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Performance implications of customer-linking capabilities: Examining the complementary role of customer orientation and CRM technology

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ABSTRACT

This study examines how technology and complementary resources are bundled to form capabilities that foster durable customer relationships. Drawing from the literature in marketing, strategic management, and information systems, the first outcome is a theoretically grounded conceptualization of CRM technology capability comprised of three complementary resources: technology, business, and human resources. The second key finding is that CRM technology capability and customer orientation have a positive association with the development of durable customer relationships. These resources also have a positive interactive effect on customer-linking capability, highlighting the importance of aligning strategic business and technology resources. Finally, the authors find that customer-linking capability has a positive relationship with customer relationship performance and that the rapidity of changes in the external environment moderates this relationship. This study addresses these research questions in a cross-sectional study of 215 organizations using a partial least squares modeling approach.

1. Introduction

Since the boom of the customer relationship management (CRM) software industry in the late 1990s many companies have started CRM technology initiatives without regard to the complementary business and human resources needed to successfully deploy and fully leverage these substantial investments (Reinartz et al., 2004). Some suggest that a myopic focus on the technology, as opposed to a broader integration of several key resources, has likely contributed to the estimated 70% of CRM projects resulting in either losses or no bottom-line improvement in company performance (Gartner Group, 2008a). Despite mixed reports on the efficacy of CRM technology over the past decade, the CRM software market exhibited record growth of more than 20% in 2007, approaching $8 billion in total software revenue. Furthermore, the market for CRM applications is expected to continue to grow through 2012, when revenues are forecast to reach $13.3 billion (Gartner Group, 2008b).

The attention that CRM technology continues to receive by executives is echoed by the growing literature on the topic within the marketing and information systems (IS) domains. While scholars have developed theories and have made progress toward empirically validating the effect of CRM technologies (Jayachandran et al., 2005; Mithas et al., 2005; Ray et al., 2005), there is only anecdotal evidence to suggest what resources and capabilities are needed for CRM technology to improve customer relationship performance. Furthermore, there is limited empirical work examining the effect of CRM technology on the development of critical marketing capabilities and how these capabilities influence organizational performance.

The substantial expenditures in CRM technology along with the lack of empirical studies on how to leverage this technology with complementary firm resources serve as the primary motivation for this study. With the resource-based view (RBV) serving as our guide, we present and empirically test a model that explains how technology, business, and human resources are integrated to develop a CRM technology capability. We argue that this capability, particularly when coupled with a customer-orientated business strategy, positively relates to a customer-linking capability, reflecting how well a company creates and manages durable customer relationships. We further examine the performance implications of customer-linking capability and how the competitive landscape moderates the capabilities-performance chain.

2. Theoretical background and conceptual model

Resource-based theory views a firm as a unique bundle of resources and maintains that sustained competitive advantage is rooted in resources that are valuable and inimitable (Barney, 1991; Day and Wensley, 1988; Wernerfelt, 1984). Resources are broadly defined as the assets, knowledge and processes that enable the firm to implement strategies that improve efficiency and effectiveness (Barney, 1991). Capabilities, in light of this view, is defined as a firm's ability to assemble, integrate and deploy valuable resources in combination to achieve superior performance (Day, 1994; Eisenhardt and Martin, 2000; Teece, Pisano and Shuen, 1997; Wu 2007; Wu, 2010). Literature in the

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marketing strategy and information systems (IS) domain has drawn from the RBV to examine how firm-specific assets and capabilities influence performance (for a comprehensive review see Fahy and Smithee, 1999; Wade and Hulland, 2004).

Recent studies have suggested that information technology (IT) resources alone are not sufficient to provide significant performance gains (Bharadwaj, 2000; Borges et al., 2009; Chang et al., 2010; Coltman, 2007; Melville et al., 2004). In other words, an organization will not necessarily realize improvements simply by investing in hardware and software to support CRM initiatives. Instead, technology resources should be deployed in combination with other complementary organizational resources to create distinctive capabilities. More specifically, CRM technology should be integrated with customer-centric business processes and human skills to develop an advantage-generating capability (Coltman, 2007).

The rich body of literature on market orientation and CRM provides the foundation for our relationship-based capabilities and performance constructs. We also draw theoretic support from Melville et al.'s (2004) integrative IT business value model. This model, in addition to its emphasis on resource *complementarity*, suggests that intermediate capabilities and business processes should be examined along with the moderating influence of the competitive environment. As shown in Fig. 1, our study examines the formation of a key distinctive capability of customer-linking, focusing on the critical constructs of CRM technology capability, customer orientation, customer relationship performance, and organization performance.

2.1. Customer-linking capabilities

From an RBV lens, customer relationships are viewed as an intangible, market-based resource that may be relatively rare and difficult for rivals to replicate (Srivastava et al., 1998). How well a firm deploys its marketing resources to build durable relationships with customers can be viewed as marketing-specific capabilities. These capabilities include the ability to identify customer wants and requirements together with the capabilities to create and build appropriate relationships with those customers (Hooley et al., 2005). Day (1994) refers to these capabilities as customer-linking capabilities and argues that these capabilities are among the most valuable of any organization. Because customer-linking capabilities take time to develop, rely on the integration of resources, and are inherently difficult for competitors to imitate, customer-linking capabilities are distinctive capabilities that have the potential to create a competitive advantage for firms that develop them.

Despite the theoretical importance of customer-linking capabilities, few empirical studies have examined their antecedents or outcomes. Hooley et al. (2005) find that market orientation contributes to the development of customer-linking capabilities and that these capabilities contribute to increased customer satisfaction and loyalty as well as increased sales and profits. From an IT perspective, Nielsen (2002) find evidence that Nordic banks deploying internet technologies can develop customer-linking capabilities. The author also finds that market orientation is a critical antecedent to these capabilities. While these studies provide some empirical support for Day's (1994) suggestion that customer-linking capabilities are critical, further research is needed to examine how technology and complementary resources contribute to their development.

2.2. CRM technology capability

The coordination of activities with customers is one of the skills, abilities, and processes that must be mastered to develop a customer-linking capability (Day, 1994). CRM technology capability, therefore, is viewed as an activity-coordinating mechanism that enables a firm to better understand its customers, collaborate with them, and develop timely responses to their needs. For this study, CRM technology capability is broadly defined as the effective deployment of information technology solutions that are designed to support customer relationships. This includes systems that provide support for sales (e.g., sales force automation), marketing (e.g., planning and budgeting, campaign and promotions management, etc.), customer service, analysis (e.g., calculating customer retention rates, customer lifetime value, etc.), data integration, and external collaboration (Jayachandran et al., 2005).

Recognizing that resources need to be combined to develop idiosyncratic capabilities, several scholars provide evidence that suggests CRM technology capability may best be conceptualized as a multidimensional construct comprised of not only technology resources but also complementary resources. Bharadwaj (2000) demonstrates that IT infrastructure, when combined with human resources and IT-enabled intangibles, leads to improved performance. Coltman (2007, p. 9) identifies human, business, and technology resources as the key drivers for superior CRM capability suggesting that CRM technology capability requires “the orchestration of a combination variety of resources and capabilities, none of which is superior in isolation, but when combined with others, make for a

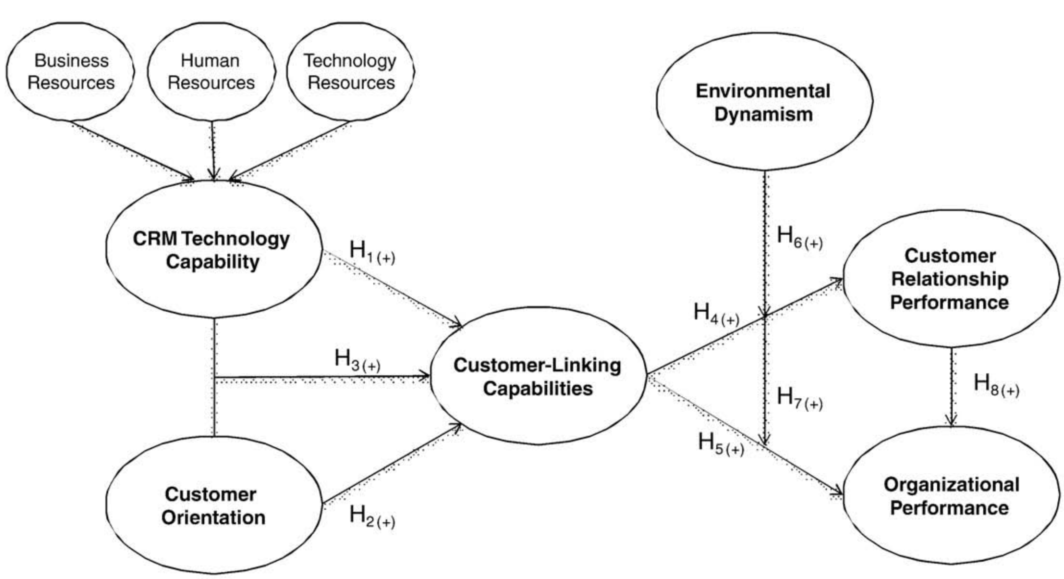

Fig. 1. Hypothesized model.