



CRM and the bottom line: Do all CRM dimensions affect firm performance?



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ABSTRACT

Successful firms often endeavour to assure competitive advantages through the relationships with their customers. Consequently, customer relationship management (CRM) has become of pivotal importance to many firms. This study investigates the effect of each CRM dimension on the performance of hotels. We found that in general hotels should aim to improve CRM capabilities because it has a positive effect on firm performance. Contrary to some previous assumptions, CRM investments did not result in positive performance. These findings are important as hotels strive to allocate resources to improve relationships with customers.

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1. Introduction

Successful firms often strive for competitive advantages through the relationships with their customers, and customer relationship management (CRM) has become of pivotal importance to many firms. CRM focuses on establishing, maintaining and enhancing long-term associations with customers (Srivastava et al., 1999). Many firms have implemented CRM technology in the hope that it will enable them to better target profitable segments, improve customer service, enhance customer retention and ultimately increase the firm's financial performance (Peppers and Dorf, 1999).

Motivated, in part, by the significance of CRM to firms, several studies have been carried out. The findings suggest that the implementation of CRM has a considerable influence on several customer-related outcomes (Gustafsson et al., 2005; Wu and Lu, 2012). More specifically, CRM is reported to affect customer satisfaction (Boulding et al., 2005), customer retention (e.g., Yim et al., 2004) and customer knowledge (Mithas et al., 2005).

However, practitioners have voiced concerns that implementing CRM sometimes has no or even a negative effect on a firm's performance (Homburg et al., 2007). While the impact of CRM on customer outcomes has been extensively studied, its impact on firm performance has not received sufficient attention (Kumar,

2008). Krasnikov et al. (2009) responded to this call and investigated whether publicity regarding CRM affects firm performance. The study by Krasnikov and colleagues (2009) provides valuable insights into whether CRM in general is an efficient use of resources. However, the question that remains is whether the dimensions of CRM all affect firm performance or whether perhaps differential effects on firm performance may contribute to explaining why implementing CRM sometimes helps and other times hurts firm performance. In light of this gap, Krasnikov et al. (2009, p. 74) call for research investigating CRM on firm performance "in a finer-grained manner".

Our research responds to this gap by investigating the linkage between CRM and its dimensions and firm performance with evaluative data obtained from managers and financial data from a longitudinal, archival data set. Thus, this study aims to examine whether and how each CRM dimension influences firm performance. The study is set in the hotel industry and uses both primary and secondary data sets that respectively capture managers' CRM evaluations and financial data in the hotel industry. This industry was chosen due to recent calls (Reimann et al., 2010, p. 340) for researchers to investigate how CRM is being implemented in service industries. We collected data on the different CRM dimensions using a survey conducted on Slovenian hotels. We measured hotel performance using the stochastic frontier methodology. This is in line with other related CRM studies (Krasnikov et al., 2009). The advantage of the stochastic frontier method is that it allows multiple inputs and outputs to be included when measuring hotel performance. Other simple performance metrics such as ROA or RevPar have been criticised as being partial indicators since they do

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not reflect the multiple input/output nature of the hotel industry (Assaf et al., 2012).

The article proceeds as follows: first, we review the relevant literature and develop the hypotheses. We then describe the methods to investigate these. After that, we report the results and, finally, we discuss the results and highlight their implications for theory and practice.

2. Literature review and hypothesis development

Existing research suggests that firms apply CRM to facilitate communication with customers, provide timely feedback, analyse customer information, and provide customised offerings (Day, 2003). Research indicates that firms which have stronger relationships with customers perform better overall (e.g., Bolton, 1998; Reinartz et al., 2005). For example, such a firm is able to identify more profitable customers, customise the solution to an individual customer and, in turn, have more loyal customers. Technology is thought to be the key to the successful management of customer relationships. The technology dimension of CRM includes front-office applications supporting firm divisions such as marketing and sales, along with back-office applications that help analyse the data (Greenberg, 2001; Jayachandran et al., 2005; Srinivasan and Moorman, 2005).

The front-office elements facilitate the flow of information with customers. In this way, firms that implement CRM aim to facilitate the seamless dissemination of customer knowledge throughout the organisation. The back-office elements help with data-mining and thus with identifying and analysing customers' needs and actions. Data from multiple touch-points may be integrated to facilitate improved customer knowledge.

CRM has been defined in a number of ways and several dimensions have been identified. For example, Payne and Frow (2005) define CRM in terms of three technology perspectives on a continuum: tactically, wide-ranging, and customer-centric. This view also illustrates an evolution in the way CRM has been viewed, moving from a technological enabler of simple automated processes to a comprehensive approach to managing customer relationships (Payne and Frow, 2005). Accordingly, CRM is increasingly regarded as a strategic process, which involves a firm and its customers (Jayachandran et al., 2005; Parvatijar and Sheth, 2000).

Based on an extensive review of the literature, Srinivasan and Moorman (2005) define CRM in terms of both the firm's CRM system investments and its CRM capabilities. More specifically, the firm's CRM capabilities are composed of three dimensions: information generation, information dissemination, and responsiveness; while CRM system investments have two dimensions: CRM technology investments and CRM technology expenses relative to competitors.

Verhoef (2003) investigated the implementation of CRM for its effects on perceptual performance. The study found that CRM positively influences customer relationships (customer share and customer retention). While this finding was important, the conclusions which can be drawn are limited by the particular operationalisation of CRM (loyalty programme and direct mailings were, for example, seen as indicative of a CRM programme). In response to such limitations, Jayachandran et al. (2005) and Srinivasan and Moorman (2005) made important contributions by investigating CRM as a multi-dimensional construct and linking these to customer outcomes. This approach allowed for a more detailed and richer understanding of the CRM – customer outcomes relationship. The authors found that certain CRM dimensions (e.g., customer relationship orientation, customer-centric management systems) positively impact customer relationship performance, while there is no relationship between the other CRM dimensions (e.g., technology use) and customer relationship performance.

While academics have investigated the impact of CRM implementation on intermediate metrics (e.g., customer satisfaction), its impact on firm profitability has not received sufficient attention (Kumar, 2008). As such, while we have a great deal of insight into the CRM – customer outcomes relationship, there is still a limited understanding of whether and how CRM is an efficient use of a firm's resources. Practitioners have also voiced concerns that CRM is a complex issue and its implementation does not always lead to improved performance (Homburg et al., 2007). For instance, the Gartner-Group (2003) investigated the impact of CRM projects on firm performance and found that about 70% of the projects resulted in either losses or had no effect on firm performance.

One important study investigated whether the use of CRM technology affects firm performance (Krasnikov et al., 2009). Operationalising CRM by using announcements from firm vendors and clients to create a dummy variable (0: If the researchers found an announcement regarding CRM in the trade press; 1: If no announcement regarding CRM was found). Krasnikov and colleagues (2009) found that CRM negatively affects cost efficiency and positively affects profit efficiency. A limitation of the study is that it measured CRM with a single, indirect indicator and thus does not provide a link between the CRM dimensions and firm performance. Given that researchers (Jayachandran et al., 2005; Srinivasan and Moorman, 2005) have found that the impact on customer outcomes varies from one CRM dimension to another, the question is whether the impact on firm performance also varies from one CRM dimension to the next? If it is vastly better to invest in some CRM dimensions rather than other dimensions, perhaps this can help explain why the experience of so many firms is that investments in CRM are wasted or even hurt the bottom-line while other firms reap significant financial benefits from implementing CRM. Krasnikov et al. (2009) emphasise this gap and call for research investigating the relationship between CRM dimensions and firm performance. Specifically, they urge researchers to examine the impact of the CRM dimensions on firm performance rather than using a single indicator and thereby allowing for research that investigates "CRM in a finer-grained manner" (Krasnikov et al., 2009, p. 74).

Research on CRM is also short on research that uses longitudinal approaches. Reimann et al. (2010, p. 340) thus call for research efforts that "examine the performance impact of CRM longitudinally". Moreover, prior studies are yet to be complemented with a longitudinal analysis that links information from managers about the dimensions of CRM to firm performance measured by secondary data. Indeed, Becker et al. (2009, p. 213) call for research with a "focus on analysing CRM from a longitudinal perspective rather than a cross-sectional one". Krasnikov and colleagues (2009) further call for research which investigates managers' evaluations and links them to firm performance and states that "subjective evaluations of managers may be critical to capture the multi-faceted nature of CRM implementation. Employing subjective data will enable a detailed assessment of the effects of CRM on firm performance". Fig. 1 illustrates that researchers first investigated the effect of simple measures of CRM on consumer outcome, and then focus moved to investigating more complex expressions of CRM on consumer outcomes. Krasnikov et al. (2009) later investigated the effect of a single indicator of CRM on an advanced measure of firm performance. The present research builds on these studies by investigating a complex and multi-dimensional measure of CRM on an advanced measure of firm performance.

Fig. 2 illustrates our conceptual framework. The links between these five CRM dimensions and firm performance (based on both inputs and outputs) have yet to be uncovered (Krasnikov et al., 2009). The framework consists of CRM capabilities and CRM system investments. CRM capabilities have three dimensions: The firm's ability to generate and disseminate information, as well as its ability to respond to changes in the market. CRM system investment

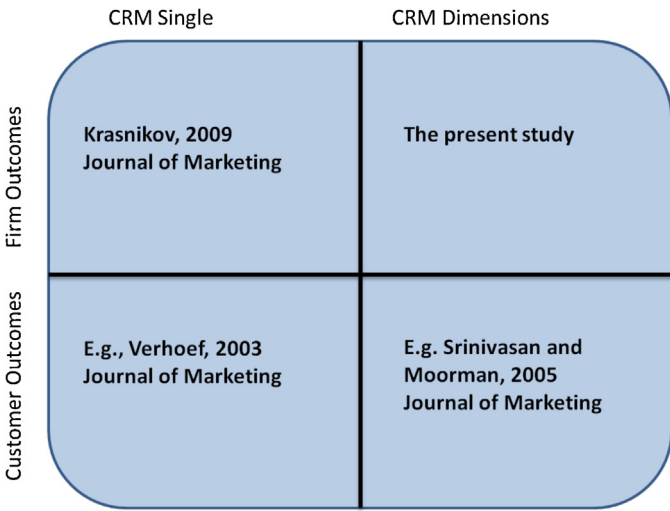


Fig. 1. CRM conceptualisations and existing research.

refers to the extent to which the firm invest in CRM systems, both in isolation and relative to competing firms.

Firms which are more customer-focused have more loyal customers and perform better (Gay and Salaman, 1992). This has long been the prevailing truth in marketing. A customer focus leads the firm to emphasise garnering, sharing and responding to customer information. Research (Jayachandran et al., 2005) has also found that a higher perceptual firm performance (e.g. customer relationship performance) is linked with a greater ability to generate, disseminate and respond to customer information. However, some academics argue that becoming too customer-focused may harm firm performance. Authors (e.g., Christensen and Bower, 1996; Hamel and Prahalad, 1991) argue that very customer-centric firms

risk inertia because they tend to be reactive rather than proactive. Anecdotal evidence suggests that sometimes the best strategy may be to ignore the customers because they often do not know what they really want and do not know what is possible (Voss and Voss, 2000). Reinartz et al. (2004) found conflicting evidence regarding these CRM dimensions (information generation, dissemination and response). Aligning the organisation to be more CRM-compatible, for example, had no significant relationship with perceptual firm performance in their study.

Some researchers argue that CRM technology investments lead to a superior performance (Krasnikov et al., 2009). Krasnikov et al. (2009) measured firms' CRM efforts by tracking announcements in the media regarding the purchase of CRM systems. They found that firms investing more in CRM technology enjoy a higher performance. Some firms view CRM as a mindset which should permeate the firm, whereas others see CRM more narrowly as an investment in technology and software (Reinartz et al., 2004). For example, Rigby and Leddinham (2004) suggest that CRM should be viewed much more narrowly. In fact, they argue that CRM efforts may fail because they are used too broadly throughout the firm. They contend that CRM technology should only be targeted to highly specific areas where it is needed. Higher CRM technology expenditures than the absolute bare minimum required, may constitute an inefficient use of the firm's resources. Reinartz et al. (2004) found that CRM technology investments mostly had no significant influence on perceptual firm performance, with the exception that CRM technology investments positively moderated the performance implications of terminating customer relationships (Reinartz et al., 2004).

The present article represents an initial investigation of the link between the dimensions of CRM and an advanced measure of firm performance. While some counter-evidence exists, as shown above the arguments in the literature mostly suggest that all five CRM facets will help enhance a firm's performance. Based on this

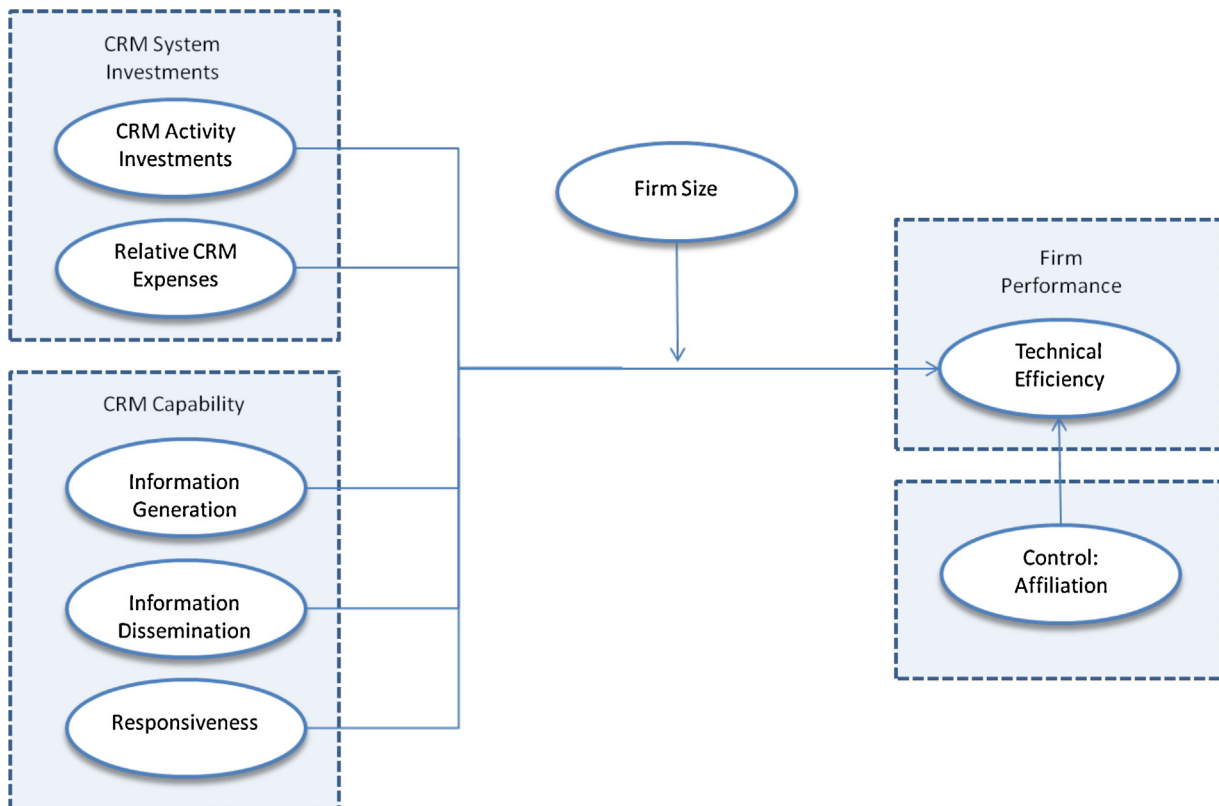


Fig. 2. Model of the relationship between firm size, the five CRM dimensions and firm performance.

discussion, we therefore put forward five hypotheses arguing that each capability and each investment and expenses CRM facet is positively related to firm performance. These are the hypotheses we propose with regard to the effect of CRM system investments, relative technology expenses, information generation, information dissemination, and responsiveness on firm performance:

Hypothesis 1. Information generation relates positively to firm performance.

Hypothesis 2. Information dissemination relates positively to firm performance.

Hypothesis 3. Responsiveness relates positively to firm performance.

Hypothesis 4. A firm's CRM system activity investments relate positively to firm performance.

Hypothesis 5. Relative CRM expenses relate positively to firm performance.

In addition, we wish to investigate the moderating influence of the size of a hotel on the relationship between the five CRM facets and firm performance. Mithas et al. (2005) suggested that CRM investments in general may affect firm performance. They argued that organisational inertia may negatively affect the ability to benefit from CRM investments. On the other hand, they suggest larger firms may have a greater potential to leverage slack resources. In a recent study (Ko et al., 2008), firm size was shown to relate positively to the adoption of CRM investments. The study reinforced previous findings (Mansfield et al., 1971; Swanson, 1994; Whately, 1985) asserting that the size of a firm positively influences the adoption of innovations in several industries. Large firms tend to be quicker than smaller firms to adopt new technologies and management ideas because they have better educated managers, more resources and strong infrastructures (Thong, 1999).

However, while research suggests that larger firms are more likely to adopt CRM and also to implement CRM technologies, no study has yet investigated whether small or large firms have an advantage when it comes to transforming the adoption of CRM into actual firm performance. Larger firms may be better able to take advantage of CRM whereas smaller firms may already (by their lack of size) be close to their customers. This may also explain why larger firms are more likely than smaller firms to implement CRM. Thus, the present study investigates the following hypothesis:

Hypothesis 6. Firm size positively moderates the relationship between each CRM facet and firm performance. Specifically, firm size positively moderates the relationship between firm performance and: (a) information generation; (b) information dissemination; (c) responsiveness; (d) CRM system activity investments; and (e) relative CRM expenses.

3. Hypothesis testing

We tested the hypotheses on a sample of Slovenian hotels. Below we explain the data collection and hypotheses testing processes. Overall, we followed a two-step procedure to test our hypotheses. In the first stage, we estimated performance using the technical efficiency concept. In the second stage, we estimated the impact of the different CRM dimensions on technical efficiency.

4. Variables and data

Slovenia is a small country with only 2 million inhabitants. Slovenia received 3.2 million visitors and 9.4 million overnight stays in 2011 (SORS, 2011). Tourism is an important sector of the national economy with international tourism receipts of USD 2.5

billion and representing 12% of Slovenian GDP directly and indirectly (WTTC, 2010).

The data for this study come from primary and secondary data sources. The primary data included variables on CRM system investments and capabilities. For the purpose of this study we developed a quantitative measurement instrument – a questionnaire. The survey was on-line and addressed to executive marketing or sales managers. Besides the on-line questionnaire, we made a few telephone reminder calls in order to improve the response rate. 153 hotel companies were included in the research and 50 of them responded, so the response rate was at 32.7%. The data collection took place between June and September 2011 and covered the period 2007–2010. We ended up with a balanced panel data set of 150 observations. The majority of hotels (24 hotels) are four-star hotels, while three hotels are five-star, 21 are three-star and the remaining two are one- or two-star hotels.

The secondary data cover financial statements for the companies that responded to the primary research. Data were available from the Agency of the Republic of Slovenia for Public Legal Records and Related Services. In 2011, the hotels in our sample generated close to 37% of total industry sales (ARSPLRS, 2012).

4.1. CRM dimensions

The CRM activity investments dimension was measured by six items asking about the level of investments in six different areas. We measured relative CRM expenses by two items asking about a hotel's CRM expenses in relation to acquiring and retaining customers. The three CRM capabilities were also measured by Likert scales ranging from 1 to 7. Information generation was measured by three items such as “in this business, we do and/or buy a lot of market research”. Information dissemination was measured by four items with statements such as “we have frequent interdepartmental meetings to discuss market trends”. Responsiveness was measured by seven items with statements such as “even if we came up with a great marketing plan we probably would not be able to implement it in a timely fashion”. These scales were all taken from Srinivasan and Moorman (2005). We also controlled for affiliation. This was modelled as a dummy variable describing whether a hotel is affiliated with a chain or is a stand-alone hotel.

4.2. Hotel performance

As mentioned, we measured hotel performance in this study using the stochastic frontier method. We considered alternative performance metrics such as sales or profits. However, merely looking at whether CRM affects sales or profits can be misleading. For example, when firms customise they may sacrifice some scale advantages and therefore a performance measure, which includes both inputs and outputs, is a superior firm performance measure. Technical efficiency (TE) is a performance measure that addresses this issue by combining multiple inputs and outputs. Over the last decade, TE has been used in an increasing number of studies to measure firm performance. It has also been used to measure the performance of hotel firms, restaurants and other related service firms (e.g. Anderson et al., 1999; Anderson and Fok, 1999; Hwang and Chang, 2003; Barros and Alves, 2004; Barros, 2005, 2006; Sanjeev, 2007). In tourism and hospitality, TE has been used to measure performance at both the firm and industry level (Bosetti and Locatelli, 2006; Cracolici et al., 2006; Wober and Fesenmaier, 2004; Peypoch, 2007). It reflects the ability of a firm to maximise its outputs with a given level of inputs.

Different methods have been proposed in the literature to measure TE. The two most common are Data Envelopment Analysis and Stochastic Frontier Analysis. Most studies use the DEA method (Hwang and Chang, 2003; Barros and Dieke, 2008; Assaf, 2011;

Table 1
Descriptive statistics of input and outputs variables.

Variable	Mean	SD
Total revenue	8,246,779	24,556,056
Number of employees	134	285
Cost of material and services	4,092,382	12,003,297
Other operational costs	4,034,364	14,528,659

Assaf et al., 2011). Some studies using the SF method include Anderson et al. (1999), Anderson and Fok (1999), Barros (2006), and Chen (2007). In this study, we use the SF method as it is generally more suitable for panel data. In contrast to DEA, it also accounts for measurement error in the data. As the method is well established in the hotel literature, we only provide an overview of the SF specification.

To obtain measures of technical efficiency, we estimate here a stochastic frontier production function. To illustrate, we know that in the case of a single output, Y , and multiple inputs, $X \in R_+^k$, the technology can be described by the well-known production function $Y=f(X)$. In fact, the production set in this case is $P(X, Y) = \{(X \in R_+^k, Y \geq 0) : Y \leq f(X)\}$ and provides all technically feasible combinations of inputs X , and output Y . Therefore, the production function $f(X)$ provides the maximum feasible amount of output that can be produced using given inputs $X \in R_+^k$. Following this, the SF model can be expressed as:

$$y_{it} = x'_{it}\beta + v_{it} - u_{it}, \quad i = 1, \dots, n, \quad t = 1, \dots, T, \quad (1)$$

where y_{it} denotes the dependent variable, x_{it} is a $k \times 1$ vector of input and explanatory variables, and β_i is a $k \times 1$ vector of parameters. Here, v_{it} , u_{it} denote measurement error and technical inefficiency, respectively. The measurement of technical efficiency (TE) can be obtained by taking $TE = \exp(-u_{it})$, where u_{it} represent technical inefficiency. These scores range between 0 and 1.

To estimate (1) in our context and hence the technical efficiency estimates, we use total hotel revenue (rooms and other services) as an output and use the following three inputs: number of employees, cost of material and services, and other operational costs. All these variables are well established in the literature and have been used in previous studies on hotels and other related industries. Table 1 summarises the descriptive statistics of input and output variables in our sample.

5. Results

After estimating technical efficiency, the next step in the analysis is to estimate the impact of each CRM dimension on hotel performance (i.e. technical efficiency). For this purpose, we estimate the following truncated regression model:

$$Perfo_i = \beta_0 + \beta_1 \times CRMInv_i + \beta_2 \times CRMExp_i + \beta_3 InfoGen_i + \beta_4 InfoDiss_i + \beta_5 Resp_i + \beta_6 Size_i + \varepsilon_i$$

where $Perfo_i$ is hotel performance (i.e. technical efficiency), $CRMInv_i$ stands for CRM investments, $CRMExp_i$ stands for CRM expenses, $InfoDiss_i$ stands for information dissemination, $Resp_i$ stands for responsiveness, $Size_i$ is hotel size, and ε_i is an error term. It is important to note that as our performance scores range only between 0 and 1 it is recommended to use a truncated regression as it accounts for truncated data. The OLS regression for instance can estimate scores greater than one.

The results are presented in Table 2. They show that information generation relates positively to firm performance. This confirms Hypothesis 1. For Hypothesis 2 we suggested that information dissemination positively affects firm performance. The results show that increased information dissemination does indeed improve firm performance, thus confirming Hypothesis 2. Hypothesis 3 is

Table 2
Results of the hypothesis testing.

	Coefficients	Standard error	t-Stat
Intercept	0.7530	0.1104	6.8182
InfoGen _i	0.0176	0.0081	2.1760
InfoDiss _i	0.0273	0.0076	3.6138
Resp _i	0.0172	0.0060	2.8825
CRMInv _i	-0.0040	0.0039	-1.0071
CRMExp _i	-0.0020	0.0150	-0.1308
Size _i	-0.0291	0.1348	-0.2156
InfoGen _i × Size _i	-0.0100	0.0097	-1.0363
InfoDiss _i × Size _i	-0.0246	0.0091	-2.7158
Resp _i × Size _i	-0.0192	0.0070	-2.7217
CRMInv _i × Size _i	-0.0042	0.0047	-0.8805
CRMExp _i × Size _i	0.0121	0.0174	0.6957
Affiliation _i	-0.0516	0.0317	-1.6262

confirmed since the relationship between responsiveness and performance is significant. Hypothesis 4 states that firms with higher CRM system investments perform better than firms with lower CRM system investments. This could not be confirmed as the relationship was insignificant. Finally, Hypothesis 5 states that CRM expenses relative to competitors relates positively to firm performance. However, this could not be confirmed either.

When testing for the moderating effects of firm size, the results show that Hypothesis 6A, D, and E shows insignificant relationships among the variables. The results relating to Hypothesis 6B show that firm size negatively moderates the relationship between information dissemination and firm performance. Firm size was also found to negatively moderate the relationship between responsiveness and firm performance. The following section discusses these results in more detail.

6. Implications for theory and practice

In this study, our aim was to investigate the effects on firm performance of five CRM dimensions. We put forward hypotheses regarding the effects of these five CRM dimensions on firm value. In general, the literature which has linked these dimensions to softer consumer outcomes indicates that all five dimensions are positively related to firm performance. In the present context, our results show that the CRM dimensions have highly diverse effects on firm performance.

As expected, we found that firms with higher levels of information generation perform better than firms with lower levels of information generation. This is the first investigation of the effect of information generation on firm performance (taking into account both firm inputs and outputs) and the result confirms results from studies linking it to perceptual outcomes (Srinivasan and Moorman, 2005). Not only does information generation have positive customer outcomes (such as customer satisfaction and loyalty), but it turns out that information generation is also an efficient use of the firm's resources.

Information dissemination throughout the firm is believed to be important for firms to reap the full benefits of the customer knowledge held by individuals within the firm. Important information should be disseminated within the organisation so that it reaches all parts of the firm that would find it useful. Even individuals or parts of a firm that cannot directly make use of the information benefit from knowing important customer information because it allows them to better understand the reasons for the actions of other individuals or parts of the firm. The results show that firms with higher levels of information dissemination throughout the firm perform better than firms with lower levels of information dissemination. This confirms our hypothesis about this CRM facet, and contributes to the CRM literature by being the first time this facet has been shown to be an efficient use of firm resources.

The final CRM capability construct we tested was responsiveness. Responsiveness relates to how fast, coordinated and responsive the firm is to market changes. Greater responsiveness was found to lead to improved firm performance. This finding supports the assertion that hotels which are quick to respond to market changes also outperform hotels which are slower to respond to such changes.

We also investigated two CRM investment and expenses constructs. The results show that neither firm CRM system investments nor relative CRM expenses are related to firm performance. This is surprising since most CRM research assumes that investing in CRM benefits firm performance and CRM is often equated with CRM technology (Reinartz et al., 2004). However, some previous research (Bull, 2003; Corner and Hinton, 2002) was unable to confirm that CRM investments relate to a higher perceptual performance.

We also considered the role of firm size in moderating the effect of each CRM facet on firm performance. The results show that information dissemination has a weaker positive influence on firm performance for larger hotels than it does for smaller hotels. Thus, it is more important for smaller firms to have procedures in place for good information dissemination. The reason smaller firms gain more from having a more structured approach to information dissemination may be that such smaller firms more often than larger hotels do not have such procedures in place. The variance in information dissemination could therefore drive firm performance to a greater extent than it does in larger hotels where information dissemination may generally be more structured. These results show the importance of information dissemination for small and large firms, but also demonstrate that smaller hotels may more readily obtain a competitive advantage over their competitors by having good procedures in place to disseminate information.

Firm size also proved to significantly affect the relationship between responsiveness and hotel performance. The positive relationship between responsiveness and performance is stronger for large hotels and weaker for smaller hotels. The efficient use of committing to being responsive in hotels may be greater for larger hotels. One reason may be that smaller hotels may already do this because their size means they are never far from the customer. Therefore, putting procedures in place is more important for larger hotels. It would be interesting for future research to see if the difference between small and large firms can be confirmed in other similar settings such as other service industries, or even in retailing.

7. Conclusions

Overall, the results of our study support the view that CRM has the potential to benefit firms. However, when differentiating between CRM capability constructs and CRM investment and expenses constructs, it is important that merely investing in CRM may not improve firm performance. The essential issue is to develop CRM capabilities; especially those that allow the firm to generate and disseminate important customer information. This is one of the key implications managers should take from the present study. CRM investment sizes or expenses relative to the competitors do not guarantee (or even suggest) that the firm will perform better than a firm which spends less on CRM IT systems. Firms should allocate resources to build and support CRM capabilities.

Our study adds empirical weight to, and thereby reinforces, the assessment of Reinartz et al. (2004) and Ernest et al. (2011) that CRM is not simply about adopting the latest technology and software. Making CRM work for the firm is a more complex task which needs to focus on building the capabilities that allow the firm to implement processes which enhance the value of important customer information. Basing the firm's CRM strategy on

CRM technology is probably not the ideal way to handle customer information. Personal interaction with customers along with firm employees who manage customer relationships are likely to work better.

These results also show that studies which used CRM investments and expenses as a proxy for CRM may have been too pessimistic as to the potential of CRM to improve firm performance because CRM capabilities have a separate and positive effect on firm performance even though CRM investments and expenses do not.

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