Antecedents and consequences of CRM technology acceptance in the sales force

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Abstract

Two conceptual approaches [Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13 (3), 319–340; DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. Information Systems Research, 3 (1), 60–95] are unified into a conceptual model that offers a comprehensive explanation of CRM acceptance antecedents and consequences in a sales force setting. Based upon responses from 240 salespersons that utilize a CRM system, the model is tested and explanations are offered for the system's acceptance. Specifically, the most prevailing influence on CRM acceptance comes from CRM perceived usefulness, followed by the setting of accurate expectations regarding system usage, the salesperson innovativeness towards new technological tools, the CRM perceived ease-of-use, and the supervisor encouragement and support. Surprisingly, the model does not adequately explicate salesperson performance. Sales managers are presented with a discussion and implications of the findings.
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1. Introduction

Undoubtedly, the last 10 years have been characterized by an unprecedented shift in the sales function of the business-to-business organization (Ingram, LaForge, & Leigh, 2002), largely due to the introduction of information systems [IS] into the industrial sales organization (Honeycutt, 2002; Marshall, Moncrief, & Lassk, 1999). These systems have been positioned in the sales force literature as a powerful tool for increasing sales productivity (Hise & Reid, 1994). Thus, it is not surprising that some researchers have underlined the importance of conducting research into the Sales Force Automation (SFA) domain (e.g., Marshall, Michaels, Stone, & Jawahar, 2001). Yet, research on SFA/

CRM[2] applications is very limited (Ingram et al., 2002), in spite of the critical role of CRM systems on building and sustaining effective customer relationships and the fact that while most CRM implementations constitute a great investment for the sales organization, they fail to be accepted by the sales force (Speier & Venkatesh, 2002).

Research efforts in the area of industrial SFA systems, are focusing either on the antecedents of SFA adoption and acceptance (e.g., Morgan & Inks, 2001) or on the consequences of the SFA implementation (e.g., Keillor, Bashaw, & Pettijohn, 1997). By reviewing the sales/marketing literature it becomes apparent that no published study has simultaneously examined the antecedents and the consequences of the SFA/CRM technology acceptance for

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[2] The terms SFA and CRM are used interchangeably in the sales literature. Basically, CRM is a business strategy that consists of processes and technologies that enhance customer relationships, while SFA deals only with technological tools. In this paper, we focus on the technological elements of CRM (Ingram et al., 2002), recognizing that CRM is a much broader [although related] concept to SFA.

the industrial salespersons. Moreover, most of the published studies are largely descriptive in nature and have concentrated on technology adoption at the organization level (e.g., Pullig, Maxham, & Hair, 2002; Rivers & Dart, 1999), thus paying less attention to the factors leading individuals to adopt new technological tools. Two notable exceptions are the recent works of Jones, Sundaram, and Chin (2002) and Speier and Venkatesh (2002). Finally, a closer examination of both the information systems and the sales management literature reveals that there is a dearth of knowledge regarding the impact of information technology on individual performance.

Therefore, the purpose of this paper is twofold: firstly, to examine the factors that lead to the effective acceptance of CRM technology and, secondly and simultaneously, to investigate the impact of its implementation on the individual sales representative performance. The structure of the paper is organized as follows: first, we review the relevant literature, in order to develop the conceptual framework and the research hypotheses of our study. Next, we present the methodology and the results of the empirical study. Finally, the study findings are discussed both from a theoretical and a managerial standpoint, and several suggestions for future research in this important area, are presented.

2. Theory development and model description

Researchers have studied technology acceptance using a variety of theoretical frameworks. However, the most widely used theoretical framework is the Technology Acceptance Model (Davis, 1989), which presents a list of factors that lead to technology acceptance and use. On the other hand, DeLone and McLean (1992) have offered a parsimonious model for IS success, which demonstrates the effect of use and user satisfaction with information systems, on user-performance. Apparently, system use, which is a key variable in most of the theoretical frameworks in the IS literature, is common in the two models and therefore it could serve as a basis for their integration. Fig. 1 presents

the conceptual model of our study, which is based on the work of Davis (1989) and DeLone and McLean (1992), and which will be analyzed further in developing our research hypotheses.

2.1. CRM acceptance antecedents

During the last 20 years researchers from a diverse set of disciplines, such as information systems research, innovation research, and social/organizational psychology, have devoted a great deal of effort in order to uncover the determinants of individual technology acceptance. This vast amount of research has produced a large number of theoretical frameworks; however, the most widely applied theoretical framework is the Technology Acceptance Model [TAM] (Davis, 1989). Davis, based upon the Theory of Reasoned Action (Ajzen, 1985), developed the TAM, which is specifically designed for explaining individual technology acceptance decisions across a wide range of technologies, user populations, and contexts. The TAM has been applied to a vast number of work settings with great success, during the last 15 years (Hu, Clark, & Ma, 2003).

2.1.1. Salesperson beliefs

According to TAM, usage behavior is determined by intentions towards using the system, while intention is jointly determined by two related beliefs: perceived ease-of-use [PEOU] and perceived usefulness [PU]. PEOU is "the degree to which an individual believes that using a particular system would be free of physical and mental effort," while PU is defined as "the degree to which an individual believes that using a particular system will enhance his/her job performance" (Davis, 1989). PU is influenced by PEOU because, other things being equal, the easier the system is to use the more useful it can be (Davis, Bagozzi, & Warshaw, 1989; Igbaria & Guimaraes, 1995). Therefore, we hypothesize that:

Hypothesis 1. CRM perceived ease-of-use will positively influence CRM perceived usefulness.
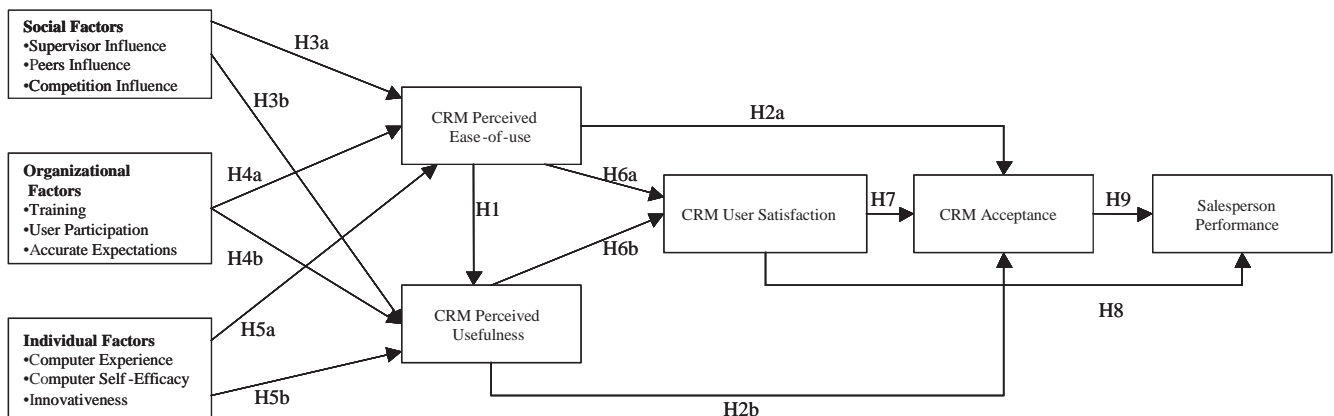

Fig. 1. Conceptual model.