Chapter 6.5
Partner Relationship Management:
Semantic Extension of CRM Systems for the Partner Searching and Management in R&D Environments

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ABSTRACT

R&D activities normally require consortium formation due to the different areas of expertise involved in such activities. On the one hand, it is not trivial for a R&D entity to decide in which projects it should participate, or which are the adequate partners to form a consortium. On the other hand, acceptation of the Customer Relationship Management (CRM) Systems has become a reality for the industry and researchers in areas, such as marketing, communication, or computer science. These tools contain in their basic packages features to manage key company actives, including partners and clients. However, R&D environments involve special characteristics and traits, which require an extension of functionalities in order to be accurately covered. The increasing strength and usefulness of semantic technologies have led to innovative decision support processes and management of partners and R&D call for proposals. This work introduces an architecture that integrates R&D processes with the CRM philosophy.

INTRODUCTION

It is common knowledge that Research and Development (R&D) investment is one of the long term solutions to assure a nation economic future. This theory is confirmed by several authors, including Lee (2009) or Sahaym, Steensma & Barden (2010). Despite of this, the least prepared companies to compete in an economic turbulence environment are SME, as they are less prepared to assume budgets of high risk projects (Corchuelo & Martínez-Ros, 2009). Although there are many government incentives in Europe to engage R&D investments in the SMEs (Cox & Gagliardi, 2009), the reality is that large organizations often get most of the public funding addressed to private R&D due to their advantageous starting point, both to form the right consortium for the right project, and acknowledge the project suitability for each call. Top companies have a vast business contacts network available which is part of the company added value and fruit of many years and past collaborations. This experience from past projects leads them to know exactly what kind of project is adequate for each call.

A SME has often little chances to get neither this profitable contacts networks to identify suitable partners, nor the experience to find the right call for a R&D initiative. Furthermore, they usually lack enough resources to commercialize their innovative products (Lee, Park, Yoon & Park, 2010). This is especially true in SMEs first R&D projects, when there is a remarkable dependence of intermediaries.

Howels (2006) defined an intermediary as an entity assuming the role of an agent or broker in an innovation process between some parties. Intermediaries responsibilities include tasks such as provide information about potential partners; brokering a transaction between partners, act as mediator between consortium members and counsel about funding.

Wright, Clarysse, Lockett & Knockaert, (2008) divides innovation intermediaries in two types: internal intermediaries and external intermediaries. The first ones are entities like the Technology Transfer Offices (OTT) that guide researches in institutions like universities and perform an intermediary role between these research institutions and the industry. The second kind of intermediaries (external) groups entities with the required expertise to guide the first steps of a company in R&D processes. One example of these intermediaries is Collective Research Centres (CRC).

Despite the benefits obtained from intermediaries by the Industry (especially by SMEs), the growth in number and nature of these professionals (Howels, 2006) and the heterogeneity of partnership cases (Hagedoorn, Link & Vonortas, 2000) and research domains may create confusion for new clients in these scenarios. At times, consulted intermediaries will not always be able to offer them proper advices regarding potential consortium members or proper projects to present in the appropriate call for proposals.

It is easy to perceive R&D initiatives of an innovative company or innovation intermediary as a project portfolio, where managers have to prioritize those initiatives considered appropriate in each situation, analyzing factors such as risks involved, or the return of investment. Since the 1970s, business portfolios and portfolio management have been portrayed as a powerful and pervasive tool (Roussel, Saad, & Erickson, 1991). There are many project portfolio management models that propose the use of success factors to evaluate and approach strategic selection processes, such as those proposed by Zhao (2007), Wang & Hwang (2007) or Meskendahl (2010). It would be interesting to address management issues from innovative companies from a project portfolio management (PPM) perspective, as it would lead intermediaries and companies to a more efficient and profitable R&D initiatives management.

The aforementioned heterogeneity of partnerships and domains could represent a challenge for intermediaries, especially SMEs, when counsel-

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