

# Analyzing e-business value creation from a resource-based perspective

Pedro Soto-Acosta\*, Angel Luis Meroño-Cerdan

*Dpto. Organización de Empresas y Finanzas, Universidad de Murcia, Campus de Espinardo, 30100 Murcia, Spain*

## Abstract

In recent years, scepticism about the value of e-business and information technology (IT) at the level of an individual firm has been renewed. In this sense, information systems researchers face pressure to answer the question of whether and how e-business creates value. To respond to this challenge, this paper develops a conceptual model, grounded in the resource-based theory, for assessing e-business value creation. This model posits three relationships: Internet resources and e-business value, Internet resources and e-business capabilities, and e-business capabilities and e-business value. To test hypotheses, a sample comprising 1010 Spanish firms is employed. The results show that, as hypothesized, Internet resources per se are not positively associated with e-business value. Furthermore, although Internet resources are not positively related to e-business value, they are found to play a critical role in creating e-business capabilities. In addition, the results confirm that e-business capabilities are key drivers of e-business value.

© 2007 Elsevier Ltd. All rights reserved.

*Keywords:* e-Business; Value creation; Resource-based theory; Internet; Information technology

## 1. Introduction

For more than a decade, researchers have been trying to quantify the benefits of information technology (IT) at the level of the individual firm. The results of these studies were varied and the term “productivity paradox” was coined to describe such findings. Nonetheless, recent studies have found positive and stronger linkages, and have attributed the productivity paradox to variation in methods and measures (Devaraj & Kholi, 2003).

Research such as of Henderson and Venkatraman (1999) argues that IT is evolving from its traditional back office role towards a strategic role, supporting new business strategies. However, recently much controversy about the value of IT has been created by assertions of Carr (2003), in his article “IT Doesn’t Matter”. Carr’s argument, in a few words, is that because every firm can purchase IT in the marketplace, because any advantage obtained by one

company can easily be copied by another company, and because IT is now a commodity based on standards (such as the Internet) that all companies can freely use, IT is no longer a differentiating factor in organizational performance. What makes a resource truly strategic—what gives it the capacity to be the basis for a sustained competitive advantage—is not ubiquity but scarcity. Carr argues that no firm can use IT to achieve a competitive advantage over its competitors any more than it could with electricity, telephones, or other infrastructure. Therefore, Carr concludes, firms should reduce spending on IT, follow rather than lead IT in their industry, and avoid deploying IT in new ways.

Most management information systems experts disagree with Carr’s assertions. The technology itself will rarely create superiority. For that reason, some research studies found that IT spending rarely correlates to superior financial results (Hoffman, 2002). However, IT can play an important role in developing superior business processes. Some researchers have described this in terms of IT capabilities and argue that IT capabilities can create uniqueness and provide organizations a competitive advantage (Bharadwaj, 2000; Bhatt & Grover, 2005;

\*Corresponding author. Tel.: +34 968367805; fax: +34 968367537.

*E-mail addresses:* [psoto@um.es](mailto:psoto@um.es) (P. Soto-Acosta), [angelmer@um.es](mailto:angelmer@um.es) (A.L. Meroño-Cerdan).