'We are heavily customer-centric; I always try to think from the consumer' Manager Sales & Marketing: 'it is not like the customer is really central. We think in terms of the product and its margin. We make a product out there and we are going to sell it'
Telecom & ICT	Different views	
IT Outsourcing	Product-centric	Product Marketing Manager: 'The best way is to see everything from the customer, but, in practice, of course, it is very common to start product-related. And later in the process we start thinking: let's see it through the eyes of the customer, how the customer actually uses it'
Energy Consultancy	Customer-Centric	Account Manager: 'Absolutely the customer. This is reflected in the service we provide to the customer. Total care! The service is very important. Not only the bigger customers but also for the standard customers'

Table 2: Examples of centricity

A second principle of CRM is customer profitability. None of the organizations uses a measurement on customer level based on profits. When measuring profitability, this mostly is done based on the product, service or even portfolio level. Next to that, the B2B organizations all want to measure profitability on the customer level, but state they do not have the data available or they look at it from a very high level perspective. Table 3 shows the different ways how organizations deal with the measurement of the profitability concept.

Organization	Profitability	Application
SimOnly	Portfolio, margin on bundles	Manager Sales & Marketing: 'if we really see that a proposition is a loss, then we terminate it. Last year we had international bundles, and which were so loss that we contacted customers that we are stopping the supply of that product'
Telecom & ICT	Number of tickets, time spent	Sales Manager: 'I'm literally looking at: how many tickets were submitted by a customer in period x. How does this relate to the profits we make for that customer?'
IT Outsourcing	Not applicable	Product Marketing Manager: 'we actually do not have a good view on that'
Marketing & More	Services	Manager Client: 'In CRM we do not have the adequate information if a client is sufficiently profitable. Because we are currently not that far' Manager Delivery: 'Within the financial administration we have general ledger accounts. There will be looked at to see if a service is profitable'
Marketing Processes	Sector potential	CEO: 'If you talk about prospects, we look at sectors: are they performing, is there growth or is there shrinkage?'
Energy Consultancy	Time spent	Owner: 'We know which customers take more time than they yield in euros.'

Table 3: Measurement of customer profitability

The third and final principle is customer satisfaction. To retain customers, they need to be satisfied. Table 4 gives an overview of how the different organizations apply measurements of customer satisfaction and how the results of those measurements are used.

Organization	Customer satisfaction	Application
SimOnly	Brand experience, Net Promotor, customer contact satisfaction	Manager Sales & Marketing: 'The lower the NPS score, the more marketing money need to spent to acquire customers' Director of Operations: 'We are always in a continuous process, with process improvements based on this type of analysis'
Telecom & ICT	Net Promotor	Commercial Director: 'I am convinced that when we have a very positive NPS, we have to spend less on acquisition'
IT Outsourcing	ISO9001 (Net Promotor)	CFO: 'to get a feeling how the customer experiences us. And, how they see us' Director IT & Operations: 'I believe you have to continuously improve as a company, whether it is on processes or other aspects. So it should be very valuable'
Marketing & More	ISO9001	Manager Client: 'those studies are more focused on how the cooperation. And of course, your proposition, your service for a part, but more supported by the fact how do you work with each other, what do you expect from each other, your customer-supplier partnership relationship'
Marketing Processes	ISO9001	CEO: 'when we get back we are not very innovative, I conclude: for this customer, we need some innovations and propositions so now and then'
Energy Consultancy	Not recurring	

Table 4: Applications of customer satisfaction surveys

Customer satisfaction is by three companies measured because of an ISO certification. While others use the Net Promotor Score, mainly by the telecom oriented organizations. The way satisfaction is measured also determines the goals of the measurement. When a Net Promotor Score is used, the grade is more important, while other organizations that do not use Net Promotor but a more open format emphasize the content of an open discussion with the customers. In those cases, the focus of the research is on how the customers perceive the relationship and the level of innovativeness. In all cases the results mainly influence existing services and processes with exploitative enhancements. None of the organizations mentions an influence on new products or services.

4.1.3 The Usage of Social Capabilities

The cases that are part of this research can be divided into three groups when looked at the usage of Social capabilities in combination with CRM. The first group uses Social CRM and social media to present themselves to potential new customers or provide existing customers with information about market developments or status updates. How those organizations look at the possibilities differs, in an interview with a sales representative he states: 'we use Facebook more from an informative perspective', but later during the interview concludes this part with 'but a lead generator through the socials? The question is if our organization is ready for that', while an IT director admits his company is behind in social media usage 'we are really at a low entry level regarding social media'. In most cases, Social CRM is described as a database, an aid or a tool. Interactions that are stored are mostly outgoing from organization to customer. Those interactions hold information regarding conditions and agreements and should enable the organizations to manage their customer at a later moment in time. Some employees within those organizations use certain channels to maintain their network and sometimes use them to interact with both potentially new or existing customer, but this is not structured and not part of a company policy.

The second group also leverages the possibilities to generate leads and contact and interact with those leads. Companies in this group acknowledge that the common ways of contacting potential customers (e.g. cold-calling) do not work anymore and that reaching out to customers through especially LinkedIn has a higher success rate when getting into touch with potentially new customers. Some companies in this group have a social media strategy in which they describe which channels to use and what are the goals in using it, but also prescribe employees how to combine personal and company branding. A sales manager stated: 'So we tell our people: Take the freedom to use personal branding on LinkedIn, but we do have a one-pager containing the do's and don'ts for LinkedIn'.

The third and final group actively uses social channels to target and interact with new customers for acquisition purposes, use enhanced web technologies to influence customers and interact with existing customer to answer questions, help them with problems and react to complaints. Especially the use of social channels to actively interact with customers differs from the organizations in the second group. The Manager Sales & Marketing of the only organization in this group expresses the goal behind those interactions: 'If I can work and build on loyalty, and that causes me to invest less in retention'.

Table 5 shows how the different organizations use Social CRM next to branding and information providing purposes, but also what are the goals of using social channels.

Name	Channels	Usage	Goals
SimOnly	Twitter Facebook Trustpilot	Acquisition Web care Status updates	Manager Sales & Marketing: 'To build a customer relationship for retention. If I can work on loyalty, can build that, we need to invest less in retention itself'
Telecom & ICT	LinkedIn Facebook Twitter Google+ Pinterest	Acquisition	Commercial Director: 'We want to keep in touch with our existing customers and we want to use our existing customers, through social media, to contact new customers in a different way than using the phone and start calling' Application Manager: 'we want to treat customers personally. And by using that kind of media we want to become more personal and get more range'
IT Outsourcing	Twitter Facebook	Status updates	CFO: 'Informative. To show customers what is possible, how certain problems can be solved'
Marketing & More	Facebook Twitter LinkedIn		Manager Client: 'If you look at those channels, we do have a Facebook and a Twitter, but we do not use it'
Marketing Processes	LinkedIn Twitter	Acquisition	Employee Marketing & Sales: 'LinkedIn is used to work account-based. So, for example, the focus target is now energy. But these are 10 major parties that are interesting for us. So, on LinkedIn we try to identify the relations and approach them'
Energy Consultancy	LinkedIn		Owner: 'Periodically, now that there is decent news to share. And we share that on LinkedIn. With the goal that it is a link to us resulting in being at the top analytics in Google.'

Table 5: Social CRM Usage

Next to the mentioned social channels some organizations use portals, but only to show invoices or follow progress on tickets. Also, none of the organizations in the sample has an integration between the used social media channels and the CRM system in use and only the organizations that at least use socials for acquisition purposes (the second and third group) explicitly mention their wish to have this integration. For example, SimOnly uses a separate tool to register interactions on social media and Telecom & ICT manually brings information to their CRM system. The result of this is two

separate systems storing interactions, which makes it harder to analyse those interactions. A second important advantage that is provided by such an integration, is information regarding the social status of the customer with whom an interaction is taking place. Information on the number of followers can be important for an employee to let him know about the possible impact of an interaction on social media, which is in fact on an open channel where others can also read along. The openness also provides organizations with challenges. The CEO of SimOnly describes this: 'Not everyone can write, but you have to write in a good way and understand that everything you write is also shared'.

4.2 THE IMPORTANCE OF EXPLORATORY & EXPLOITATIVE INNOVATION

All the organizations stress the need for innovation, as technology, market and regulation change fast. Innovation will help create more lock-in to retain customers and to maintain their market position. None of the organizations want to be frontrunners in their market and all want to follow the market, for example by using proven technologies. Some are even in markets where a couple of other bigger companies (especially the Dutch telecom providers) determine the direction the market is going. Companies that are part of this market are forced to follow and adapt to keep in business.

Three out of five B2B organizations have a focus on enhancing existing processes when asked for their innovation focus. The sales manager of Telecom & ICT states:

The focus is to continuously take one extra step in what we do. So, that means there is a little less attention for innovation, and more for the improvement of processes.

At IT Outsourcing the focus is the same, as described by the Director IT & Operations

Often it is a two-fold. First, our innovation is internally, how we are going to work smarter and better, can I link all systems and resources together, which is a bit of innovation that we do. And on the other hand, if you look towards the market, we often look for: hey guys how can we improve certain aspects that we are already doing well or where we are already strong at.

For SimOnly, the only B2C organization, the focus is different. Through improvement of processes and services SimOnly tries to enhance the so-called customer journey and to improve customer engagement by enabling customers to change their own settings and bundles. This provides the customer with more power, but also reduces the need for actual human interaction.

During all interviews examples of innovations were collected and analysed. In total the data showed 48 innovations divided over the 6 companies. 25 of those examples were labelled as exploratory, 23 as exploitative. Table 6 shows the number of found innovations per case. From the four organizations that stated a focus on exploitation, Telecom & ICT and IT Outsourcing also provided more exploitative examples. The organizations that not explicitly mentioned improvement of process also show a division that is more to the exploratory side.

Name	Total	Exploratory	Exploitative
SimOnly	12	6	6
Telecom & ICT	10	4	6
IT Outsourcing	6	2	4
Marketing & More	9	6	3
Marketing Processes	4	3	1
Energy Consultancy	7	4	3

Table 6: total innovations per case

4.3 ACQUISITION & RETENTION AS SOURCES FOR INNOVATION

During the interviews, multiple examples of innovation were mentioned. Some of them were based on questions or demands from a new, while others were in response to an existing customer. Table 8 shows an overview of exploratory and exploitative innovations that result from customer questions or demands.

Organization	Type	No	Example	New/existing	Source
Telecom & ICT	Exploratory	1	Detection System	Existing	Commercial Director: 'That customer made the link that detection is a piece of communication and asked us to help and think along.'
	Exploitative	2	Extended Contact Hours	Existing	Sales Manager: 'That customer said he could not reach us yesterday and found a bit annoying as he works to 6 o'clock. We improved the process so that there will be some sort of overlap scheme for that customer'
IT Outsourcing	Exploratory	1	Pay TV	New/existing	Product Marketing Manager: 'basically we developed it because several customers asked for it'
Marketing & More	Exploratory	5	Contact Centre	Existing	Manager Delivery: 'Until a customer, from our network, came to us with an idea to start a campaign to sell EPAs'
Marketing Processes	Exploratory	2	Alumni Program	New	CEO: 'This is their idea and may we think along and advise in the concept and realization of that application'
Energy Consultancy	Exploratory	2	Invoice Control	Existing	Owner: 'it's just a logical question for a customer'
	Exploitative	3	Purchase Advice	Existing	Owner: 'We have many large customers, who do not want to be placed in a basket, we had to develop a separate service for them'

Table 7: Exploratory & Exploitative innovations with customers as source

As innovation results from both new and existing customers, they can both be the result of acquisition processes part of Social CRM or retention of existing customers. In the case of retention this can either be because the customer has a very good relation with the supplier and asks for certain new products or the customer already wanted some product, and starts searching for a possible other supplier, forcing the existing supplier to innovate and developing the requested product. An example of such an innovation was described by the Product Marketing Manager of IT Outsourcing: 'I'm working on a great innovation and the greatest driver to do that is to keep one of our largest customers'. He also points out the need for the relation with the customer using informal conversations: 'And it turns out that we were in conversation with that customer at the right time, because he was already orientating on other suppliers. Those conversations actually happen very informal, not by systems or analysing existing data'.

When innovations have another source than customers, the data also shows that in 18 examples the customer is somehow involved when information is acquired or questions from customers are used for analysis to determine that services can be improved. Telecom & ICT used information from talks with customers gathered by account managers and information about customers to shape their new offering. Energy Consultancy did the same when developing a new service:

We then did qualitative research in a group of 10 customers and we asked them: what suits us and what does not suit us. Well, there has been an acknowledgment on the ideas we had, and we used that to write a business plan

SimOnly improved their monthly invoice because their customer service department received a lot of questions and complaints about the invoice. After making improvements to the invoice the number of questions dropped. The Director of Operations described this:

For example, we have our invoice, which is always question number 1. We have completely adapted and incorporated therein what were the questions that customers asked the most questions about the invoice.

Table 8 shows an overview of the number of innovations with customer involvement, but also some examples of this involvement.

Organization	Type	No	Example	How?	Customer involvement
SimOnly	Exploratory	2	Smaller bundles	Data-analysis	CEO: 'For example, the 7.50 bundle we introduced, really stemmed from the desire of customers to have smaller bundles'
	Exploitative	6	Invoice	Data-analysis	Director of Operations: 'we have our invoice, which is always question number 1. We have completely adapted and incorporated therein what were the questions that customers asked the most questions about the invoice'
Telecom & ICT	Exploratory	2	IT-workstation	Data-analysis	Sales Manager: 'When developing the plan for workstations, we used the data from CRM and we divided our customers into three segments. Because we will do it first for our existing customers'
	Exploitative	2	Service Contract	Interviews	Application Manager: 'We then really sat down with customers: this is a service contract. What do you think about it? Do you have any remarks?'
IT Outsourcing	Exploratory	1	Anti-DDOS	Interviews	CFO: 'it was mostly done informally through customer interviews. And therefore, a customer who has had an issue, who was attacked'
Marketing & More	Exploratory	1	Big Data	Projects	Managing Partner: 'We help KLM with the savings program, and until recently it was primarily to maximize the emails sent. But now it is moving to big data, data mining, making cross-references, make analyses'
	Exploitative	1	Contact centre questions	Data-analysis	Managing Partner: 'The analysis of the conversation: have we asked the right questions? Do we need to propose the customer to ask some additional questions?'

Marketing Processes	Exploratory	1	Use of new web technology	Projects	CEO: 'We innovate for customers; we renew the processes and the way we use them for business customers'
	Exploitative	1	ISO 27001	Demands	Application Manager: 'For some customers we need to have ISO 27001 certificate to be allowed to eventually work for them'
Energy Consultancy	Exploitative	1	Role Service desk	Satisfaction	Sales Manager: 'This also originated because certain stated: guys I have not seen or heard from you for over a year'

Table 8: innovations with customer involvement

The results until now show that customers are involved in innovation processes both as direct or as information source. Within the researched group of organizations more exploratory than exploitative innovations were found, with more innovations related to retention processes on existing customers than innovations as result from the acquisition of new customers. The involvement of customers in the innovation process is either based on questions or demands for certain new products or services or based on the usage of information about customer to shape an innovation. Both are results from Social CRM activities and processes. In both cases the quality of the relationship between supplier and customer plays an important role because the customer will more likely be tended to share information and stay with a supplier.

4.4 PRODUCT INNOVATION

Of the 48 examples of innovation 25 were categorized as product innovations. Energy Consultancy is the only company without product innovations. Mainly because Energy Consultancy is the only organizations that has no technical services or products in its portfolio, while all other companies are involved in IT, Telecom and Marketing Automation. Within the group of 25 examples, 17 innovations were marked as exploratory.

4.4.1 Exploratory Innovation

Although the Director IT & Operations of IT Outsourcing states about innovation based on questions from existing customers 'Now I must say that it does not occur very often coming from existing customers, it happens, but not often', the examples in this research show more examples coming from existing than from new customers. The only example of an exploratory innovation coming from a new customer as source is the alumni program of Marketing Processes. A Dutch Regional Education Centre wanted to create a program supported with an online portal for their alumni. The CEO describes: 'This is their idea and may we think along and advise in the concept and realization of that application'. After implementation of the idea it functions as reference for other ROCs, and Marketing Processes can use the gained knowledge in this market.

An example with an existing customer as source is the tracking system for visually impaired implemented by Telecom & ICT for one of their existing customers. The customer already used basic telephony services provided by Telecom & ICT and was searching for a new system in their seven homes housing visually impaired. The commercial director describes why this customer decided to reach out to them instead of choosing for a known and proved solution in this specific market:

They came to us because of the good service that we provided on the basic services and because of the constant dialogue with each other. We indicated, as something is related to

communication, you should come with us. That customer made the link that detection is a piece of communication and asked us to help and think along.

When compared five out of six exploratory product innovations can be related back to questions of customers. Next to that, five other innovations in this category were reactions to changes in the market. An example of such a reactive innovation is the Anti-DDOS technology of ICT Outsourcing, which was developed in cooperation with competitors in reaction to the DDOS attacks of the last years which caused unrest in the society. During development, they also involved existing customers to check for possible sales opportunities.

Those examples are in line with the statements about following the market. From the five B2B companies four call themselves followers as it comes to innovation. This will allow customers to be familiar with new developments or technologies which allow them to create requests to their suppliers. The application manager of Marketing Processes also mentions the result of this:

We also work for many large energy companies, which have of their own marketing department that invents different ideas and come to us and 'say hey, we see this in the market that could be usable for us, can you integrate, build, link that for us?'

Another important reason for this is the focus on delivering services. The pure B2B companies that also having a technical competence are all working based on projects for customers and are dependent on spending hours. When innovating they therefore prefer to let customers pay for innovation or they need to innovate because the market is going in a certain direction. Evidence of both these types can be found at Marketing Processes and Telecom & ICT. The CEO of Marketing Processes states about innovation:

We have several customers for whom we occasionally can do major projects. During those projects, we learn, so thanks to that customer, thanks to that paid commission we realize a lot of innovation within the company. As a SME, it is quite difficult spent half a million on innovation. Unlike in large organization where they have a lot of money, put up a project and start innovating. We must gradually reinvent ourselves and whenever possible we do paid inventions.

Especially when customers are involved in product innovations, not too many innovations pass the customer specific gate and become standard products that can be sold to more customers. In most cases implementation follows and after that, the product is delivered and the project is closed. Only at Marketing & More two examples were found that followed a different process and products were used as a more generic product, although one of them eventually was dropped because of negative margins. In none of the organizations processes are setup to enable knowledge sharing regarding this kind of products to allow usage for other customers. At IT Outsourcing sessions are occasionally organized to present and discuss certain themes and new solutions, but those are not focused on newly created solutions and the organization of sessions like this is not fixed. At other organizations sessions where information is shared are mostly focused on the sharing of financials, new and upcoming customers and organizational changes. When an innovation is created in reaction to the market, organizations tend to create a more generic product, like for example the mentioned Anti-DDOS solutions from IT Outsourcing. In those cases, Social CRM and its processes can play an important role, as the relation with the customer allow for informal information gathering or the analysis of data and information can provide an organization with useful knowledge about requirements for such a product.

4.4.2 Exploitative Innovation

Six of the eight found exploitative technological innovations are not the result of any customer involvement. Mainly, this is because those innovations are internal improvements to systems and application that allow the involved organizations to work more efficiently. Examples are the integration of multiple CRM-systems to a single application at IT Outsourcing, integration of multiple applications at Marketing & More and the introduction of a ticket portal at Telecom & ICT. In most cases customers will not be involved or will notice anything, although the introduction of a ticket portal is a way of creating customer engagement by allowing customers to create their tickets when they want it and to be able to monitor progress.

The only real example of an exploitative innovation in reaction to customer actions is the improvement of the login procedure on the personal portal of SimOnly. When analysing data about customer questions at the call centre, SimOnly noticed that the procedure to login was unclear to customers. In reaction to this they improved the procedure on the portal, and after that analysed the data again to see that the number of questions dropped. In this example SimOnly used information gathered from customers to improve the portal. This improved customer engagement, the experience the customer has and ensured the customer intends to use the portal instead of calling the customer service.

4.5 SERVICE INNOVATION

The second largest group of innovations is centred around services. In total 14 service innovations were mentioned during the interviews. Within this group there is a clear focus on exploitation: 10 of the examples are exploitative.

4.5.1 Exploratory Innovation

The organizations that took part in this research are mainly delivering services instead of generic products. Exploratory service innovations are therefore more important for those organizations as services are meant for a broader group of customers and should fill the need of multiple customers. Three out of four examples were found within B2B companies and could be related back to questions or demands from existing customers. An example of this is the introduction of a call centre for Marketing & More. The organization did not want to start such a service as described by the Manager Delivery:

We always said: we are not going to do that. Until a customer, from our network, came to us with an idea to start a campaign to sell EPAs. We made a calculation based on the available budget. We also had acquired a company which provided as with free workstations during certain hours. So, we started with a call centre. After that other customers who came to our office saw that and started asking question about it.

In this case the start of a call centre was a completely new service for Marketing & More, one customer asked for this service, combined with the circumstances after an acquisition and a positive calculation resulted in the start of this service. Other customers joined as direct customers, also, because their relation with Marketing & More already was on a certain level.

Although this would indicate that customers can play an important role when developing new services, two organizations that have added two services with customer involvement in their portfolio state that they do not want to involve customers in the process of developing new services. For example, the commercial director of Telecom & ICT said:

We are introducing IT Services right now. I have not talked to customers about it, I just started working on it. Because every customer says yes or no, and then he must know very clearly what the service is about, and half the time he told you something that is not true. You should do a comprehensive study if you want to get to know what customers think.

Although customers are not directly involved, Telecom & ICT used both information from conversations with existing customer about their IT environments and data stored in the CRM system to shape the service, but they did not actually used direct customer input. Another example is Energy Consultancy who used research in their customer base to develop a new service regarding energy usage and reduction. When asked if they would do that again the owner answered:

I think we have very good antennae to know what our clients care about. I think we know this partly through the research, but also because we get to better understand our customers, know what they want and what to pilot with our customers and what not

In this case the relationship with the customer plays an important role, because Energy Consultancy does not store information in their systems, the knowledge is much more tacit. Both examples show that within service innovation customers are not directly involved, but information and knowledge about existing customers plays an important role. It is used to determine which customers are potential customers for the new service, but also how the new service is shaped is influenced by knowledge about how that service can be used as an advantage for existing customers. This again stresses the importance of retention processes to keep customers, the relation with customers but also knowledge about customers.

For all the exploratory service innovations, it became clear how organizations deal with services that are new to the organization. For example, the contact centre of Marketing & More was a question from a customer regarding a service Marketing & More did not provide yet. The question triggered a process in which Marketing & More started an investigation on the possibilities and in the end made a calculation on cost and income and based on that decided to start the service. From a customer-specific project, it became a service that still exists and serves multiple companies. Other examples at Energy Consultancy with Invoice Control and, again, Marketing & More with a contact centre for financial services shows the same details. Questions or signals from one or more customers lead to a research phase in which the organizations research the possibilities, makes calculations regarding the possible profits, in some cases also asks other existing customers for information and finally writes a business plan.

4.5.2 Exploitative Innovation

Also, exploitative service innovation originates from questions from customers. For example, the service Purchase Advisory from Energy Consultancy was the result of the demands of new, larger customers but exploited already existing knowledge that was previously used to advise larger collectives that purchased energy. One of the two owners of the company said: 'Then we said: we have a lot more customers who do not want to be placed in a basket, we have to develop a separate service'. Another example of exploitative service innovation can be found within Telecom & ICT, who reacted on complaints from a customer about their opening times with extended hours to keep the customer satisfied. Although both innovations were initially for a specific customer, the implementation is done in a way that it can be used again for other customers. Other examples within the B2B organizations show the same, new and existing customer ask for certain additional conditions and agreements which result in improvements on already existing services. Within those examples only one example was found that was supported by additional research.

A large portion of the ten exploitative service innovations can be found within the SimOnly case. Although the innovations are marked as internal, customers and retention play an important role in the origin of those innovations. SimOnly uses data regarding interactions to improve their services with as a goal to improve customer satisfaction, loyalty and to retain customers, which are all Social CRM principles.

4.6 USING SOCIAL CRM DATA WHEN INNOVATING

4.6.1 Data-analysis in B2C

SimOnly actively uses data and data analysis to both create new portfolio's and to improve their existing services. But there is a difference in where this data is coming from. First, when creating portfolio's, they make extensive use of market data like market potential, market division for Apple IOS and Google Android and the amount of internet usage. But when doing this, data on their existing customer base is used sparsely. The Manager Sales & Marketing explains why: 'When looking back you look at an old market, telecom changes quickly. Subscriptions and subscription types also innovate fast'. In their case the historic data reflects past portfolio's, but due to changes in the market mainly triggered by the big four telecom providers in the Netherlands this usage data does not reflect the future situation. SimOnly rather looks at other countries that are like the Netherlands, but are known to be half a year in ahead of the Dutch market. But especially when it comes to service improvement, SimOnly is the only organization in the research sample that makes extensive use of data analysis to determine what are the key areas where services can be improved. They do this by registering all the interaction moments with customers and more importantly the reason behind those interactions: which problems do customers run into or what questions are they asking about services. From the six found exploitative innovations, five were supported by data analysis about customer questions and behaviour. The improvement of the invoice lay-out was already an example of such an improvement, another example is the delivery time of SIM cards given by the Director of Operations:

An improvement is that we deliver our SIM-card much faster, there were always questions like "when do I get my SIM card?". If someone has bought something, he wants it immediately. Those are things we have improved that led to significantly fewer questions

This answer also shows why these improvements are being made and why data is analysed: by improving services, the number of questions regarding a service will be lower, less call centre agents will be needed and less expenses will be made into the call centre. But, the resulting improvements also enhances customer engagement because it provides the customer with more ways of helping himself without involvement of the supplier. In turn, by creating more customer engagement SimOnly provides customers with more structured ways of interacting with SimOnly. Again, those results are analysed again to see if services can be enhanced and improved to better satisfy customers.

4.6.2 Data-analysis in B2B

The data also shows that within the five B2B organizations data analysis is only done to monitor and manage things like the sales forecast and financial situation of the organizations. The first is done to predict how personnel is going to be used in the upcoming period, while the second is done to see what the actual financial situation is. Finally, both will be compared to check if there is a balance between what was sold and what was paid by customers. The only other analysis that was found within the B2B group is the way individual services perform in ways of margin. None of the organizations perform analysis on individual customers. The desire to analyse a customer on

profitability is expressed by all organizations, but they also state that they do not have the actual data to do this. Only Telecom & ICT performs a basic count on number of tickets reported by a customer, but the time spent is not taken into consideration. The reasons for not measuring customer profitability is just one example of problems of data integrity within organizations. In an example of the development of an innovation within IT Outsourcing the lack of available data is mentioned by the Product Marketing Manager:

The signals for an innovation come very informal. It goes like: “do you deliver this actually this?” And then technicians said no, I did not know that technicians about it. And at one point I saw this trend in the market for which we try to launch a product now and made a tour around the company and asked: “We see this, for which customers could this be interesting?” And when this came up, a time ago a customer has asked if we could deliver it.

A customer of IT Outsourcing already asked for the new product, but it was not registered at all. In this example the employees who knew about this were still employed and could remember the question. But, if they would have left the information would be gone. In previous paragraphs, it became clear that information about and from existing customers is used to create new services. This included both information that was stored explicitly within systems and tacit information gathered by different people.

4.6.3 Data Purity

One of the reasons why data-analysis in B2B is not possible is the absence of data and lack of data purity. All the companies have some sort of guidelines and rules that state that all agreements and communication should be stored in the CRM system. In one interview a sales and marketing employee said:

There's still a bit of education to it. Sales people are lazy people, they say themselves. They find the registration process ... They find it necessary, they see the importance of it, but it's the first thing verse left.

The commercial director of Telecom & ICT mentions the same: ‘We do have guidelines regarding this, but it is certainly not used 100%. I have been by far the worst example’. The lack of following the guidelines is one of the reasons why data is not available. This can also be caused by the importance an organization has regarding following the procedures. For example, Marketing Processes has a database filled with more than 800 accounts. Regarding the retention process within his company the CEO states:

We have around 40-50 customers. for which I do not need a CRM system. Simply said: we also have one list of 40-50 customers in Excel. And one time per month we have a sales meeting where we discuss those customers very shortly: have you seen or spoken to them? Or is there something going on? In short, therefore we ensure that we are sufficiently in touch with customers.

The mentioned number of 50 customers cannot be related back to the CRM system, and apparently not all information regarding those customers is stored in the CRM system. The usage of an additional list with customers is an indication for employees that the importance of keeping information within the main system is not very high. Next to that, because information is not up to date or recognizable, within innovation processes for new services or portfolio's information cannot be used or at least considered unreliable.

4.6.4 Integrated Systems

Another problem is the lack of integration with other information systems that might limit the amount of available information. SimOnly uses a CRM system, but needs additional tooling for handling Social Media interactions. Due to the spread of information in both systems, interactions on social media cannot be linked to customers in the CRM system limiting the data analysis possibilities. IT Outsourcing has multiple systems, CRM for sales and marketing and other systems more focused on technical departments. When comparing data from both systems, IT Outsourcing discovered differences as described by the Director IT & Operations:

We are now working with a new tool, which we are launching, we should fill it with data, which is data from our legacy systems. And we want to match the data with customer data from CRM, and we scare now and then. Per the first systems the customer has this and this and the other system says that this is not true. So, one of the two is wrong. Or we never sold it, or we never delivered it, or we have it delivered and did not invoice it. And now we are at the stage that we need to clean it

When different systems are not integrated and not in sync with each other it can cause operational issues regarding for example invoicing. But also, when information seems to be available it can be used for innovation processes, for example when developing a new service, resulting in wrong assumptions with regards to wishes or potential customers.

4.6.5 Cross-functional usage

Finally, for most organizations CRM is a software application or tool supporting especially sales and sometimes service. Within the more technical organizations the access to the usage of CRM systems and processes is limited to those departments, while there are other touchpoints between the organization and customers besides sales. An example of this is the earlier mentioned innovation example at IT Outsourcing, where technicians received questions from customers regarding an at that time non-existing product. They also did not have access to the CRM system to save those interactions, nor were the departments linked to ensure information is shared. When developing the innovation, the information about those kinds of innovations could have helped and at least would have prevented the need for an informal tour of the company to ask if some customers might be interested. Also, when people with knowledge about those questions leave the information about the questions will be lost. Within some other organizations the same situation exists where access to the CRM system is limited to a smaller group of personnel, mainly because CRM is considered a sales and marketing thing.

4.7 SOCIAL CRM AS LIMITATION FOR INNOVATION

The way Social CRM is used and especially the supporting CRM application is implemented within the organization can be a limitation for or is a point of attention during innovation processes. The data shows that at least three of the organizations either encountered problems regarding Social CRM and organizational growth or had to make investments to let CRM evolve. SimOnly had a CRM application in use, but after years of usage the system caused problems while servicing customers. The Director of Operations describes:

So, we see that the CRM we use now, which is outdated, gives error messages and that limits us to provide good service to end users

Next to that the system could not evolve easily with the growth of the customer base and the view on the future of SimOnly. This resulted into the decision to implement a completely different IT

backbone with CRM as central information hub for the organization, but this also requested a large investment. At IT Outsourcing a similar issue occurred: the CRM application is only focused on the sales and marketing department and is not integrated with other systems used by the technical and operations departments. This now causes differences in information, but which information is false is not easily determined. The Director IT & Operations stated his view on this matter:

I do not know how it was implemented and with what level of ambition, how then has already thought about the entire chain. IT chain thinking. And if they thought about how to connect it all together. I think CRM can be a central spindle in the web of an organization, but you should think from day one: how we are going to implement it, how is it going to slowly become the spindle to an organization, how do we ensure that the data stays clear and how do let different roles and responsibilities change data. I think it might have been better as well from our side.

Energy Consultancy just started using their CRM application after a failed first implementation project and second one with another supplier. The application is now completely focused on the current business, but as the account manager says this has its limitation also:

I think CRM as we do have now cannot grow hard enough. If you talk about innovation, the steps to innovate with CRM stay behind. Ultimately, everything is changeable of course, but I think the way we use CRM, we want to compare it with the use of Excel, which they should not do.

Finally, Telecom & ICT grew from a mobile telecom company to a company with mobile and fixed telephony integrated to a company that also offers IT workstations. They already used CRM from the start and CRM grew along with every new major service added to the portfolio. They were only able to do this with one employee dedicated to managing CRM and processes. During a period of a couple of years this can be a large investment for smaller organizations.

All the examples show that the use of a (Social) CRM application should evolve and innovate along with other innovations within an organization. This also required a good view on what Social CRM does mean for the organizations and that is must change in time, but also that this will require further investment to realize this.

5 DISCUSSION & IMPLICATIONS

Although previous research has looked at the integration of CRM processes customer information management, customer segmentation and multi-channel management (Ernst, Hoyer, Krafft, & Krieger, 2011), the influence of CRM practices like joint-problem solving and technology-based innovation capabilities (Lin, Chen, & Chiu, 2010) and the effect of a strategic customer orientation of acquisition versus retention on radical and incremental innovation (Arnold, Fang, & Palmatier, 2011), no research looked at Social CRM and exploratory and exploitative innovation, but also no research looked how the processes influence or contribute to innovation. This research contributed to the existing field on both Social CRM and exploratory and exploitative innovation by showing that the relationships that are the result of Social CRM provide organizations with possibilities to use acquisition and retention to react on customer demands and question to start exploratory and exploitative innovation. Also, information gathered in (in)formal meetings, stored in systems and interactions are used for exploratory service innovations and generic exploitative innovation.

5.1 THEORETICAL IMPLICATIONS

The results of this study show that both acquisition and retention contribute to exploratory and exploitative innovation. When customers have a question or demand for a supplier they usually have some sort of a problem. This problem initiates a search process at the supplier, but this also results in an opportunity (Maggitti, Smith, & Katila, 2013). The relationship between a customer and supplier plays an important role. When the relationship is perceived as a long-time partnership the customer will more likely use an existing relationship to search for a solution to solve his problem. For an organization, the involvement of that customer is in turn useful to better understand the actual problem and thus its needs (Sin, Tse, & Yim, 2005). Earlier research by Arnold, Fang & Palmatier (2011) showed that an orientation on retention favoured exploitation, while Voss, Sirdeshmukh, & Voss (2008) showed that organizations with more commitment to existing customers inhibited exploratory innovation. The results of this study contrast with these findings. Although many of the organizations stated they slightly favoured retention over acquisition, this did not result in more exploitative innovation. On the contrary, approximately the same number of exploratory and exploitative innovations were found. Especially in B2B customers are triggers for exploratory innovation. This can be explained by the market-following stance of those organizations. All the organizations expressed the wish to be a smart follower. Although customers are perceived having problems to explain their needs as they do not have knowledge about changes in technology (Christensen & Bower, 1996; Mithas, Krishnan, & Fornell, 2005), when organizations are in a market following stance customers are more aware of changes in technology, trends and market. In this way this shapes their ideas and allows them to translate this to needs.

Especially when it comes down to product innovation, this research shows that questions and demands from existing customers resulted in more exploratory innovations. Existing customers are important for new product development because the product needs of existing customers are easier to identify than for new customers (Danneels, 2002). Again, the findings are not in line with the findings of Arnold, Fang, & Palmatier (2011). The retention orientation of the organizations in this research did result in more exploitative product innovation. Especially when technology is perceived as quickly changing, customers will be involved for both a feasibility check and to reduce both the first initial investment (Carbonell, Rodríguez-Escudero, & Pujari, 2009) and the perceived risk of the innovation. But, this research also found that many product innovations are only developed for one specific customer, although organizations stated they wanted more standard products. There are a couple of possible explanations for this. First, to create a generic product, routines must be created

to translate the customer-specific implementation to a product. Although some organizations stated they wanted more standard products, there most likely is not an internal drive from management and external drive from the market to create those routines (Avlonitis, Papastathopoulou, & Gounaris, 2001; Matthing, Sandén, & Edvardsson, 2004). Second, because organizations are dependent on revenues from services, especially based on hours, the introduction of more generic products might cause cannibalization of service revenues (Nijssen, Hillebrand, Vermeulen, & Kemp, 2006). Finally, to transform a specific product suitable for multiple customers that was implemented based on the needs of a single customer, the involvement of a dedicated R&D department might be needed. Especially smaller companies do not have such a department or the budget to finance this (Nijssen, Hillebrand, Vermeulen, & Kemp, 2006). Although these are possible explanations, the real reasons for not transforming one-time product innovations into long-time products was not studied and is a possible subject for further research.

When developing new service offerings, the findings of this research show that information gathered at customer sites and stored in CRM is used extensively. This adds to the study of Lin, Chen & Chiu (2010), whose findings showed that technological-based CRM consisting out of data storage, data mining and the CRM system itself, contribute to service innovation. Though, not only technological-based CRM contributes, but customer questions, resulting from the close relationship between organization and customer, are important triggers for exploratory service innovations, although this happens less than with product innovation. In addition, organizations gather information in meetings with customers, use more explicit information stored in systems to shape an offering internally and create possible segments for sales. Customer input and involvement improves the quality and speed during various stages of development (Alam & Perry, 2002; Carbonell, Rodríguez-Escudero, & Pujari, 2009). Next to that, because customers are most likely impacted by and involved with delivery of services and will benefit from service innovation, either being exploratory or exploitative. Due to this, they will be in the position to measure, see and evaluate the results of such an innovation (Wagner, 2013). Finally, involving customers in service innovation might offer organizations with challenges, especially when it comes down to selecting the right customers to be involved (Matthing, Sandén, & Edvardsson, 2004). Social CRM can help organizations selecting the right customers, for example based on certain characteristics and profiles. This adds to the statements by earlier CRM scholars that data can be an important source (Boulding, Staelin, Ehret, & Johnston, 2005; Reimann, Schilke, & Thomas, 2010), although proactive data analysis was not used to detect possible new products or services.

When looking at exploitative service innovation, the findings show that especially organizations that emphasize customer service and customer satisfaction can benefit from Social CRM. Social CRM provides organizations with transaction storage capabilities and ways of labelling interactions. Organizations actively involve customers in generating intelligence on their changing needs and to help the organization respond to those needs (Sashi, 2012). Using this data and information will help to analyze possible problems and improvements in their services. When used to move the power of interaction to the customer through customer engagement this lowers the need for an extensive customer service department, but also creates new ways of analyzing additional data, that in turn can be leveraged again to enhance engagement. Though, this advantage comes with a cost. Organizations must invest in resources to integrate data sources and allow for analyzing the data and must make choices on which data to analyze (Altman, Nagle, & Tushman, 2014; Van Knippenberg, Dahlander, Haas, & George, 2015). When the goal is to lower the need for a physical service department to lower the cost, the investments needed to reach this goal should have a certain level to be profitable. This research did not consider how the choices are being made and if the results, with more customer engagement, live up to the expectations. Further research could possibly look at

why and how organizations make choices and what the business results of customer engagement are. While data can thus be an important source of information for innovation, data purity is one of the greatest problems organizations encounter. This starts with top management that does not recognize the real need for data, but also at the departments Social CRM is focused upon.

Finally, this research also adds to the existing literature on CRM and Social CRM, showing that both can limit innovation. The findings also underscore earlier studies that many organizations have a narrow view on (Social) CRM mainly centered around IT and technology (Payne & Frow, 2005). The results now, 10 years later, still sum up the views on CRM. CRM is mostly described as a software application, supporting and controlling sales departments. Some activities and processes are used, but organizations do not link them to CRM and are not part of a CRM strategy. Because Social CRM can support innovation, this view on Social CRM can also limit innovation processes for a couple of reasons. First, the usage of the social element of Social CRM is limited within organizations. Especially in B2B, social is mostly leveraged for branding purposes while possibilities for joint learning and feedback are considered irrelevant (Michaelidou, Siamagka, & Christodoulides, 2011). Second, a narrow view on Social CRM puts the power around processes and activities in the hands of IT instead of creating a link with the overall business strategy (Kale, 2004; Payne & Frow, 2005). This causes implementations of CRM-systems that are hard to change and do not match the actual strategy and processes. IT systems need to match the environment of an organization (Lavikka, Smeds, & Jaatinen, 2015), and to reach this the implementation should be flexible enough to change with the changes an organization goes through when innovating. In addition, information systems, and especially CRM with its cross-functional focus, will need to consider not only the direct business processes, but also culture, people and other processes influenced (Finnegan & Currie, 2010). Viewing Social CRM in a broader, more strategic perspective can help to leverage the full capabilities. Within a strategic perspective an organization stresses the importance for not only acquisition and retention, but also innovation. Third, innovation has been proven to show better results when employees have different touch points with the environment. Diverse knowledge and skills at different levels in the organizations are needed to identify latent needs (Matthing, Sandén, & Edvardsson, 2004; Ordanini & Parasuraman, 2010). But also, cross-functional coordination is needed to disseminate and combine information about needs with technological knowledge to develop product or service solutions (De Luca & Atuahene-Gima, 2007). This research shows that organizations because of their view from a primary sales perspective limit Social CRM to sales departments, therefore ignoring other departments that also have touch points with customers. The results show that this limits innovation possibilities, because the needed information is not available or does not spread within the organization. A solid, cross-functional Social CRM strategy, linked to the overall business strategy can improve Social CRM elements that influence and contribute to innovation processes.

5.2 LIMITATIONS

Although this research was done with the highest possible accuracy, there are some limitations.

First, the sample included only one B2C organization. The results show that the usage and importance of Social CRM differs between B2C and B2B. In B2B Social CRM is primarily used for sales and acquisition purposes, while in the B2C organization Social CRM is mostly leveraged for service purposes. Next to that, the B2C organization only offers services to its customers and is very limited in its possibilities for product innovation because of the need to follow bigger telecom companies. On the contrary, manufacturing or fast-moving consumer goods organization will need to invest in product innovation to stay in the market and be competitive. To only analyse market data to create a portfolio of services will most likely not be enough to innovate. Further research could therefore look at manufacturing organizations in the B2C sector to see how Social CRM contributes to innovation in that context.

Second, the usage of real Social CRM was limited to a couple of organizations. Especially in B2B this was limited to acquisition processes, while in none of the organizations Social was integrated into the actual CRM system. For example, SimOnly used a dedicated tool for Social listening and interactions, but unlike the analysis they perform on interactions in CRM they are not able to analyse the social interactions. The type, content and context of those interactions can be different and might therefore result in different innovation results. Research in more B2B and B2C companies that leverage Social CRM and Social media integrated can provide a better understanding on why organizations use Social CRM and in which ways, but also how they contribute to innovation. Next to that, this research was performed in the Netherlands. The Social CRM community in the Netherlands has a certain local flavour due to the existence of local communities and review websites like the ConsumentenBond and KiesKeurig. When looking at Social CRM in other countries this can be totally different.

Third, all organizations are customers from BusinessBase. BusinessBase helped all the organizations with the implementation of their CRM system and advised them on using it. This research did not look at this role and influence of advisory companies and in this case, BusinessBase. When an advisory and implementation partner does not focus on a CRM strategy linked to the business strategy, the cross-functional aspect and the importance of data purity, but instead also looks at Social CRM from an IT perspective this influences an organization in its usage of Social CRM. The researcher does not consider BusinessBase an expert on things like strategy and usage of Social. During the implementation projects within the involved organizations those subjects were not given to much attention. Thus, research in a broader group of organizations with different providers of Social CRM solutions can make results more comparable and will provide a better understanding if the provider plays a role.

Finally, this research was performed using qualitative methods, mainly based on semi-structured interviews. This type of interview has the drawback that certain topics will not be addressed and questions are steering the content of an interview. For example, the interviews and document analysis focused on innovations where customers were somehow involved. This might cause other innovations to be neglected, even when customers were not directly involved. An additional problem with asking for the origins of an innovation could hardly be remembered by the interviewee. To address those drawbacks, at each organization multiple interviews were recorded and written down. In combination with the document analysis this allowed the researcher to triangulate all results to minimize those drawbacks. This also resulted in the exclusion of some innovations as the source could not be determined.

5.3 MANAGERIAL IMPLICATIONS

The results as described above offer some possible insight for managers in organizations using Social CRM. First, managers should be aware of the actual meaning of Social CRM and which role it can play within an organization. This role is not limited to sales processes, acquisition and retention only, but can also influence and contribute to innovation. By linking the overall business strategy to the cross-functional usage of Social CRM with a strong CRM strategy, this influence will most likely be the most effective for both exploratory and exploitative innovation. In addition, by making sure information is acquired, gathered and stored by different touch points the information will be more diverse.

Second, Social CRM activities, especially acquisition, are changing. The results also show that the older ways of acquisition are changing from cold-calling to social selling. While generations within organizations are shifting because of for examples retirements, so will also the group of influences and decision makers. This shift will result in different ways of information gathering and decision making, which in turn will also affect sales processes. For example, LinkedIn already provides ways of searching for the decision makers within a target organization with full name, function and connection, allowing sales personnel to directly target these decision makers instead of just calling and asking for those people without knowing their names.

Finally, as organizations, markets and technology change, organizations add new products and/or service to their portfolio, so will ways of working and communicating change. When this happens, IT and Social CRM Systems will need to change and evolve with the organization. When implementing Social CRM into an organization, managers should be aware that how the system is implemented at that moment can limit change at a later moment. For example, a very strict implementation with a lot of validations and conditions can possibly change when services change resulting in new investments to align the system to the service. This also applies for the usage of Social channels. The last couple of years' new channels originated, while other diminished. A strict focus in strategy and implementation on certain specific channels can and will most likely result in changes later on. When making investments in Social CRM, it is advised to take changes into account.

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APPENDIX I: INTERVIEW SETUP

CRM & Strategy:

- What does CRM mean to the organizations?
- Was there a specific strategy behind the choice for CRM?
- Is the CRM-strategy linked to the overall business strategy?
- Is the market you are operating in changing rapidly? Are those changes threats for the organizations?
- Does the organization provide customer specific solutions or are basic products sold? Which ones are more important?
- Is the customer or the product the focal point?
- Are there any incentives linked to the CRM-strategy?

CRM & Processes:

- Is there a strategic focus on acquisition or retention?
- Is CRM used by multiple departments? Which departments not? Why not?
- Are customers analysed on customer profitability? Why or why not?
- Are customer satisfaction surveys being used? What is the importance of this? How do the results influence products and services?

CRM, integration & Data Analysis

- Is CRM integrated with other systems within the organization?
- Is data from different systems combined for data analysis?
- How is data being analysed? For control purposes? For spotting trends?

Social CRM & Interactions:

- Which social media or interactive channels are used for interaction with potential or existing customers?
 - Twitter?
 - Facebook?
 - LinkedIn?
 - Blogs?
 - Portals?
 - Customer Service?
 - Webinars?
 - E-mail marketing?
- If data is collected through those channels, is this data saved within a CRM system?
- Is there a policy describing that all information regarding interactions should be stored?
- Is the purpose behind storage saving information about the customer or to create knowledge about customer processes?
- Are ideas shared with customers? Are interactive channels used for this?

Innovation

- How important is innovation for the organizations?
- Is there a focus on a certain type of innovation? Creating new products or services or improving existing ones?
- Is innovation taking place as response to the market?
- Is there active search, guiding or stimulating to create or use new knowledge?
- Is the organization searching for innovation by for example., analysing data, saving customer wishes, etc.?
- Is there a dedicated team involved with innovation?
- Are there knowledge sharing processes in place to share information and knowledge regarding customer, projects or services?
- Is innovation rewarded with incentives?

Exploratory Innovation

- Which new products and/or service have been developed during the last couple of years?
 - Is input from of information about customers used?
 - How is this information gathered and used?
- Did your organization enter new markets with existing products or services?
 - How did you make the decision to enter this market?

Exploitative innovation:

- Which improvements have been made to products and/or services?
 - Is input from of information about customers used?
 - How is this information gathered and used?