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A process-oriented perspective on customer relationship management and organizational performance: An empirical investigation

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ABSTRACT

Research on the CRM-performance link has been fragmented due to various perspectives on CRM. This study, considering different concepts of CRM, proposes a process-oriented framework for examining the relationship among CRM resources, CRM process capabilities, and organizational performance. Based on the resource-based view (RBV) of the firm, CRM resources are classified as "technological CRM resources" and "infrastructural CRM resources". Data from 77 Iranian Internet service provider firms were gathered in a field survey. The empirical work indicates that the measured constructs demonstrate key psychometric properties including reliability and validity. The results reveal that CRM processes are more affected by infrastructural CRM resources rather than technological CRM resources. Moreover, the findings indicate that firms with improved CRM process capabilities enjoy better organizational performance.

1. Introduction

In the contemporary business environment, customers are considered to be the central element of all marketing actions, and CRM has become a priority for companies (Karakostas, Kardaras, & Papathanassiou, 2005; Rust, Zeithaml, & Lemon, 2000). This is highlighted by the claim of academics and practitioners that a customer orientation strategy is necessary for companies to survive and be successful in saturated markets (Heinrich, 2005). Business firms, regardless of the size of their organization, as a whole, are spending billions of dollars each year on CRM applications (Ngai, 2005; Zablah, Bellenger, & Johnston, 2004). Although some academic researchers have provided some evidence of the positive relationship between CRM and performance (Coltman, 2006; Mithas, Krishnan, & Fornell, 2005; Sin, Tse, & Yim, 2005), many academic and business reports have shown disappointing results (Chen & Wang, 2006; Heinrich, 2005; Richards & Jones, 2008; Rigby, Reichheld, & Schefter, 2002; Zablah et al., 2004). In 2003, Gartner reported that about 70% of CRM projects result in either loss or no bottom line improvement in company performance (Richards & Jones, 2008). These paradoxical results are similar to what the academicians have called "productivity paradox" in the Information Technology (IT) literature (Albadvi, Keramati, & Razmi, 2007). This could be one of the reasons that CRM is an emerging field of inquiry (Richards & Jones, 2008).

To remedy the situation, we should first determine from where the problem stems. Going through the literature, we found two problems that are relevant to the CRM-performance link.

First, many companies have considered CRM as an IT solution and a technology for a marketing strategy (Peppard, 2000; Reinartz, Krafft, & Hoyer, 2004; Rigby et al., 2002). Through many years, IT researchers have been trying to answer the question of why IT does not confer direct competitive advantage. The clear reason, to which many scholars pointed, was that IT is easy to acquire in competitive markets. In other words, technology cannot bring about success or failure in a business strategy by itself (Mooney, Gurbaxani, & Kraemer, 1996). The same thing happens with CRM technology. Many firms can buy the same CRM technology from the same vendor. So, what makes CRM different in competitive markets? Because the same problem has led to the IT productivity paradox, we followed the IT and performance literature to gain helpful insights. By doing so, we saw that some researchers have worked on the resource-based view (RBV) of the firm and have extended it into the IT context to explain the productivity paradox of IT (Bharadwaj, 2000; Santhanam & Hartono, 2003; Melville, Kraemer, & Gurbaxani, 2004). Others have investigated complementary factors affecting the relationship between IT and performance (Keramati & Albadvi, 2006; Albadvi et al., 2007). More importantly, some researchers have made use of a process-oriented approach to explain how IT affects performance (Mooney et al., 1996; Radhakrishnan, Zu, & Grover, 2008).

The second reason is related to the concept of CRM. That is, technology is the common aspect between CRM and IT, but CRM by itself is not a technological concept. CRM has a multifaceted nature

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(Payne & Frow, 2005) and has not produced the expected results through lack of a common conceptualization (LaPlaca, 2004). Various models have been developed to show how it impacts organizational performance. These models are different in two ways: first, in conceptualizing key constructs of CRM, and second, in showing the interrelationships among the constructs. Zablah et al. (2004) worked on the CRM literature and identified and conceptualized five major perspectives on CRM (i.e., philosophy, strategy, technology, process, and capability). This was an important step toward a unified framework linking CRM to performance.

This paper addresses both problems mentioned above. The main objective of this study is to propose an integrated framework which traces the path from CRM investment to organizational performance. In this framework, we are going to:

1. Specify what resources are important for implementing CRM processes.
2. Put different perspectives on CRM, which have caused various strands of research, into a single integrated framework.
3. Display how and through which mechanisms CRM creates value for the firm.

By reviewing the literature on CRM and drawing on the RBV and the process-oriented approach, this study has worked towards the above objectives. The remainder of this paper is structured as follows: in the next section, the relationship between CRM and IT is reviewed. Then, the RBV, process-oriented approach, and their extension to CRM and the performance study will be discussed. A review of the models that link CRM to performance is also offered in Section 2. Then, in Section 3, the research framework and its dimensions are proposed. Research methodology is discussed in Section 4. Section 5 presents the results of the empirical study. The paper concludes with a discussion, managerial implications, and limitations in Sections 6 through 8.

2. Resource-based view and process-oriented approach in the CRM value creation model

In this section, the theoretical backgrounds of CRM and IT, RBV, and the process-oriented approach are studied. Meanwhile, why RBV and the process-oriented approach can be adopted based on the CRM premise will be discussed.

2.1. CRM and IT

In the mid-1990s, CRM emerged in the IT vendor community (Payne & Frow, 2005), and interest in it began to grow in that same decade (Ngai, 2005). Many have pointed to relationship marketing as the philosophical basis of CRM (Chen & Popovich, 2003; Grabner-Kraeuter, Moedritscher, Waiguny, & Mussnig, 2007; Payne & Frow, 2004; Reinartz et al., 2004; Zablah et al., 2004).

The literature shows that relationship marketing and IT formed the CRM phenomenon. As Bharadwaj (2000) mentions, "in achieving high levels of customer orientation, firms have found IT to be an indispensable factor". In fact, CRM, as a customer orientation strategy, is rooted in the core IT capability of the firm. Payne and Frow (2005) confirm this by suggesting that CRM is more commonly used in the context of technology solutions and has been described as "information-enabled relationship marketing". This is why many executives have mistaken CRM with technology solutions. For instance, in a recent survey among executives, Payne and Frow (2005) found that different meanings of CRM still exist, which are mostly technology-oriented. Some meant CRM as direct mail, a loyalty card scheme, a database, a help desk, or a call center. Others defined it as populating a data warehouse, undertaking data mining, and so on. This can be the reason of why academics believe that the negative reaction to CRM is more about the IT-dependent view of it, rather than the unimportance of customer relationship value (Coltman, 2007). Therefore, it is important to note that CRM is a marketing strategy enabled by information technology aimed at creating mutually beneficial relationships between the firm and its customers (Lindgreen & Antioco, 2004; Rigby et al., 2002; Zablah et al., 2004). The emphasis on viewing CRM as a strategy is now evident in the literature. Payne and Frow (2005) describe CRM as a continuum which, on the one side, is about the implementation of a specific technology solution, and, on the other side, is a strategy for managing customer relationships to create shareholder value. They conclude that CRM should be positioned in the broad strategic context which involves "a profound synthesis of strategic vision". By defining clear goals for CRM strategy, its implementation can be as simple as making a "frequently asked questions (FAQ)" page on a company's Web site, giving customers information about the availability of products (Karakostas et al., 2005), or simply telling employees to be more careful with customers (Rigby et al., 2002), or, it can be as complex as executing complicated systems and processes.

Meanwhile, and with the growing interest in CRM, the IT and Information Systems (IS) researchers found mixed results between IT investments and firm performance (Santhanam & Hartono, 2003). They called this phenomenon the "productivity paradox", and tried to address the question of why investments in IT do not generate the expected results. To answer this question, some theories have been adopted and developed; one of them is a theory-based framework commonly referred to as the resource-based view (RBV) of the firm (Santhanam & Hartono, 2003).

The attributes of RBV make it suitable to be extended to the context of CRM. First, CRM is mainly grounded in marketing and IS fields. Barney, Wright, and Ketchen (2001) suggest that RBV has important implications for both fields. 1) In the IT field, RBV has been used to explore the ability of IT in bringing competitive advantage to firms. For instance, Melville et al. (2004), with a comprehensive view of other theories, explained the reason for choosing the RBV as the primary theory in their study (e.g., its firm roots in microeconomics and its usefulness in examining the IT resource). 2) In the field of marketing, the RBV can be used to analyze the resource–competitive advantage connection. In other words, we can analyze the fundamental process by which the transformation of resources to something valuable for customers happens (Barney et al., 2001). Second, the 'people aspect' in the definition of CRM as people, processes, and technology has gained much attention (Chen & Popovich, 2003; Reinartz et al., 2004; Rigby et al., 2002). The RBV has also made important contributions in the field of strategic human resource management (SHRM) and emphasized the strategic importance of people (Barney et al., 2001). In this regard, human capital skills and employee behavior have been considered to be two independent components of SHRM that affect sustainable competitive advantage. Third, CRM is a comprehensive strategy and a management approach aimed at creating superior value for the company (in terms of economic performance) and the customer (Payne & Frow, 2005). The RBV combines the underlying principles of economics with a management perspective (Peteraf & Barney, 2003).

We discussed the RBV's usefulness in the CRM context in and of itself. Before we proceed to talk about the RBV in the context of CRM, we are going to discuss the question of why the RBV is better than other theories in the study of CRM. As mentioned, CRM's main goal is to create value and superior performance. That is what the RBV is all about (i.e., a theory which "focuses on the fundamental drivers of performance and competitive advantage") (Conner, 1991). From this standpoint, Conner (1991) finds the RBV to be a theory used in industrial organization (IO) economics and, as a result, compares it with five theories that have been significant in the evolution of IO. These refer to neoclassical economics, Bain-type IO, the Schumpeterian and Chicago responses, and transaction cost economics. Concluding that the RBV has at least one commonality and one difference with these theories, his study also states that the RBV "both reflects a strong