

# Chapter 6

## Competence Management over Social Networks Through Dynamic Taxonomies

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### ABSTRACT

*The exploitation and integration of social network information in a competence reference model (CRAI, Competence, Resource, Aspect, Individual) are discussed. The Social-CRAI model, which extends CRAI to social networks, provides an effective solution to this problem and is discussed in detail. Finally, dynamic taxonomies, a model supporting explorative conceptual search, are introduced and their use in the context of the Social-CRAI model for exploring retrieved information available in social networks is discussed. A real-world example is provided.*

### INTRODUCTION

The current focus of organizations is on gathering, planning, representing and exploiting competencies of employees and other collaborating/concurrent organizations. As explained in the last Cedar Crestone report (CedarCrestone, 2010),

organizations with *individual competence management* (i.e. the management of competences of any employee) have better than average sales growth; those outperforming organizations have been supported by Human Resource software systems (HR systems) with integrated and unified functionalities and are even able to exploit social

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networks; more importantly, their best practices in talent management have been fundamentally driven by individual competence management.

In the context of *web 2.0*, *social networks* are becoming a basic mechanism for advertising and sharing information about competencies of people, roles (in the sense of roles played by people and organizations within one organization) and organizations. For instance, social networks such as *LinkedIn* are becoming more and more important in forging *networks of professionals* for deal-making, collaboration, and, most importantly in this present context, for recruiting. On the one hand, companies can use information from social networks to speed up recruitment/collaboration and, conversely, persons can use the same information to get more job opportunities. On the other hand, companies can advertise their interests about specific required competencies and persons may even want to focus on these competencies when looking at learning opportunities and curricula.

Therefore, in social networks several types of information about competencies may be found. However, these information need to be carefully identified and assessed before moving further because

- A. Any *self qualitative or quantitative evaluation* of own proper competencies may be wrong;
- B. Any *self definition of a competence* may differ significantly from definitions provided by other actors in the same or other contexts.

Otherwise, there is a risk of making wrong decisions concerning recruitment of people and collaboration with people or organizations.

Since late '90, we have proposed a competence reference model (Harzallah & Vernadat, 2002; Berio & Harzallah, 2006) and a competence management process model (Berio & Harzallah, 2005; Berio, Harzallah & Sacco, 2007): the former provides a precise definition for the concept of competence, acquired and required

by an organization, and comprises concepts that are required for managing these competencies; the latter provides the definition of four macro-enterprise processes (i.e. required competence identification for planning and identifying what an organization is looking for, competence assessment for understanding the current status of individual competencies within the organization, competence acquisition – and retention - for acquiring missing required competencies - – and retaining currently available required competencies - and, finally, competence knowledge usage for exploiting in specific manner any knowledge about competencies and supporting the previous three processes) that defining what management of competencies is. The competence reference process model supports two management styles:

- *Competence identification first* i.e. the enterprise is able to define and to plan its required competencies (mostly usable when competencies are mostly known or envisioned in advance);
- *Competence assessment first* i.e. the enterprise discovers its competences, possibly not required in short-term but becoming required in long-term, based on assessment, (mostly usable when competencies are not known a priori or with very qualified employees undertaking actions and making decisions autonomously toward the fulfillment of given enterprise objectives).

Both styles are valuable in specific situations and probably can be mixed.

This robust baseline, both the competence reference model and the competence management process reference model, is fully in line the findings cited in (CedarCrestone, 2010). The baseline indeed supports the development unified and integrated functionalities for HR systems by providing a complete *implementation framework*. Additionally, the framework comprises modern technologies compliant with the Semantic Web,

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