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International Journal of Information Management

International Journal of Information Management 28 (2008) 102-113

www.elsevier.com/locate/ijinfomgt

## Customer Knowledge Management and E-commerce: The role of customer perceived risk

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## Abstract

The present research is designed to gain a deeper understanding of Customer Knowledge Management (CKM) tools inside the e-commerce context. The relationship between the CKM literature and the e-commerce literature is evaluated through several user characteristics such as risk preference, Internet preference and Internet knowledge and their impact on customers' online perceived risk and purchase intentions depending on the presence of certain CKM tools on the web site. The empirical study is based on a survey of 276 customers with previous online experience. By using multidimensional analysis, this study shows that the customers' perceived risk associated with different CKM tools plays an important role in explaining certain customer online behaviour. Therefore, the implications of CKM tools for e-commerce activity are demonstrated and the managerial implications are highlighted.

Keywords: CKM tools; E-commerce; Perceived risk; Purchase intention; Customer perceptions

## 1. Introduction

In modern organizations, knowledge is the fundamental basis of competition (Zack, 1999), and information technology (IT) is a necessity (Bose, 2000) critical for managing knowledge (Ofek & Sarvary, 2001). In the new context, two major factors determine the future survival or success of organisations: electronic commerce (Gupta, Su, & Walter, 2004) and the knowledge from customers (Tsai & Shih, 2004), encouraging the adoption of e-commerce and the use of the Internet as a platform to access and collect important knowledge from customers. In other words, the success of e-commerce increasingly depends on knowledge management (Borges, Almeida, Gomes, & Cabral, 2007; Saeed, Grover, & Hwang, 2005). Customer Knowledge Management (CKM) is the application of knowledge management (KM) instruments and techniques to support the exchange of knowledge between

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an enterprise and its customers (Kolbe & Geib, 2005; Rollins & Halinen, 2005; Rowley, 2002), enabling the company to make appropriate strategic business decisions (Rowley, 2002; Su, Chen, & Sha, 2006). However, there is still a need to further elaborate on the concepts of customer knowledge and CKM (Rollins & Halinen, 2005), since the critical role of KM in gaining competitive advantage in the market (Ofek & Sarvary, 2001) and within the e-commerce context (Du Plessis & Boon, 2004; Tsai & Shih, 2004) is far from fully understood.

Knowledge, defined as information combined with experience, context, interpretation and reflection (Davenport, De Long, & Beers, 1998), can be divided into explicit knowledge and tacit knowledge (Nonaka, 1994). Specifically, customer knowledge can also be classified as knowledge 'for', 'about' or 'from' the customer (Maswera, Dawson, & Edwards, 2006; Salomann, Dous, Kolbe, & Brenner, 2005; Su et al., 2006). KM is the explicit and systematic management of vital knowledge and its associated processes of creation, organisation, diffusion, use and exploitation (Skyrme, 2001) and CKM is the external perspective of KM (Rollins & Halinen, 2005). In order to

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<sup>0268-4012/\$-</sup> see front matter © 2007 Elsevier Ltd. All rights reserved. doi:10.1016/j.ijinfomgt.2007.09.001