

Does Organizational Culture influence CRM Outcomes?

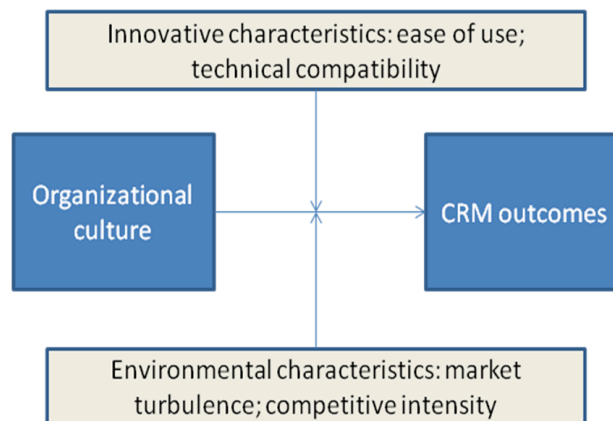
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Introduction

Customer relationship management (CRM) has received wide acceptance as an important management discipline. In recent years, CRM system implementations have become more commonplace (Butler, 2005) and industry forecasts indicate that worldwide spending on CRM technologies will expand to US\$11 billion per annum by 2010 (Band, Leaver, and Rogan, 2007). Bain and Company's global survey ranked CRM as one of the top ten management tools (Rigby, 2003; Rigby and Bilodeau, 2005). However, several reports point to an alarming number of failed CRM projects, estimated at between 35 and 71 percent (CGEY, 2002; LaValle and Scheld, 2004; Lee, 2000; Sims, 2006).

Several consultancy reports have suggested that organizational culture may have a significant influence on the success of a CRM implementation. McKinsey & Co. (cited in Agarwal, Harding, and Schumacher, 2004), for example, report that 59% of companies experiencing a successful CRM implementation identify and deal with cultural issues, such as resistance to change, during the implementation. In contrast, 33% of those with a failed CRM implementation attempted to address cultural issues. There has been very little empirical analysis of the association between organizational culture and CRM system implementation outcomes (van Bentum and Stone, 2005). This study redresses that omission.

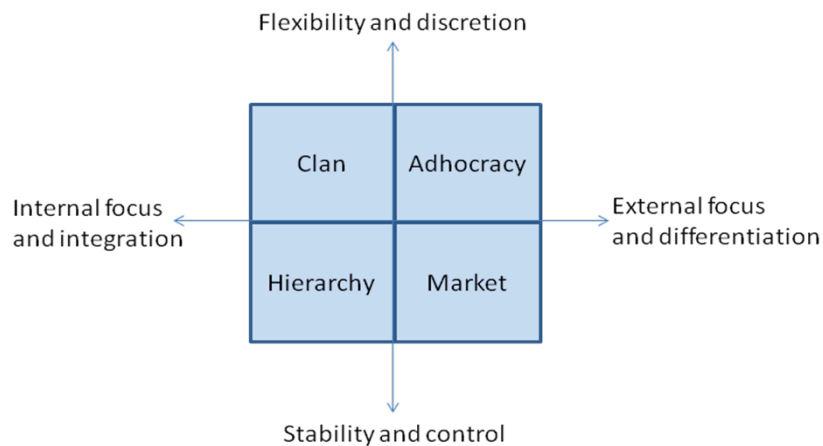
Our research investigates relationships in the research model below. Our primary aim is to see if there is any relationship between organizational culture and CRM outcomes, and secondarily to identify whether a number of attributes of the technology innovation or the business environment moderate the association.



Understanding organizational culture

Although there are several ways of conceptualizing, and of modeling, organizational culture we elected to employ the Competing Values Model (CVM) (Cameron and Quinn, 1999). Several marketing studies have successfully used the CVM to assess the association between organizational culture and business performance (Deshpandé and Farley, 1999). Researchers

investigating technological opportunism (Srinivasan, Lilien, and Rangaswamy, 2002), and IT implementations (Stock and McDermott, 2000) have also used the CVM. Although the CVM was originally developed and validated in the US, it has also been validated for use in the geographic context of this study, Australia (Lamond, 2003). The figure below shows that the CVM identifies four types of organizational culture – clan, hierarchy, market, and adhocracy. Each culture has a different combination of indicators.



The CVM is structured around two continua anchored by opposite or competing assumptions. One axis opposes organic and mechanistic attributes; the other opposes internal and external focus. Any organization can have a tendency towards flexibility and discretion (organic orientation), as opposed to stability and control (mechanistic orientation), and an inclination towards internal, as opposed to external, matters. Differences in the organization’s dominant characteristics, such as its leadership, employee management practices, organizational bonds, strategic emphasis, and measures of success, reflect these tendencies. These dominant characteristics distinguish each quadrant of the CVM. The clan culture, for example, stresses internal cohesiveness. The organizational culture assessment instrument (OCAI) (Cameron and Quinn, 1999) provides an inventory of 16 items to measure the cultural constructs embodied in the CVM.

Linking organizational culture to CRM

A number of academic studies have examined the links between some elements of organizational culture and CRM outcomes. Starkey and Woodcock (2002) show that organizations that are less customer-focused are more likely to have inferior sales performance. Campbell (2003) and Wilson, Daniel, and McDonald (2002) recognize the important contribution that customer-focused and cross-functional teams can make to the creation of the deeper customer-related knowledge on which CRM success is based. Campbell (2003) cites an appropriate reward structure as a key factor in the development of that deeper insight. Kristoffersen and Singh (2004) and Wilson et al. (2002) find a link between CRM success and employee support within customer-facing departments. Curry and Kkolou (2004) identify customer focus, participation, and teamwork as important cultural issues influencing CRM outcomes. Reinartz and Chugh (2003) suggest that empowering employees to excel at customer service and ensuring their job security also contribute to CRM success. This CRM-specific research is supplemented by broader organizational research. Galbreath and Rogers (1999) argue that an organizational culture that promotes an atmosphere of risk-taking can create a climate of confidence in which employees feel

empowered to act in the best interests of customers. Research into market orientation suggest that the presence of an innovative and entrepreneurial culture is strongly associated with excellent business performance (Deshpandé 1999). Collectively, these reports suggest that an organizational culture that puts more importance on customer-focused behaviors, cross functional teams, performance-based rewards, adaptive and responsive attitudes to change, and a higher degree of risk taking and innovation, is likely to contribute to successful CRM system implementations. These attributes are strongly associated with the Adhocracy culture. Managers in adhocracies are favorably inclined towards collaborative communication (Brown and Starkey 1994). Moorman (1995) found that organizations with an adhocracy culture tend to stress participation, teamwork, and cohesiveness, which leads to greater cooperation among organizational members. We therefore present our first hypothesis.

H₁: Organizational cultures high in Adhocracy achieve the best CRM outcomes.

Measuring CRM outcomes

We measured CRM outcomes using a balanced scorecard, based on the original framework of Kaplan and Norton (1992). Kim, Suh, and Hwang (2003) have also deployed a similar approach in their CRM research. Following a literature review, we identified 16 metrics that are widely deployed to measure the outcomes of CRM system implementations. On the basis of expert judgment, each metric was assigned to one of the four balanced scorecard measurement categories – finance, customer, process, and people. In our research, the financial metrics used to assess CRM outcomes include sales revenues, share of customer spending (share of wallet), average profit per customer, and customer acquisition cost. The customer-related metrics include customer retention rate, customer satisfaction level, numbers of new customers acquired, and response rate to marketing campaigns. The process metrics include the number of sales leads generated, the percentage of sales leads converted to sales, organizational response time to customer inquiries, and the time to resolve customer complaints. The people metrics assess the satisfaction, productivity, retention, and training of employees. Respondents to our survey were asked to self-report whether there had been any improvement in performance against these metrics following the CRM system implementation.

Research design

Survey research was undertaken. Named individuals in 1,449 public and private-sector organizations were invited to participate, and sent a six-page questionnaire, cover letter, and reply paid envelope. Dun & Bradstreet information services provided the contact list of individuals holding management positions in sales, marketing, customer service, and information technology in 11 industries. The instrument contained questions on organizational culture, CRM outcomes, and the a number of additional hypothesized moderating variables - ease of using the CRM system, compatibility of the CRM system with existing technologies, competitive intensity, and market turbulence. After sending a second reminder by surface mail and a follow-up phone call encouraging people to participate, we achieved 134 questionnaires (9.25% response rate). After removing responses from companies having no CRM system in place, a total of 101 questionnaires remained for analysis. We had anticipated a low response rate, as only organizations with a CRM system in place are eligible to participate, and according to Gartner Inc. (cited in Peterson, 2003),

only 35 percent of Australian organizations with more than 500 employees use CRM technologies.

All data were collected using 7-point Likert-type scales. We adopted published and validated scales for all constructs except CRM outcomes. Prior to analysis, all data were tested for reliability and validity. Two balanced scorecard items with very high cross-loadings were removed from the dataset prior to hypothesis testing. Otherwise all constructs had good reliabilities, Cronbach’s alpha being above 0.75 with one exception (market turbulence $\alpha = 0.60$). Further tests for discriminant validity amongst the constructs also proved satisfactory, the squared correlations (R^2) between the constructs in the research model being less than the average variance extracted (AVE, i.e. the average variance shared between a construct and its measures) (Fornell and Larcker, 1981).

H₁ results

We used partial least squares path modeling (PLSPM) from XLSTAT-PLSPM to measure the associations between organizational culture and CRM outcomes. PLS combines features from principal component analysis and multiple regression (Abdi, 2007) and provides an alternative approach to structural equation modeling where a smaller number of observations are available (Jöreskog and Wold, 1982). The PLS Path Modeling approach is a method for representing complex relationships between observed variables and latent variables. The PLS modeling results, reported in the Table below, show that of the four organizational cultures, adhocracy and market cultures make the highest contribution to good CRM outcomes.

We therefore find support for H₁.

	Adhocracy	Market	Hierarchy	Clan
Correlation	0.48	0.48	0.44	0.38
Path coefficient	0.17	0.17	0.15	0.13
Contribution to R ² (%)	29.09	28.74	23.80	18.38

Although all types of organizational culture have some degree of positive association with CRM success, Adhocracy has the strongest association, followed by Market, Hierarchy, and Clan cultures. Adhocracy and Market cultures are found in externally-focused organizations. These results support other research that links Adhocracy culture to total quality management (TQM) success (Dellana and Hauser, 1999), strong business-to-business relationships (Paulin, Ferguson, and Salazar, 1999), successful exploitation of new technologies (Srinivasan et al., 2002), and a strong focus on customer satisfaction (Conrad, Brown, and Harmon, 1997).

Testing the moderator variable hypotheses

A number of moderator variables were tested to see if they modified the relationship between organizational culture and CRM outcomes. The two technology-related moderators measured were perceived ease-of-use of the CRM system, and the technical compatibility between the

CRM system and other technology systems. Ease-of-use was measured using Moore and Benbasat's (1991) 2-item scale. Technical compatibility was measured by Ramamurthy et al.'s (1999) 2-item scale. The two business environment moderators tested were competitive intensity and market turbulence both of which were measured using Jaworski and Kohli's (1993) pair of 6-item scales. The tested hypotheses were as follows;

H₂: The higher the perceived ease-of-use of the CRM system, the weaker is the association between organizational culture and CRM outcomes.

H₃: The higher the degree of the compatibility of the CRM system with existing technology systems, the weaker is the association between organizational culture and CRM outcomes.

H₄: The higher the degree of competitive intensity, the stronger is the association between organizational culture and good CRM outcomes.

H₅: The higher the degree of market turbulence, the stronger is the association between organizational culture and good CRM outcomes.

We found support for only one of these hypotheses: H₅. Increased market turbulence interacts with organizational culture to deliver poorer CRM outcomes. This indicates that organizations operating in highly turbulent markets have a greater need for an externally-oriented culture in order to achieve good CRM outcomes. This result contrasts with the findings of Jaworski and Kohli (1993) and Slater and Narver (1994), whose evidence indicates that market turbulence has little effect on the strength of the relationship between market orientation and business performance. The study does reinforce the fundamental importance of organizational culture to successful CRM system implementation. Even if the CRM technology is easy-to-use and compatible with existing systems, having a dominant organizational culture inimical to CRM success will mean that organization may achieve poor outcomes. Even if the competitive environment is benign, the absence of a supportive culture may impede the delivery of desired CRM outcomes. The finding that market turbulence moderates the strength of the relationship between organizational culture and CRM system implementation outcomes indicates that organizations in highly turbulent markets have an even stronger need for a CRM-supportive culture.

Managerial implications

Organizations often regard CRM system implementations as IT projects, but these findings suggest that they may profit from also viewing them as culture change management projects. CRM system implementations achieve better outcomes when organizational culture is externally-oriented, that is an Adhocracy or a Market culture. Cultural change may be necessary to yield the desired outcomes. Whereas many authors have proffered advice on changing organizational culture (see for example, Kotter 1996, Schrabracq 2007), Cameron and Quinn (1999) do so from the perspective of the CVM. Their process involves planning and implementing a 6-phase approach: (1) diagnosis and consensus for the present using the OCAI (where is the organization now?); (2) diagnosis and consensus for the future (where does the organization want to be?); (3) identify what changes the organization needs and what these changes mean or do not mean for the organization; (4) develop stories that illustrate what the future will be like; (5) develop strategic action steps; and finally, (6) develop an implementation plan. Payne (2006) advocates another approach to CRM-related change management, grounded on McKinsey's 'Seven S' framework, covering strategy, structure, systems, staff, style, skills and shared values. Cameron and Quinn (1999) however stress that the key to culture change is individual behavioral change.

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