Decision-Making for Location of New Knowledge Intensive Businesses on ICT Sector: Portuguese Evidences

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ABSTRACT

Technological innovation associated with e-business is seen as one of the key drivers of the knowledge economy and innovation performance and is a considerable test of a region's or nation's capacity to generate e-entrepreneurship and sustain competitiveness. The importance of the knowledge intensive business services (KIBS) sector to economic growth will increase significantly with the development of the knowledge economy and the rise of e-entrepreneurship. This article identifies different types of new KIBS and recognizes factors influencing their location. A conceptual research model based on the link between KIBS and location attributes is proposed and tested, and a survey was carried out in the Region Centro of Portugal to test a multidimensional approach at the location decision level. The authors found many different factors associated with the location of new KIBS, and their findings highlight two profiles of KIBS.

Keywords: E-Business, Information and Communication Technologies, Knowledge Economy, Knowledge Intensive Business, Location Decisions

1. INTRODUCTION

The Lisbon European Council adopted, in March 2000, an economic reform programme with the aim of making the EU the most competitive and dynamic knowledge-based economy in the world by 2010. In that connection the European Council highlighted the key role of services in the economy and their potential for growth and employment. Services are the main motor of growth in the EU, accounting for 54% of GDP (Eurostat, 2002) and for 67% of those in employment.

However, interest on economic information services goes back to 1980, at a time when regional development in Europe and North America was concerned with de-industrialization. Until then, those services were seen as mere subsidiaries of transforming activities. Over the last 20 years, special attention has been
De-industrialization has continued, yet, some services’ sectors have shown a progressive rise (Wood, 2005).

Despite growing awareness that innovation is not confined to sheer technical processes and products, some recent research on innovative activities has focused its attention only on technical innovation and, in particular, on the transforming industries sector (Becker & Dietz, 2004; Huergo & Jaumandreu, 2004; Lyskey, 2004; Nieto & Santamaria, 2005).

Technological innovation associated with e-business is now broadly appreciated as one of the key drivers of positive economic change and innovation performance and gives a potentially considerable test of a region or nations capacity to generate an e-entrepreneurship process (a multistage process which is influenced by both the exogenous as well as endogenous factors) and sustain competitiveness (Ramsey et al., 2005). Particularly the importance of the Knowledge Intensive Business Services (KIBS) sector to economic growth will increase significantly with fast development of the knowledge economy and the rise of e-entrepreneurship.

According to McCole and Ramsey (2004) e-business is the integration of Information and Communication Technologies (ICT) into business operations, which may evolve the redesign of internal processes around ICT, or the complete reinvention of an organization’s business model. Relation to the ICT is a key feature of KIBS which has been attracting a great deal of attention in the literature (Hempel, 2002; Broersma & Ark, 2007; Muller & Doloreux, 2009). In the most dynamic service industries, investments in ICT are larger than in the manufacturing sector and the available statistics concerning ICT investments show that service sectors account for the biggest – and growing-share of the total expenditures in ICT in the economy (Corrocher et al., 2009).

Today ICT must be conceived broadly to encompass the information that business create and use, as well as the wide spectrum of increasingly convergent and linked technologies that process that information. Therefore, ICT can be viewed as a collective term for a wide range of software (human and social capital), hardware (information and communication technology), and the fundamental socio-economic environment, which are linked in a systematic way by the entrepreneurs (Brandy et al., 2002; Porter & Millar, 1985). ICT have the potential to generate a steep change among KIBS and make them more competitive, innovative and generate growth.

The importance of the services industry has only been acknowledged in the last decade (Gallouj & Weinstein, 1997; Tether, 2003). According to Tether et al. (2001) innovation in the service industry firms is perceived as something that occurs very slowly. Services are perceived as being incapable to innovate, adopting innovations generated by the transforming industry’s firms. Alongside Tether et al. (2001), Pavitt (1984) also believes that smaller services firms are less likely to develop R&D roles, thus becoming recipients of technology and innovation produced in other sectors.

Within the services industries, the rapid growth of KIBS has exposed their major role in innovation processes (Howells & Tether, 2004; Koch & Stahlecker, 2006; Muller, 2001; Toivonen, 2004). The role played by KIBS in the innovation process is affirmed, above else, by the fact that they do not have a simple performing role in the innovating activity, such as meeting demand and, more specifically, their clients’ wishes. Rather, they act as builders of “knowledge bridges”, or “innovation bridges”, between firms and science (Czarnitzki & Spielkamp, 2003; Miles et al., 1995). Nevertheless, few studies have been made on the innovative activity carried out by this sector of services (Koch & Strøtmann, 2008).

KIBS are services that rely deeply upon professional knowledge (Miles et al., 1994). Thus, the employment structures of firms in these sectors are heavily weighted towards scientists, engineers, and specialists of all types. Some are strongly technology-oriented, while others are much more concerned with knowledge of administrative, regulatory or social affairs.
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