# A Survey of Competency Management Software Information Systems in the Framework of Human Resources Management

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### **ABSTRACT**

One of the greatest surprises of the Internet economy is that far from replacing people, the use of advanced technology is confirming that talent is the most valuable asset in today's organizations. In this context, competency management (CM) software automation practices become the most valuable business approach to define, measure, and manage talent needs, the human capital of the organization. This chapter's position is that CM process automation in competitive, knowledge-intensive e-business oriented organizations requires that information technology (IT) address software strategy in a comprehensive human resources management (HRM) framework. Core competency management-related applications are deployed in current corporate e-business

transformation processes in association with the use of innovative employee—facing relations management technology and reengineering most HR transactional domain type of applications in place. The chapter shows the CM software evolution from a previous fragmented market situation to a much more integrated scenario in which best-of-breed single-function oriented products preferences are now swiftly moving to the enterprise resource planning (ERP) type of architecture.

### INTRODUCTION

As the Internet age transforms the way people work and live, organizations keep continuously embracing the new opportunities and challenges generated by this relatively recent and significant change, introducing a new knowledge revolution (Nordstrom & Ridderstrale, 2000).

Today's economy is creating a new breed of "intelligent" organizations, where a very high percentage of the total workforce is comprised of knowledge workers. In this context, the ability to effectively manage human capital investments becomes essential to ensure business success. Organizations gain real advantages by applying Internet technology to the measurement and management of their talent needs, the human capital of the organization.

The long transition from traditional "personnel administration" activities to most recent "human resources (HR) management," has meant an evolution from a purely functional to a process-oriented approach in which all those activities associated with the management of employment and work relations are included (Boxall & Purcel, 2003).

Traditionally, organizations of any size or activity used to focus primary attention on automating payroll & basic administrative functions. Other administrative-required functions (like recruiting, training, etc.) were largely assumed and performed in a non-automated way, thus creating large staff departmental units in these areas, non-associated with the organization's primary business.

IT solutions at the time were not designed to manage *knowledge assets*; they were focused on managing *physical assets*. Individual employees and managers used to call upon HR to satisfy different kinds of requests. Individual employees typically required tracking and processing personal information, such as compensation, benefits, or other related data. Managers required HR to provide information on recruitment or training services.

In recent HR management, the new e-business context has transformed and automated most HR operations, thus generating additional efficiency: process flows are handled like "automated transactions" and self-service functions appear, simplify-

ing individual employee/manager relations within the organisation, automating administrative tasks and enhancing task-driven routines formerly performed by HR departments.

In the new "human capital" (HC) paradigm, it is not just about modeling and automating "tactical" HR functions. Two new dimensions are introduced. The first to consider is that a new role appears for HR: that of strategic asset (talent) management. The second is that HR becomes just another component in the organisation, like financial management, supply chain management, customer relations management, or IT, all of them driven to produce a product or service that generates value to the customer (Laudon, 2004).

It is in this new, comprehensive management context where competency management fully develops itself, becoming the integrating "glue" element in HC management systems (Sagi-Vela, 2004), thus reshaping today's and future HR management implementation strategies.

In the context of this work, competence is understood as the set of knowledge, skills, and attitudes required in people to perform a specific task in an efficient way (Sagi-Vela, 2004). CM is a comprehensive HR process that starts by defining the required organizational competencies, assigns them to employees, observes them through behaviour, asses them according to an organization's defined values, and permanently improves them (Levy-Leboyer, 1997). Unlike in traditional transaction-oriented HR practices, a CM strategy should pursue the following goals:

- Support business objectives, providing information to *acquire*, *maintain*, *influence*, *develop*, and *retain* the *right employees*.
- Align people, processes, and technology around shared values.
- *Measure* the strategic value of human capital investments.
- Anticipate human capital changes.
- Learn from industry-best practices, leveraging benchmark data.

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