Case study

A case analysis of semantic technologies for R&D intermediation information management

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ABSTRACT

It is evident that companies and research centres can find a myriad of instruments to fund their R&D (Research & Development) activities. Due to the dynamics of the information management in these circumstances there is a need for intermediary businesses intervention. Consequently, intermediary companies are thus involved in a complex process that needs to be managed and controlled. Within this scenario an Information Technology (IT) platform, named RDi-Advise, was developed by EgeoIT using semantic technologies to support R&D process decisions. This case analysis describes the development and implementation of the platform including the lessons learned during the activity period.

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1. Introduction

Organizations must continuously innovate in terms of product, process, market and business model to remain sustainable (O'Sullivan & Dooley, 2010). Public support programmes are a way for every type of company to secure funding for their R&D initiatives. These programmes, designed to encourage private R&D effort, have been implemented in the US, Japan and the European Union (Busom & Fernández-Rivas, 2008). As a part of the European Union, the Spanish government has seen R&D as a strategic issue. In Spain, R&D policy-making is centralised at a high political level in the Ministry for Science and Innovation. This Ministry and the Interministerial Commission for Science and Technology (CICYT) are in charge of developing and controlling the National R&D Plan. This plan known as the National Scientific Research, Development and Technological Innovation Plan (National R&D&I plan) includes twenty-five National Programmes grouped in nine broad areas or fields. The Information Society Technologies Area receives 20% of the support given to the program. Apart from this, the growing importance of R&D for policy-making in Spain is also reflected in the reorientation of the European Structural Funds, as the percentage of these funds devoted to R&D will rise from 12% in the period 2000–2006 to 35% in the period 2007–2013. Moreover, Spain is one of the main beneficiaries of the European Technology Fund created by the European Commission to compensate partially for Spain's loss of funds related to the Regional Cohesion Funds due to the entry of new countries in the Union (Heijs, 2010).

Given the opportunities of funding, many organizations in Spain are pursuing these funds to support their R&D&I plans. Due to the intrinsic difficulty of the process, many organizations hire a private intermediary to help them in the process. According to Howels (2006), an intermediary can be defined as an organization that acts as an agent or broker in any aspect of the innovation process between two or more parties. Such intermediary activities include: helping to provide information about potential collaborators; brokering a transaction between two or more parties; acting as a mediator, or go-between, for bodies or organizations that are already collaborating; and helping find advice, funding and support for the innovation outcomes of such collaborations. The benefits of this kind of agents are well known. An intermediary can help companies to maximize their chances of innovation and increase their likelihood of success in developing new products and services (Lee, Park, Yoon, & Park, 2010). However, the growth in the number and range of these actors within the system creates confusion for their clients and to the innovation system overall (Howels, 2006).

This intermediate managing process is complex and may be assisted by technology through the application of a decision support system (DSS). The main objective of this case analysis is to present a system that enables the management of R&D intermediary firms based on semantic technologies and open standards

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