From data to empathy: A customer perspective on decision making process

While CRM investments are increasing, questions related to effectiveness measures raise. As a marketing information system, CRM contribute in the improvement of market and customer knowledge. The aim of this research is to examine if CRM usage influences sales force knowledge and to what extent this can help customers in their decision making. A theoretical framework is drawn on CRM/IT literature and a conceptual model is proposed and tested among a large sample of customers. The results indicate the positive impact of CRM usage by sales force on their knowledge. Also, product and customer knowledge have a positive effect on customer decision assistance and salesperson empathy. Research limitations and further contributions are then provided.

Key words: Relationship marketing – CRM and SFA benefits – sales force performance – customer decision making – empathy
Introduction

Nowadays, companies are increasingly investing in CRM to provide the foundation reflecting a company’s customer centricity and a reliable infrastructure for creating value through knowledge management. The last Gartner’s report (published in 2013) indicated that CRM global market experienced a growth of 12% in 2012, which represents three times the average of all enterprise software categories. The same report explains this interest from companies by the willingness to master customer analytics, big data inquiries and social interactions insights. In theory, CRM emerged as the consequence of marketing paradigm evolution from transactional to relationship approach (Gummesson 1997, Grönroos 1995). The technological dimension of CRM and its consideration as ‘‘software solution’’ appeared during the IT capabilities shift in the 1990s to refer to “information-enabled relationship marketing” (Ryals and Payne 2001). At the conceptual level, CRM is defined as a multiple variant construct, a combination between process and IT (Plakoyiannaki & Tzokas, 2002), between strategy and IT (Payne & Frow, 2005), between strategy, process and IT (Buttle, 2004; Rigby et al., 2002), and between process, strategy, philosophy, capability and IT (Zablah et al., 2004). In this research, we align with Payne and Frow approach indicating that ‘‘CRM unites the potential of relationship marketing strategies and IT to create profitable, long-term relationships with customers and other key stakeholders. CRM provides enhanced opportunities to use data and information to both understand customers and cocreate value with them’’.

As CRM market is reaching a maturity phase, many companies begin to overpass the adoption issues and start facing new challenges. One main question is about finding the balance between data collection and analytics and relationship monitoring. Knowledge generated from CRM should be oriented toward understanding market and customer value and modeling or estimating customer behavior. Customer data management remains a real challenge for many companies and business analysts today. Given its boundary spanning position, the sales force plays a crucial role in processing and conveying information to achieve market orientation and customer centricity. For example, Homburg and Rudolph (2001) found that customer satisfaction toward sales force interaction is the most important dimension of overall customer satisfaction in industrial settings. From sales force point of view, CRM dedicated applications or SFA represent a knowledge base from which sales activities can be tracked and scheduled and customer relationships improved (Ahearne et al. 2008; Day 1992).

While most research studies examined the issues of CRM/SFA adoption by organizations and sales force or the benefits of CRM/SFA usage on salesperson individual performance (Engle and Barnes 2000; Ahearne et al. 2008; Widmier et al. 2002; Keilior, Bashaw and Pettijohn 1997; Speier and Venkatesh 2002; Zablah et al. 2004), insights on the contribution of CRM that simultaneously connect the benefits for the sales force and the impact on the customer side remain scarce. Many calls have been made within academia and companies like Forester or leader editors like salesforce.com to integrate the customer perspective while examining CRM or sales technology effectiveness. Such customer based metrics might reveal the effective ROI in CRM since it’s oriented toward customer value creation (Honeycutt et al. 2005).

This article suggests that the true value of CRM generated knowledge hinges on the capacity of sales representatives of developing a complete picture of the market that profits to customers. The intent is to help managers and sales force to overpass the productivity focus to take a customer oriented approach that considers the critical step of customer decision
making. Drawing on literature on IT and CRM benefits, a conceptual framework is developed and hypothesized relationships tested from the customer’s perspective.

Sales force and CRM usage

The following part provides the main benefits of CRM/SFA/IT based on information systems and sales literature. Given our research issue, the focus will be on benefits pertaining to salesperson–customer interactions and that are likely to be perceived by customers.

As mentioned by Honeycutt (2002), CRM is one of the main sources of impact on sales management. Like any other technological advancement, it represents a significant change in organizations dynamics including sales operating and performance. As far as sales force effectiveness is concerned, many studies emphasized CRM/SFA contribution to productivity (Hitt and Brynjolfsson 1996; Hunter and Perreault 2007; Moriarty and Swartz 1989; Wedell and Hempeck 1987), opportunity intelligence leveraging (Grant and Schlesinger 1995). At the level of customer management, Pullig et al. (2002) demonstrate the benefits of SFA applications in terms of better account prospecting, development, and customer profiling.

In the same line, interactions with customers have been shown to improve through better capacity to formulate alternatives, make effective decisions, and develop more effective customer relationships thanks to accurate and timely information access enabled by CRM (Hill and Swenson 1994). Many studies emphasized the positive effect of information technology usage by salespeople on their communication performance and ability to propose relevant solutions to customers’ problems (Hunter and Perreault 2007; Rice and Blair 1984; Sproull and Kiesler 1986). For example, technology based sales presentations bring more interactivity and participatory exchange with customers that enable comparisons and relevant positioning of product offer (Ahearne et al. 2008, Khandpur and Wevers 1998). Ahearne et al. (2008) found a positive effect of SFA on sales presentation quality and adaptive selling behaviors. These advantages provided by offered applications are likely to increase sales teams’ productivity and strengthen customer relationships.

On the other side CRM/SFA solutions lead to a better efficiency in terms of selling task execution. This contribution is valuable since one of the main challenges in sales is the management of effort allocation and time. In fact, the automation of many manual and non directly sales-related tasks like administrative or support ones (contract generation, report establishment,….) make salespeople more available for other value creating activities like sales calls (Rivers and Dart 1999, Ahearne et al. 2005; Wedell and Hempeck 1987). As an information system, CRM offers many capabilities related to information gathering, processing and diffusion. For this reason, sales force that uses CRM applications is able to access and explore market and customer data in order to better qualify leads (Jayachandran et al. 2005) and focus on critical elements that shorten sales cycle and maximize value through cross-selling and up-selling proposals (Hill 1998). In addition to that, this process is likely to facilitate the identification of customers with less generated value.
Conceptual framework

Salesperson competence

Competence refers to the customer’s perception that a salesperson is knowledgeable in important areas such as specific customer needs, product knowledge, industry trends, and competitive products. In their study, Behrman and Perreault (1982) identified two critical knowledge areas: technical or product knowledge and market knowledge. The first one refers to technical aspects and usage situations and the second one is related to the industry, competitors and trends (Narver et Slater 1990). However, customer knowledge is another dimension of salesperson knowledge that should be considered. According to many authors, it pertains to customer needs anticipation and understanding (Day 1994; Huber 1991; Sinkula 1994). This dimension is crucial since it’s directly related to customer satisfaction and value creation (Buehrer et al. 2005). Therefore, the degree of sales force competence represents a key factor for competitive advantage especially to face a changing demand and environment. Different authors demonstrated the importance of knowledge for sales effectiveness (Behrman et Perreault 1982; Sujan et al. 1986; Weitz 1978; Weitz et al. 1986; Leigh et McGraw 1989).

Knowledge constitution is the result of a process of information search, collection, storage and dissemination about the products and the market (Weitz et al. 1986). Given its strategic position in managing relationships with customers and external environment, sales force role relies on information processing and diffusion abilities (Ingram et al. 1997). For this reason, companies and especially management should enhance and facilitate sales representatives’ access to market data to ensure their effectiveness (Sujan et al. 1988). Therefore, CRM initiatives with the set of applications related to information management is likely to enable this processes within the sales force (Fletcher 1990; Glazer 1991; Huber 1991; Marshall, Moncrief and Lassk 1999). In fact, CRM/SFA solutions’ architecture and content allow salespeople to access valuable information and data to leverage their market and customer intelligence. In addition to that, CRM systems are based and built on the principle of unique, centralized and largely accessible database covering purchase records, customer information and preferences, competitors’ offer, previous orders, etc). To be effective, stored data are updated on regular and progressive rhythm by marketing and sales teams and easily shared through different remote executions. The study conducted by Ahearne et al. (2008) found positive correlations between SFA/IT usage and market and technical knowledge.

Based on the previous considerations, we hypothesize a positive effect of CRM usage on the three levels of salesperson knowledge: product, market and customer.

Customer decision making

In general, the process of decision making refers to a set of different steps related to problem formulation, objective setting and finally identification and generation of alternative solutions (Cyert and March 1963; Mintzberg, Raisinghani and Theoret 1976). Sharma and Pillai (1996) indicate that for customers, decision making process is based on information requirements, decision-making time, people involved in buying decisions, and buying criteria. As a major communication medium and brand representative, the sales force plays a determinant role in accompanying and optimizing customers decision making process. Companies have usually preference for some specific approaches to adopt during customer interactions to ensure sales success and customer satisfaction (Szymanski 1988). The challenge for the sales force is then
more about distinctive offer and value proposition. To do so, salespeople should be provided with updated and critical information to show their capacity of meeting expectations and integrating customer’s constraints (Atkinson and Koprowski 2006).

Stringfellow et al. (2004) underline the necessity of aligning three critical levers to build a successful CRM: insight into customer decision-making, information about customers, and information-processing capability. For example, data base marketing allows to continuously sharpen customers’ segmentation through better profiling. Moreover, accessing customer data base helps salespeople in having enough information about customer profile and preferences to adjust behavior and offer before and during the sales call. IT capacities facilitate the adaptation of sales presentations structure and content according to specific customers’ needs. Moreover, CRM usage influences the way of conveying information to customers in timely, accurate and adapted manner. At this level, we identify two critical components in the customer decision process: decision making assistance and empathy. Concerning decision making assistance, the main challenge for customers remains risk monitoring and reduction to ensure decision quality. Customer uncertainty may be related to different factors: the amount of information available, decision consequences forecast and trust in decisions (Achrol and Stern 1988). The improvement of salesperson knowledge (informing the customer), personal attributes (proposed alternatives) and behaviors (customized information and assistance in problem solving) through CRM is likely to help customer in the decision making process.

On the other hand, the contribution of the sales force in customer’s decision making process relies also on its ability to adopt customer’s perspective. This refers to the concept of salesperson empathy which is the capacity of identifying and understanding customer perspective (Marks 1988). Empathy has been shown to be positively correlated to sales efficacy (Main 1985). When manifested by the salesperson, empathy is perceived by the customer as a similarity or convergence factor and contributes then to decision making (Pilling and Eroglu 1994). Expressing empathy by the salesperson relies on competence, personal attributes and behaviors to convince the customer of his or her capacity to understand the customer specific situation and to provide the best suited solutions. Consequently, the improved salesperson knowledge thanks to CRM will positively impact customer decision making.

Given the mentioned elements, sales force improved knowledge is supposed to have a positive effect on customer decision making.

Figure 1. Conceptual model of the impact of CRM usage on customer decision making
Methodology

Empirical study

To test the proposed model, an empirical survey has been conducted. We collected data through an online survey questionnaire administrated among a sample of 280 customers from different industries like retailing, pharmaceutical, banking and insurance, etc and who are dealing with salespeople using CRM/SFA applications. 249 respondents have been kept after outliers’ removal from the database. 68 % of respondents know their referent salesperson for at least two years. To better apprehend variance, customers were asked to answer the questions by comparing and contrasting with a case of a sales representative who isn’t using CRM.

Measurement scales

We adapted measures from previous relevant studies when available or created them specifically for this research. All measures are multi-item and relied on five-point Likert scales (1: Strongly disagree, 5: Strongly agree). CRM usage has been measured on the basis of the scale adopted by Ahearne and Schillewaert (2000) with five items. This scale measures the usage and usage frequency of CRM applications, the integration of these applications to the different tasks and the analysis of information and market data. As far as, the salesperson competence is concerned, three scales have been adopted. Market knowledge scale contains three items (information about competitors, trends and events) and is inspired by the scale of Behrman and Perreault (1982) which has been reused by Ahearne and Schillewaert (2000). It’s the same case for the technical/product knowledge (product characteristics and functionalities, offer trends and innovations, company’s production and technical developments). The scale concerning customer knowledge has been adapted and structured with four items based on the study of Schell (2003) (customer’s firm, customer’s firm industry, customer’s constraints, customer’s needs). The scale of customer decision assistance is adapted from the SOCO scale of Michaels and Day (1985) replicated within customers. It contains four items that refer to problem solving, decision quality and offer adaptation. Finally, we relied on three items scale for empathy relied on an adaptation of SOCO scale and Schell (2003) study (help in reaching buying’s objectives, sensitivity to costs reduction and taking into consideration the satisfaction of the buyer’s customers). Reliability of individual items is assessed by examining the loadings of the items with their respective latent construct; loadings of less than .5 may represent poorly worded or inappropriate items and thus should be eliminated from the model (Hulland 1999). As the table reports, all constructs have acceptable levels of reliability, with the composite reliability coefficients ranging from .72 to .81 for each construct, exceeding the .7 recommended threshold (Nunnally 1978). Results related to the SEM confirmatory scales analysis are also provided.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Reliability Cronbach’s alpha</th>
<th>KMO index</th>
<th>Explained Variance</th>
<th>Model fit RMSEA</th>
<th>Reliability Jöreskog’s Rhô</th>
<th>Convergent validity Rhô</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM usage</td>
<td>.81</td>
<td>.818</td>
<td>58 %</td>
<td>.071</td>
<td>.82</td>
<td>.48</td>
</tr>
<tr>
<td>Market knowledge</td>
<td>.80</td>
<td>.684</td>
<td>71 %</td>
<td>.029</td>
<td>.80</td>
<td>.59</td>
</tr>
<tr>
<td>Product knowledge</td>
<td>.73</td>
<td>.673</td>
<td>65 %</td>
<td>.067</td>
<td>.73</td>
<td>.48</td>
</tr>
<tr>
<td>Customer knowledge</td>
<td>.75</td>
<td>.743</td>
<td>57 %</td>
<td>.049</td>
<td>.48</td>
<td>.19</td>
</tr>
<tr>
<td>Customer decision assistance</td>
<td>.80</td>
<td>.789</td>
<td>62 %</td>
<td>.056</td>
<td>.80</td>
<td>.51</td>
</tr>
<tr>
<td>Empathy</td>
<td>.72</td>
<td>.666</td>
<td>64 %</td>
<td>.040</td>
<td>.73</td>
<td>.48</td>
</tr>
</tbody>
</table>
Analysis and discussion

The results indicate a positive effect of CRM applications usage on salesperson competence. CRM is significantly related to market knowledge (H1; \( \beta=0.408, R^2=0.163, p<0.05 \)). Furthermore, CRM influences positively product knowledge (H2; \( \beta=0.322, R^2=0.1, p<0.05 \)) and customer knowledge (H3; \( \beta=0.388, R^2=0.147, p<0.05 \)). Concerning the effect of salesperson’s knowledge on customer’s decision assistance (R²=0.218). The hypothesis related to market knowledge was not supported (H4; \( \beta=-0.162, p<0.05 \)). Product knowledge has a positive and significant effect on customer decision assistance (H5; \( \beta=0.460, p<0.05 \)). It’s the same case for customer knowledge (H6; \( \beta=0.137, p<0.05 \)). Then, only product and customer knowledge showed positive and significant influence on customer decision assistance. The test of hypothesized effects of salesperson knowledge levels on empathy (R²=0.219) indicate: (1) the positive but non-significant effect of market knowledge on empathy (H7; \( \beta=0.015, p=0.814 \)), (2) the positive and significant effect of product (H8; \( \beta=0.388, p<0.05 \)), and customer knowledge (H9; \( \beta=0.156, p<0.05 \)), on empathy.

According to our findings, the usage of CRM applications influences positively salespeople’s perceived knowledge on three levels: market, product and customer (see Fig.2). Given the customer’s perspective adopted in this research, sales force’s knowledge improvement is shown through interactions with the customer, especially during the sales call but also during critical moments or “moments of truth” when the salesperson is requested for specific needs, advice or information. The way sales presentations are structured and tailored, the process of argumentation and the salesperson demonstrated professionalism enable customers to notice this improvement. In fact, CRM database capacities facilitate access to timely and accurate information when needed. The salesperson will be also more knowledgeable about innovations and customer records (procurement history, motives and preferences) to adapt the selling proposition. These results indicate also the importance of customer knowledge in addition to the product and market one to establish relationships with added value. Thanks to segmentation and a better profiling of leads, sales force demonstrates a better expertise in mastering customer specific situation and constraints.

Also, the perceived impact of CRM usage on salesperson different knowledge levels is the consequence of the progressive balanced information sourcing adopted by the salesperson. In fact, since the sales force has access to the centralized CRM data base and to different dedicated sales applications, then each salesperson choose to use the information he or she considers as necessary to prepare the call, solve the customer’s problem or close the deal.
Furthermore, through different interactions and call visits, salespeople memorize some information that they don’t need to recheck. These statements can also justify the differences noticed in terms of explained variance of knowledge levels. In the main stream, the way the company implements CRM, communicates on the projects objectives and expected benefits and chooses to align performance evaluation criteria will drive salespeople behaviors and usage levels of the applications. Finally, the differences in terms of CRM information usage may be related to the quality, updating and exhaustiveness of database as perceived by sales force. This relies mainly on the marketing and sales teams efforts to share and enrich the database.

As far as the impact of the improved sales force knowledge, the findings confirm only the role of product and customer knowledge on customer decision assistance. This result could be explained by different reasons. First, during buying decision process, customers can be more interested in the ability of the salesperson to master his/her offer and his or her capacity of adapting it to the specific needs and constraints of the customer. Market knowledge is generally a domain that the customer knows and that can also be mentioned in other different sales presentations. Second, the non significative impact of market knowledge can be explained by the approach adopted by salespeople that is sometimes more focusing on the offer and the willingness of manifesting an expertise in terms of customer situation and record. Finally, this result can be related to the maturity level of database content or usage that sometimes doesn’t integrate yet market aspects. In addition to that, results demonstrate that the positive effect on empathy is only driven by product and customer knowledge. This result could seem logical in sense that empathy drivers and the scale’s items refer to a general ability of the salesperson to put him or herself in the customer situation. Then, we can imagine that this ability perception will be strongly related to the knowledge levels that are the closest to the customer.

Research contributions and limitations

The current article helps understanding how CRM usage by sales force may be beneficial to the customer who represents a major target of such investment. Also, the approach of this research is totally in line with the stream focusing on CRM as relationship leveraging knowledge process and with many academic and managerial calls for more customer centricity. In addition to that, this research adopts the customer’s perspective which is valuable since it reflects an objective and relevant vision.

From theoretical standpoint, our findings results provide insights into underresearched and intangible facets of the return on investment on CRM/SFA. In particular, we show how the information properties and cognitive capacities result in relational outcomes. The results confirmed the positive impact of CRM usage on salesperson perceived knowledge. This indicates an effective approach of measuring ROI especially while some companies are nowadays drown in data and don’t manage to reap profit from it. Also, the approach consisting of linking salespeople knowledge to customer decision making integrate the whole process and enables to overpass the simplistic and limited productivity objective associated to CRM/SFA.

On the managerial side, our findings demonstrate the extent to which the usage of CRM by salespeople improve their expertise and help customers to make effective decisions. This approach will lead managers to address the issue of CRM data storage and quality. Also, the developed model provides an insight to managers on the way CRM benefits are realized in
direct and indirect manner. In fact, investment in CRM software packages cannot be justified if it doesn’t lead to new customer value propositions that increase share, turnover and profitability. Then, investments in CRM/SFA might be better justified and channeled in a profitable way that reduces potential risk of misfitting customer needs and lead to satisfaction. In fact, firms should move toward an approach of CRM that involves the customers -the central focus of all marketing and the key to gain competitive advantage- by considering the relational consequences. Finally, if companies communicate clearly on this focus, they might improve the acceptance and usage of CRM applications by salespeople.

Future research should extend the model by testing the impact of the improvement of customer decision making on key variables like satisfaction, loyalty, commitment, or predisposition to recommend the supplier. To reduce the bias of variance common source, model test should consider a dyadic approach that combines both perspectives: salespeople and customers ones.
References


