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Why Invest in CRM Programs When So Many Appear to Fail?

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Abstract
The market enthusiasm generated around investment in CRM technology is in stark contrast to the nay saying by many academic and business commentators. Building on the resource-based view of the firm this study shows the human, technological and business capabilities required to effectively execute a CRM program. Further, the study demonstrates that CRM programs are most valuable when directing attention towards a proactive market orientation. Lastly, the study cautions that in seeking to compete through superior service, CRM programs must first be feasible and this requires a wider understanding of the structural and behavioural limits to performance.

Keywords
Customer relationship management, technology investment, IT capabilities, performance

INTRODUCTION
For years, managers have emphasised strategies designed to increase the size of their customer base, encourage brand switching and boost purchase frequency. However, markets in developed countries like Australia are often mature or at best growing slowly. This implies that there are fewer new customers over which companies compete and that strategies based on customer acquisition are increasingly difficult to meet. Further, it has been estimated that the cost of attracting new customers can be up to five times as much as the cost of serving existing ones efficiently to ensure that they stay with you (Reichheld 1996).

It should come as no surprise that vendors are quick to point out that by allocating resources to customer relationship management (CRM) programs, organisations in all sectors of industry, commerce and government can outperform their competition. A number of stellar examples come to mind: National Australia Bank in Australia, Otto Versand in Germany, Tesco in the UK, Travelocity.com, Capital One and Harrah’s Entertainment in the U.S. In each case, these companies have chosen to compete through superior service and customer relationships based largely on the CRM programs deployed.

However, the enthusiasm generated around CRM and a select concentration of “relationship winners” is in stark contrast to the nay saying of many business commentators. For example, research and advisory firm, the Gartner Group, claim that close to 50% of all CRM projects failed to meet expectations (The Australian, 8th July, 2003). Additionally, an InfoWorld survey of chief technology officers (2001) found that close to 30% of chief technology officers said that CRM was one of the most “over hyped” technologies they had seen. A follow up survey of IT executives found that 43 per cent of large companies that have deployed CRM still believe that it deserves the bad press. These commentaries highlight the frustration many executives experience as software glitches, poorly trained staff and disparate legacy systems continue to hinder effective deployment of CRM programs. Far from improving profits and cementing relationships, some companies find themselves in the worst case scenario where their CRM systems wind up alienating long-term customers and employees (Day 2002; Rigby, Reichheld et al. 2002).

So why invest in CRM technology and what, if anything is wrong with CRM programs? These questions provide the focus for this paper. The remaining sections set about testing a general framework of CRM performance, which explains why and through which mechanisms the adoption of a customer focussed strategy should lead to operational and economic advantage. The importance of these measures is examined using field interviews and a survey of 100 senior executives in Australia. Results reveal an adroit combination of human and technological capabilities is required to successfully execute a customer strategy. Further, it is shown that to be successful, CRM programs must be feasible and this requires a wider understanding of the structural and behavioural limits to organizational alignment. Perhaps most importantly, high performing companies are not overly concerned with reactive responses to expressed needs. Instead, they seek a proactive orientation that directs attention towards latent or unarticulated demand. Our analytical approach is further developed in subsequent sections where: (1) the paper is positioned within the wider literature on market orientation, CRM is defined and theoretically justified, (2) the model is developed and measures of performance, market orientation,
CRM capability and conversion feasibility justified, (3) the results from a partial least squares (PLS) estimation are reported and (4) the paper concludes with a discussion that represents new insight into the all important benefits of investment in CRM programs.

THEORETICAL BACKGROUND

Among the many things that managers do, nothing affects a company’s ultimate success or failure more fundamentally than the choice of strategic orientation and the ability to implement whatever needs to be done to execute the strategy (Thompson and Strickland 2001). In the strategy and marketing literature, scholars have long suggested that a customer centred strategy is fundamental to competitive advantage. A customer or market-oriented strategy implies that organizations should allocate resources to systematically gather and analyse customer and competitor information, to share this market knowledge, and then to use this knowledge to guide strategy recognition, understanding, creation, selection, implementation and modification (Hunt and Morgan 1995 p.11).

Despite the appeal to scholars in marketing, the fundamental assumption that greater customer orientation = higher performance is far too simplistic and does not hold in many circumstances (Langerak 2003). For example, Baker and Sinkula (1999) report a positive direct relationship between a market oriented organization and performance outcomes. Harris (2001) reports no direct relationship, while Chan and Ellis (1998) encounter mixed results. In other words, developing close links with customers can be both detrimental and beneficial to the quality of the relationship and is contingent on various external factors.

Further, the level of market orientation is widely misinterpreted because it is largely based on cultural and behavioural assumptions that are abstract and difficult to operationally implement. Not surprisingly, CRM programs have emerged as a way for managers to support the type of customer understanding and interdepartmental connectedness required to effectively execute a customer strategy. The Gartner Group defines CRM as a business strategy whose outcomes optimise profitability, revenue and customer satisfaction (the why?) by organising around customer segments, fostering customer-satisfying behaviours and implementing customer-centric processes (the how?). Although this is a reasonably complete definition it is still quite abstract and has little say about what capabilities—human, technological and organisational—are required to achieve these outcomes.

To this point, the distinction between capabilities that account for differences in performance is best derived from the resource based view (RBV) of the firm. The theory essentially argues that competitive positions are derived from unique bundles of resources and capabilities that are rare, valuable, nonsubstitutable and nonimitable (Barney 1991). A key premise of the RBV is that resource and capability development is selective and path dependent. This view is entirely consistent with what is known about CRM according to a series of studies conducted by Day (2002) and coauthors (Day and Van den Bulte 2002; Day and Hubbard 2003). The CRM development process is selective in that firms decide whether to make these programs the central thrust of their strategy or a subordinate element.

In general, empirical studies that link CRM strategy to business performance are relatively rare. Some work has investigated bivariate relationships regarding the orchestration of technology—such as sales and service automation—and direct marketing or campaign management (Sutton and Klein 2003). Others have described how the business case for CRM investment can be justified (Maklan et al. 2005) and developed scales for CRM implementation (Reinhartz et al. 2004). Work conducted by Reinhartz, Krafft and Hoyer (2004) is particularly relevant because it shows that technical CRM capabilities have a small positive impact on market and economic performance and that this impact is moderated by CRM incentivization schemes. Day and Van den Bulte (2002) also show that when technical and structural aspects are combined, a superior customer-relating capability results that is strongly related to sales growth, customer retention, and profitability. In the grand scheme scholars have just scratched the surface as far as studies of CRM performance are concerned. The challenge for researcher and practitioner alike is to establish a greater understanding of how resources and capabilities such as CRM technology can be deployed to create value.

MODEL STRUCTURE

The focus for thinking about the impact of CRM programs on the performance of the firm was originally derived from a model of competitive advantage developed by Day and Wensley (1988). Their model has become a benchmark for publications in marketing that have sought to explain performance differences between companies (Hunt and Morgan 1995). Further, the relatively simple deterministic relationship between sources of advantage, positions of advantage and performance is particularly relevant to an assessment of CRM performance in this study for the following reasons:
1. The model recognizes the mediating impact that positional advantage (i.e., customer orientation) has on performance.

2. The model captures the emerging RBV literature that has spread throughout the strategic management literature. In particular, it enables one to assess the contribution that superior capabilities—human, technological and business capabilities—have on competitive advantage.

3. The model captures the path dependent nature of performance. Prior investment in IT infrastructure and other sources of advantage is used to enhance future performance and sustain competitive advantage.

However, superior skills and resources are not automatically converted into positions of competitive advantage. As Day and Wensley (1988 p.88) rightly note;

*Underlying the simple, sequential determinism that superior sources of advantage -> superior positions of advantage -> superior performance framework is a complex environment fraught with uncertainty and distorted by feedback, lags and structural rigidities.*

To capture the forces that influence this uncertainty suitably, the author turns to a recently articulated theory developed by Devinney et al. (2000) (hereinafter DMV). DMV builds on a number of traditions not captured in Day and Wensley’s model. Most importantly, they build on issues of institutional feasibility that define what the firm can actually do. By separating resources and capabilities from organizational constraints, a clearer understanding of the nature and evolution of customer strategy is revealed. This combined approach is of theoretical and practical importance because it underlies the extent to which organizational success is determined by content (structural antecedents and their performance consequences) and/or process (soft constraints and the role that managers play in strategic choice). Important constructs and their hypothesized relationships are shown schematically in figure 1.

![Diagram of Model and hypothesized relationships](image)

**Figure 1 – Model and hypothesized relationships**

For the purpose of this paper three constructs are used to reflect the human, technical and organisational dimensions of a CRM capability. In accordance with the literature in strategy (Leonard 1998), marketing (Day and Van den Bulte 2003) and information systems (Bharadwaj 2000; Tippins and Sohi 2003) the link between all three CRM capabilities and performance is hypothesised as positive. However, there is a temptation to be normative about the pursuit of market orientation by directing attention and resources to CRM capabilities. A critical aspect of this model and overall success is to establish whether investment in new CRM programs is a ‘sensible thing to do’. Therefore, firms must come to terms with the tension between new customer orientations and the conversion feasibility placed on the firm by existing forms, systems and resources. It is hypothesised that conversion feasibility will have a negative (moderating) impact on the link between CRM and market orientation. Operational details for each of these constructs are provided in the sections that follow.

**INSTRUMENT DEVELOPMENT and MEASURES**

Using the strategic business unit (SBU) as the level of analysis, all scales were developed using an extensive and recursive pre-testing procedure. Business *performance* is central to the information systems field, yet the many ways in which it is measured suggests that both the conceptualization and measurement of performance is still problematic. First, organizational performance is a multidimensional construct that encompasses both internal and external measures. Internal measures correspond to operational performance, and are represented by a variety of measures such as new product innovation, inventory turnover or cost of goods sold. External measures are typically derived from accounting or financial measures such as ROI, economic profit or earnings per share etc. (Barua, Pinnell et al. 1999).
Second, it is commonly accepted that the causes of organizational performance are difficult to determine. Subjective measures of all types are subject to recency bias arising from the availability of recent events (Tversky and Kahneman 1973), while the direction of causality of many measures, be they internal (such as employee satisfaction) or external (such as customer satisfaction), is often unstable. This situation arises because informants often face limitations in terms of retrospective recall whenever measures are surrounded by spurious relationships and causal ambiguity. Similarly, although accounting based measures and market valuations are often treated as “objective” indicators, Christensen and Carlile et al (2002) claim that the data is still subject to “political, negotiated, judgmental processes.” Executives and managers face tremendous pressures to meet analyst’s expectations, leading to creative shifts in expenses and revenues such as those demonstrated by Arthur Anderson, Nortel and Tyco in recent times. In summary, both key informant descriptions and market valuations can be the subject of irrational exuberance, bandwagon effects and other psychological effects.

This discussion implies that to be useful, both theoretically and practically, the validity of performance measures needs to be convincingly established. Past studies suggest that measures of performance need to exhibit three key attributes: (1) it should provide a multidimensional and balanced assessment of performance, (2) it should incorporate a competitive assessment element, and (3) it should address the notion of performance over time. This three-dimensional method is applied to a balanced scorecard view of performance that includes: (a) Financial measures such as return on investment, (b) customer satisfaction including sales growth, (c) business process improvement as reflected in the reduction in cost of transacting with customers, and (d) innovation or success generating revenue from new products. See table 1 for a summary.

Table 1 – Measures of performance

<table>
<thead>
<tr>
<th>Major Area</th>
<th>Operational Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>Relative to the highest performer in your industry, how has your business performed over the last three years: (Five point scale from Far better to Much worse)</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Return on investment (after tax)</td>
</tr>
<tr>
<td>Business Process</td>
<td>Sales growth (revenue turnover)</td>
</tr>
<tr>
<td>Innovation</td>
<td>Reduction in cost of transacting with customers</td>
</tr>
<tr>
<td></td>
<td>Success at generated revenue from new products</td>
</tr>
</tbody>
</table>

The level of customer or market orientation can be measured according to two complementary perspectives: cultural and behavioural (Homburg and Pflesser 2000). The cultural stream describes market orientation as a culture that commits the organization to the continuous creation of superior value for customers (see Narver and Slater 1990). Although the importance of the cultural perspective should not be underestimated, culture is a difficult domain to define and measure. As a consequence, Homburg and Pflesser (2000) notice that most of the research within this perspective has typically measured market orientation in terms of behaviours.

The behavioural stream of research describes market orientation in terms of specific behaviours related to the organization-wide generation of market intelligence. This includes current and future customer needs, dissemination of intelligence across departments and organization-wide responsiveness to it (Kohli and Jaworski 1990). Key features in this view are a focus on customers, an emphasis on the specific form of inter-functional coordination and activities related to information processing. Narver, Slater et al. (2000) hold that measures of market orientation must take into account the two forms in which customers needs and solutions exist: expressed (reactive market orientation) and latent (proactive market orientation). All items for the reactive market orientation construct were taken from the MORTN scale (Deshpande and Farley 1998), while measures of the reactive market orientation construct were derived from recent work by Narver and Slater (2000). See table 2 for a summary of market orientation measures.
It has previously been proposed in the marketing literature that customer focussed capabilities are best seen as a meta or higher order capability that contributes positively to firm performance (Day 2002). To fully capture the expansive nature of CRM a similar approach is taken to operationalise a CRM capability. Three items—measured on a seven point likert scale—were used to establish the higher order construct CRM capability. Importantly, each item required respondents to compare capabilities to their direct competition. The importance of this is that capabilities need to be superior to the competition if they are to contribute positively to competitive advantage. The three measures of customer relating capability are: (1) skills and experience at converting data to customer knowledge, (2) level of IT infrastructure, and (3) alignment of incentives, customer strategy and structure. See table 3 for a summary description.

Furthermore, this construct was validated with further measures of (1), (2) and (3). For example, seven measures were adopted from the Davenport, Harris (2001) study to capture the broad ways in which companies manage “customer knowledge”. These measures capture all three knowledge flows—knowledge for customers, knowledge about customers and knowledge from customers—previously identified by Gebert et al. (2003). Seven items were used to develop a scale for IT infrastructure based on work in IT (Bharadwaj 2000) and marketing (Reinartz, Krafft et al. 2003). Lastly, six items were used to develop a scale for organisational architecture. These were items were predominantly taken from Day and Van den Bulte (2002). Due to space limitations, these measures are not repeated since they are highly correlated and supportive of the higher order CRM capability.

There are many institutional barriers that managers face when deciding to invest in IT. Indeed, Lucas (2005) has used a ‘garbage can’ metaphor to capture the way actors and technologies interact. Feeding out of the garbage can is a pipeline that leads to a return on investment spigot. This filter is referred to as conversion feasibility and Weill (1990) has previously proposed four components; top management commitment, experience with IT, user satisfaction, and political turbulence. In this study a similar measure of conversion feasibility is used that captures the limitations of all the affected players (customers and partners) and the costs of setting up the new arrangement and undoing the old arrangement. Since this line of thinking is relatively new and no existing scales exist, a new scale was created to capture explicit constraints—sunk costs in equipment and personnel—and implicit constraints facing the firm—embedded political and behavioural complexity. Eight items are used to adequately capture this construct based on studies by Weill (1990), Christensen and Overdorf (2000) and Coltman, Devinney and Midgley (2003). See table 4 for a summary description.
Table 4 – Measures of conversion feasibility

<table>
<thead>
<tr>
<th>Operational questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please indicate your extent of agreement with the issues stated below:</td>
</tr>
<tr>
<td>(Strongly disagree to Strongly agree)</td>
</tr>
<tr>
<td>Our customer knowledge is based on a delicately balanced chain of activities that may be adversely disturbed by new software programs</td>
</tr>
<tr>
<td>We are very proficient at integrating legacy systems with new customer/partner relationship needs</td>
</tr>
<tr>
<td>We have complex processes in place that make integration of customer data a difficult proposition</td>
</tr>
<tr>
<td>When deciding amongst strategic alternatives like CRM, political influence &amp; parochial interest play a crucial role</td>
</tr>
<tr>
<td>Multiple units are/would be affected adversely by the deployment of a new customer relationship programs</td>
</tr>
<tr>
<td>It is difficult to get key managers to pay more than cursory attention to CRM initiatives because they are more concerned with areas generating immediate cash flow and profitability</td>
</tr>
<tr>
<td>Managers in other business units feel that a customer focussed strategy would compromise their own role in the firm</td>
</tr>
<tr>
<td>My organization is well prepared to implement a fully integrated customer information system</td>
</tr>
</tbody>
</table>

RESULTS

A two-step approach to data analysis was performed that: (1) includes a detailed assessment of the measurement model, and (2) includes an analysis of the relationships between constructs. The main assumption—so fundamental to social science research—is that analysis of any relationship between constructs can only proceed after the measurement model is found to be satisfactory.

To ensure the validity of each measure, key informant bias, non-response bias, common method bias, convergent and discriminant validity were examined. For the sake of brevity a short summary only is provided. Senior managers were targeted from three functional areas (IT, marketing, and strategy), reducing the impact of key informant bias. To determine the impact of informant bias in the study, t-tests were used to examine differences in the degree of market orientation and performance between top management (n=34) and middle management (n=48). While a slight difference was detected between groups, this difference was not significant for market orientation (t=-0.810 p=0.420) and performance (t=-0.671 p=0.504). On the basis of these tests, informant bias does not appear to be a concern in this study. Results from a follow up survey indicate that the risks from non response bias are low.

A correlation matrix of the constructs is shown in Table 1. For the reflective constructs, factor analyses of their underlying questionnaire items indicated one dimension for each, making it legitimate to compute the Cronbach alphas given earlier and to regard them as unitary constructs. We also computed the average variance extracted by these items (Fornell and Larcker 1981) which is not shown. The fact that these average variances are all above 0.7 indicates adequate convergent validity for their underlying items. Further, the fact that they are higher than the correlations between the various constructs indicates adequate discriminant validity between these constructs.
Table 5 – Correlation of latent constructs (diagonal elements are square roots of average variance extracted)

<table>
<thead>
<tr>
<th></th>
<th>Overall Performance</th>
<th>Reactive Orientation</th>
<th>Proactive Orientation</th>
<th>Customer Relating Cap.</th>
<th>Skills and Experience</th>
<th>IT Infrastructure</th>
<th>Business Architecture</th>
<th>Conversion Feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Performance</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reactive Orientation</td>
<td>0.07</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Orientation</td>
<td>0.31</td>
<td>0.57</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Relating Cap.</td>
<td>0.35</td>
<td>0.29</td>
<td>0.36</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills and Experience</td>
<td>0.38</td>
<td>0.22</td>
<td>0.36</td>
<td>0.46</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT Infrastructure</td>
<td>0.16</td>
<td>0.17</td>
<td>0.09</td>
<td>0.37</td>
<td>0.59</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Architecture</td>
<td>0.30</td>
<td>0.20</td>
<td>0.20</td>
<td>0.41</td>
<td>0.64</td>
<td>0.47</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>Conversion Feasibility</td>
<td>-0.02</td>
<td>-0.31</td>
<td>-0.16</td>
<td>0.02</td>
<td>-0.01</td>
<td>-0.16</td>
<td>-0.16</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Furthermore, discriminant validity was also assessed by comparing the variance shared by constructs, as measured by the squared correlation between them, with the AVE by each constructs measurement items (Fornell and Larcker 1981). In other words, the amount of variance captured by the construct (through its indicators) should be demonstrably closer to its measurement items than to another construct. If not, there may be insufficient distinction between two constructs, as measure by the items in this study. The correlation matrix in Table 1 shows that the square root of the construct’s AVE—as shown on the diagonal elements—are greater than the corresponding off-diagonal elements. Thus, it is possible to conclude that each measure was tapping into distinct and different concepts.

Increasingly, researchers investigating organizational issues are required to account for: (1) several interrelated organizational variables, (2) theoretical models which involve unobservable and second order factors (latent constructs), (3) measurement error in observed indicators, and formative, as well as reflective measures. In this study a form of structural equation modelling known as partial least squares (PLS) is used. PLS offers a sophisticated way to test direct, indirect and total effects of one variable on another: it is particularly suitable for exploratory work, can work with small to medium sample sizes and does not assume multivariate normality in the data (Fornell 1982). Finally, the PLS methodology is capable of including both formative and reflective measures simultaneously in a model and has gained the interest and use among researchers in information systems (Chin, Marcolin et al. 2003).

DISCUSSION of STRUCTURAL MODEL

As conceptualized, the structural model shows that the direct effect of CRM capability and conversion feasibility is as predicted (see table 2). In this table the loadings shown are of measurement items on their constructs, predictor constructs on outcomes and control measures on constructs. Bootstrapping was used to generate t-statistics for all coefficients indicating those links that are significant. In the case of reactive market orientation, the structural model provides standardized beta scores of 0.326 for CRM capability and -0.351 for conversion effectiveness. Similar results are reported for proactive market orientation with standardized beta scores of 0.350 for CRM capability and -0.166 for conversion effectiveness. All path values are highly significant and provide further support for the hypotheses in this study.

The main effects model reveals a number of other interesting findings. First, a CRM capability is primarily driven by human skills and experience that is supported by appropriate business architecture (i.e., incentives and structures). The relative unimportance of IT infrastructure stands in contrast to what the marketing divisions of companies like Siebel, Oracle and SAP would like us to believe. Second, the effect of CRM capability is stronger on proactive market orientation than it is on reactive market orientation. This finding is consistent with reports that CRM is best aligned with a market orientation that puts a premium on superior market sensing and a conducive cultural context. Second, the effect of conversion effectiveness is quite robust with negative and significant effects on both measures of market orientation. It is also interesting to note that the conversion effectiveness path is more than double on reactive market orientation that on proactive market orientation (-0.384 versus 0.166).
Table 6 – Structural model results

<table>
<thead>
<tr>
<th></th>
<th>Proposed Effect</th>
<th>Path Coefficient</th>
<th>Observed t-value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CRM Capability (R^2=0.33)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Skills and Experience</td>
<td>n.h.</td>
<td>0.379</td>
<td>3.430</td>
<td>**</td>
</tr>
<tr>
<td>IT Infrastructure</td>
<td>n.h.</td>
<td>0.053</td>
<td>0.452</td>
<td>n.s.</td>
</tr>
<tr>
<td>Business Architecture</td>
<td>n.h.</td>
<td>0.206</td>
<td>1.672</td>
<td>*</td>
</tr>
<tr>
<td><strong>Reactive Orientation (R^2=0.27)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Relating Capability</td>
<td>+</td>
<td>0.326</td>
<td>2.784</td>
<td>****</td>
</tr>
<tr>
<td>Conversion Feasibility</td>
<td>-</td>
<td>-0.351</td>
<td>2.373</td>
<td>****</td>
</tr>
<tr>
<td><strong>Proactive Orientation (R^2=0.17)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Relating Capability</td>
<td>+</td>
<td>0.350</td>
<td>3.672</td>
<td>****</td>
</tr>
<tr>
<td>Conversion Feasibility</td>
<td>-</td>
<td>-0.166</td>
<td>1.237</td>
<td>*</td>
</tr>
<tr>
<td><strong>Effects on Performance (R^2=0.21)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reactive Market Orientation</td>
<td>+</td>
<td>-0.197</td>
<td>0.176</td>
<td>n.s.</td>
</tr>
<tr>
<td>Proactive Market Orientation</td>
<td>+</td>
<td>0.285</td>
<td>1.609</td>
<td>**</td>
</tr>
<tr>
<td>Customer Relating Capability</td>
<td>+</td>
<td>0.342</td>
<td>3.540</td>
<td>****</td>
</tr>
<tr>
<td>Conversion Feasibility</td>
<td>-</td>
<td>-0.073</td>
<td>0.411</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

P=value: *<0.100; **<0.05; ***<0.01; ****<0.001
n.s. = not significant; n.h. = not hypothesised

Tests were also undertaken to determine the interaction or moderating effect of conversion effectiveness. The results show that a change in level of conversion effectiveness has a significant effect on the influence of customer relating capability on market orientation. A second model with the interaction effect included reveals standardized beta scores of 0.589 for customer relating capability, -0.215 for conversion effectiveness and the interaction effect is -0.357 with a total R^2 of 0.330 on reactive orientation. Thus, these results imply that a one standard deviation increase in conversion effectiveness will not only impact reactive market orientation directly by -0.215, but it would also decrease the impact of customer relating capability to reactive market orientation from 0.589 to 0.232. As expected the main effects model, shown in figure 2, resulted in a slightly higher standardized beta and a smaller R^2 of 0.265.

A measure of the predictive power for the model is the R^2 value—it indicates the amount of variance in the construct explained by the model. The results indicate that 27 percent of the variance in reactive market orientation, 17 percent of the variance in proactive market orientation, and 22 percent of the variance in performance was explained. Given the multidimensional nature of each construct, where a large number of factors could impact market orientation and performance, the variance explained by this parsimonious model is substantial.
Lastly, several industry and firm specific control measures were used to detect further patterns in the data. First, to control for the possibility of a size effect, organizational size was measured by number of employees. This control has no effect on the measures of market orientation or performance. Second, to control for the possibility of variance across different industry sectors, four dummy variables were used to represent five broad industry sectors. No uniform pattern in the data was revealed to suggest that an industry effect exists. The only exception was the business service sector where a positive and significant impact on reactive market orientation was found. This finding is to be expected, as the essence of this sector is customer service. Overall the lack of an industry effect is by no means conclusive and may be attributable to insufficient power. Lastly, customer relationship controls were used to identify customer preferences for a particular kind of relationship. Three dummy variables used were acquaintance, friend and true partner. The base case was no relationship at all. Negative and significant results were detected as one would expect. Companies with large proportions of customers that do not have the time energy or motivation to form deep customer relationships (i.e., customers who are classified as acquaintances or friends) are unlikely to gain competitive advantages through market orientation strategies—no matter whether they are reactive or proactive in focus. This finding underscores the need to differentiate relationships on the basis of how value is created and to link value creation in relationship segments to overall firm performance.

CONCLUSION

CRM has become a buzzword of late, and like all new initiatives, suffers when it is poorly understood, improperly applied and incorrectly measured and managed. Prior empirical work implies that more relationship building is not necessarily better, but rather building the right type of relationship is the key to performance improvement. In this study of industry leaders we show why CRM programs can be successful and what capabilities are required to support success. The first implication for managers is that CRM programs should be directed towards customer value that competitor’s cannot match. On this point the results are quite clear. High performing companies base their success on proactive rather than reactive orientations. CRM programs that support identification of latent or unarticulated customer demand are well positioned to add real business value. The second implication is that the study begins to identify the relative importance of human, technological and business capabilities to an effective CRM program. Results reveal that IT infrastructure, business incentives and human skills merely buy chairs at the table. What is required is the orchestration of a higher order capability that makes for a better and more effective program.

As any study, this research has limitations that qualify the findings and present opportunities for future research. For example, it is possible that those companies that have been working longer on their CRM programs are, in turn, among the better performing companies. This is a limit of cross-sectional design and longitudinal studies would provide greater insight into this effect. A larger sample size would enable greater validation based on “out of sample” data to enhance external validity. However, the ability to attain sufficient
sample size and improved power is not simple. For example, the standard deviation, correlation and item reliability scores detected in this study make it virtually impossible to obtain adequate power (i.e., 0.8); there are simply not enough subjects using CRM in the Australian population. Future work therefore, should seek to extend the study beyond Australia and build a larger, more globally representative sample.

REFERENCES


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