# CRM systems and organizational learning: An exploration of the relationship between CRM effectiveness and the customer information orientation of the firm in industrial markets

Alex Stein [a], Michael Smith [b],*

[a] *Goucher College, Baltimore, MD, USA*
[b] *Fox School of Business & Management, Temple University, Philadelphia, PA, USA*

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## ABSTRACT

The firm's customer relationship management (CRM) system is frequently a central element of the knowledge management function of the firm. It integrates information from internal and external sources to guide managers and field personnel in the development and presentation of the firm's value proposition. But despite the widespread adoption of CRM systems by firms operating in business-to-business markets, there is continued management skepticism concerning the effectiveness of these systems and their association with the firm's overall "customer information orientation." The present study seeks to shed light on these topics by evaluating the relationship between the customer relationship orientation of the firm and its use of CRM, as well as the association of CRM use with overall firm performance in B-to-B settings across a range of traditional business performance measures. The authors employ a multi-method approach to determine the key variables, including: database currency, internal database utilization, database accuracy and performance based reward systems utilized to operationalize the construct "the firm's customer information orientation" in order to develop statistical measures of the relationships of selected variables. The results of the study provide support for the finding that customer information orientation is indeed associated with CRM system implementation and that CRM use is associated with firm performance in B-to-B markets.

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## 1. Introduction

Organizational knowledge management, often referred to in practice as "the learning organization," is an important topic in the organizational literature. Alavi and Leidner (2001) define knowledge management as "the knowledge-based perspective [on organizations]" which "postulates that the services rendered by tangible resources depend on how they are combined and applied, which is in turn a function of the firm's know-how" (p. 107). Sun, Li and Zhou (2006) define this process as "adaptive learning," the process of using the firm's information to derive market and competitive intelligence. The customer relationship management (CRM) system is a key to this process of continuous adaptation to the firm's environments, which is the monitoring of external changes and adapting internal cultures and processes in response to external challenges (Senge et al., 1999).

As a result, the number of implemented CRM systems, generally in the form of IT databases and communications systems has grown markedly during the past ten years (DeSisto, 2005). These implementations have generally taken the form of extended sales automation systems and enterprise resource planning (ERP) systems, in most cases replicating an existing process using modern database and networking technologies. In a survey conducted in 2004, 60% of mid-sized companies indicated their intention to initiate or expand their CRM usage, while only 2% indicated they currently had no plans to implement a CRM system (Neuborne, 2005). More recently, such shared on-demand Internet services as NetSuite, RightNow Technologies, Salesforce.com and CRM OnDemand have given smaller firms an opportunity to develop CRM capabilities at significantly lower capital outlays (Myron, 2005). The resulting solutions have improved efficiency within the narrow confines of traditional sales management, providing firms with real-time sales planning, sales team development, pipeline reporting and project tracking capabilities.

Regardless of the technology platform selected by a firm, modern integrated CRMs typically combine various information sources: account plans, the company's marketing programs, and competitive and market information. CRMs also have multiple users, those for whom the database provides continuous value in helping to formulate selling and buying strategies. These users include the sales team, third-party suppliers (including service organizations, component and sub-assembly providers), corporate managers and customers. Fig. 1 summarizes the sources of CRM information and the users of that information.

The firm's CRM system should identify factors important to clients, promote a consumer-oriented philosophy, use customer-based

* Corresponding author.
  *E-mail addresses:* astein@temple.edu (A. Stein), msmith@temple.edu (M. Smith).
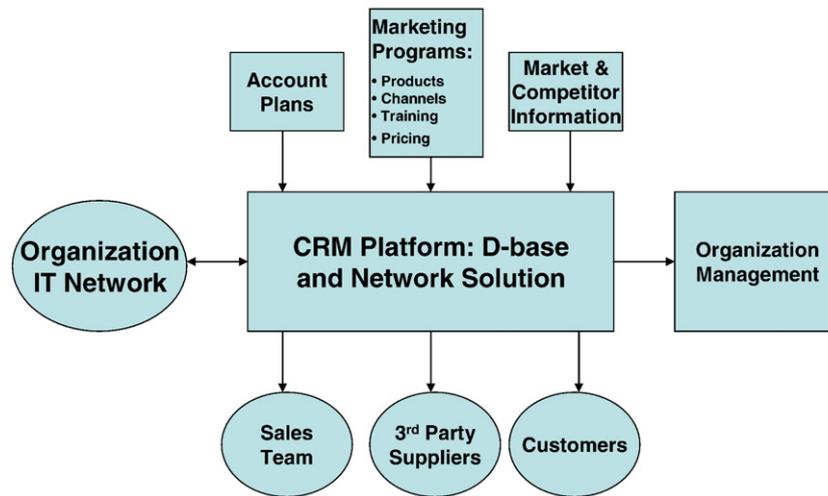
Fig. 1. The elements of integrated CRM solutions.

measures, develop end-to-end customer management processes to serve customers, provide customer support (including handling complaints), and track all aspects of sales. In other words the system should create a holistic view of customers' sales and services information. Superior strategy development and implementation is "achieved through open-minded inquiry, synergistic information distribution, mutually informed interpretations, and accessible memories." "Accessible memory" is important because, as Day (1994) states, "market-driven inquiry, distribution, and interpretation will not have a lasting effect unless what is learned is lodged in the collective memory. Organizations without practical mechanisms to remember what has worked and why will have to repeat their failures and rediscover their success formulas over and over again" (p. 44).

Critics have observed that the implementation of a CRM solution is not sufficient to create a true "learning organization." Rather, organizations need to think across organizational functions to truly benefit from CRM. This requires "thinking across departmental boundaries in order to concentrate on adding value to the customer… [there is] the need for marketing to act as an integrating function in coordinating the organization's interaction with the customer" (Wilson, Daniel, & McDonald, 2002, p. 194–5). If properly implemented, the organization's CRM system is uniquely well positioned as a knowledge management tool, defined by Szulanski and Winter (2000), as a resource which promotes that (1) only best available practices are copied, (2) everyone works from the same active best practice template, (3) best practices are copied as closely as possible, (4) adopted practices are tested and adapted only after good results are achieved, and (5) best practice templates are kept in mind after their adoption by the organization. Therefore, CRM must be able to serve as the value creating interface between the firm's functional units (including those linked by an ERP) and its customers. However, there is no existing research to support the value of CRM in the broader context of the organization's customer information orientation, and specifically in the business-to-business market space.

Along these lines, Day (2000) has proposed that successful customer relationship strategies are associated with three organizational characteristics: (1) an organizational relationship orientation, (2) developing and utilizing knowledge of the customer, and (3) effectively integrating and aligning internal and external processes. Each of these proposed constructs has a relatively well-developed body of literature: *customer relationship orientation* (Day & Wenseley, 1988; Kotler, 1984; Simmons & Munch, 1996; Slater & Narver, 1994; Wyner, 1999); *customer knowledge orientation* (Kohli & Jaworski, 1990; Shoemaker, 2001; Slater & Narver, 1995; Szulanski & Winter, 2000); and *internal and external organizational alignment* (Bowditch & Buono,

2001; Burns & Stalker, 1961; Crotts, Dickson, & Ford, 2005; Nadler, Tushman & Nadler, 1997).

The focus of the present research is the operationalization and testing of the Day (2000) hypothetical construct as it relates to "customer knowledge orientation," in the B-to-B space, and the link between CRM use and firm performance. For the purposes of the study, customer knowledge orientation will be operationalized as a set of data collection, data management and information dissemination functions rather than as the strictly sales support process traditionally associated with CRM solutions.

## 2. Background

### 2.1. The integrated CRM system as a knowledge resource

According to Lemon, White, and Winer (2002), "the trend in marketing toward building relationships with customers continues to grow, and marketers have become increasingly interested in retaining customers over the long run" (p. 1). The large number of CRM implementations over the past decade can be seen "as a contemporary response to the emerging climate of customer churn, waning brand loyalty and lower profitability" (Agrawal, 2003, p. 151). Furthermore, "CRM is central to the task of making an organization customer-centric [and] is the surest symbol embracing information technology in business [and] the most certain way to increase value to the customers and profitability to the practicing organizations" (p. 151).

Achrol and Kotler (1999) believe that such learning is best accomplished in the "network organizations [which is a] superior learning organization because it organizes functional components so that each fits better with its external knowledge environment" (p. 147). The emphasis is on diffusing knowledge through a *dynamic* integrated CRM system, not just on collecting customer and market information. The relationship between the firm's knowledge base and its strategy is complex and multi-dimensional. Zack (1999) states "… the most important context for guiding knowledge management is the firm's strategy. An organization's strategic context helps to identify knowledge management initiatives that support its purpose or mission, strengthen its competitive position, and create shareholder value" (p. 128).

Properly organized and applied, information can become the knowledge that defines the mission, form and strategy of the firm. Achrol (1991) states that "with the coming of the age of information, the generic level of almost any kind of business and its core business strategy is intertwined with its knowledge environment." In other words, the value of many firms' information "is greater than [their]