



Web knowledge sharing and its effect on innovation: an empirical investigation in SMEs

Pedro Soto-Acosta¹
Ricardo Colomo-Palacios² and
Simona Popa¹

¹University of Murcia, Spain; ²Universidad Carlos III de Madrid, Spain

Correspondence: Pedro Soto-Acosta,
Department of Management & Finance,
University of Murcia, Campus de Espinardo,
Murcia 30.100, Spain.
Tel: +34 868 887805;
Fax: +34 868 887537;
E-mails: psoto@um.es; ricardo.colomo@uc3m.es; sp.popa@um.es

Abstract

This paper extends previous studies on knowledge management by analysing factors affecting Web Knowledge Sharing (WKS) in small- and medium-sized enterprises (SMEs). In addition, the impact of WKS on organizational innovation and the moderating effect of IT skills on this relation are analysed. Grounded in the technology-organization-environment (TOE) theory and the resource-based view (RBV), this paper develops an integrative research model, which analyses these relations using structural equation modelling on a data set of 535 Spanish SMEs. Results suggest that technological and organizational factors – IT expertise and commitment-based human resources practices – positively influence WKS, while the contrary is found for environmental factors (customer power). In addition, results show that WKS contributes positively to organizational innovation, though support for the moderating effect of IT skills in this relation is not found. The main conclusions of this research can be valuable to SMEs that use or intend to use Internet technologies for knowledge management.

Knowledge Management Research & Practice (2014) 12, 103–113.

doi:10.1057/kmrp.2013.31; published online 29 July 2013

Keywords: knowledge sharing; Internet technologies; innovation; performance; TOE theory; SMEs

Introduction

Information and Communication Technology (ICT) innovations and the advent of Internet have played an important role in shaping organizational transformation by influencing workforce productivity and the development of productivity and knowledge-intensive products and services (Soto-Acosta *et al.*, 2010; Molina-Castillo *et al.*, 2012). Effective adoption and use of Internet technologies are therefore a major management concern (Soto-Acosta & Meroño-Cerdan, 2006; Colomo-Palacios *et al.*, 2013). Recent studies (e.g., Gu *et al.*, 2012) are starting to analyse the adoption and use of Internet technologies within organizations and how these technologies support specific business processes. However, much of the existing research focuses on a single aggregate view of the organizational adoption and use of Internet technologies (e.g., Zhu & Kraemer, 2005; Hong & Zhu, 2006; Soto-Acosta & Meroño-Cerdan, 2006; Bordonaba-Juste *et al.*, 2012). These studies analyse the adoption and use of Internet technologies along the whole value chain activities (or a significant part of it). Thus, while existing research has expanded our knowledge, little is known about the determinants of Internet technologies use for specific business processes, such as knowledge sharing, and how these processes contribute to organizational innovation and business value.

The Internet and open standards technologies characteristics of rapid search, access, retrieval and exchange of information make these technologies suitable for collaboration and knowledge sharing between

Received: 18 March 2013
Revised: 10 June 2013
Accepted: 11 June 2013