

## Chapter 20

# Personnel Performance Appraisal Coverage in ITIL, COBIT and CMMi: A Study from the Perspective of People–CMM

**Cristina Casado-Lumbreras**  
*Universidad Complutense de Madrid, Spain*

**Ricardo Colomo-Palacios**  
*Universidad Carlos III de Madrid, Spain*

**Adrián Hernández-López**  
*Universidad Carlos III de Madrid, Spain*

**Pedro Soto-Acosta**  
*Universidad de Murcia, Spain*

### ABSTRACT

*Human capital is of paramount importance in the ICT industry. This paper analyses one of the elements which underlies effective management of human assets: performance assessment. This analysis uses the development of a common standard based on the tasks and processes outlined in People CMM, the standard in human resource management designed by the Software Engineering Institute. This framework is evaluated in different models related to IT Governance, such as COBIT and ITIL, as well as other related IT practices like CMMI for Development, CMMI for Acquisition, and CMMi-SVC. The results indicate that COBIT is the only framework that presents reliable coverage in relation to personnel performance assessment.*

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## **1. INTRODUCTION**

Human capital is key for the knowledge society. The advancement in techniques for personnel development has enabled the application of practices and processes which foster training and learning, improving the performance of individuals and groups. Studies of human capital (Schultz, 1959; Becker, 1964; Mincer, 1974) indicate that this asset is sustained in knowledge, and that this element provides individuals with increases in their cognitive abilities, leading to more productive and efficient potential activity. Drucker (1998) stated that knowledge is the most significant economic resource of a post-capitalist society. Thus, according to Bakry and Alfantookh (2010), building the knowledge culture is of increasing importance, not only because of its role in providing sound knowledge management and effective knowledge-based economic development, but also because of its support to environment protection, intercultural harmony and human well-being.

In this scenario, Knowledge Intensive Organizations (KOI) are, according to Starbuck (1992), those organizations in which “knowledge plays a more important role than any other of the inputs to an organization”. In this environment, KOI, in which IT-related organizations are included, according to Hurley and Green (2005) require effective measurement techniques for the development of their employees, both from the perspective of knowledge as well as competency elements (aptitudes, attitudes, etc.). Human capital is particularly critical for competitiveness in high-tech sectors (Bartelsman et al., 2004). According to López-Fernández, Martín-Alcázar, and Romero-Fernández (2010), IT human resources are gaining importance in an environment more and more competitive and changeable. This circumstance has obliged an increase in the importance of human capital in general and its evaluation, in particular in different environments focused on the governing and management of ICT. In order to accurately analyze such elements, the current paper proposes

a structured reflection of this research field, comparing the practices proposed in the state of the art with those models implemented in the ICT field. To include a more refined analysis, this paper outlines some recommendations for the inclusion of such practices in different models. Given that, according to Ruiz-Larrocha et al. (2011), IT standards (like ISO 27001, ITIL and COBIT) are available to assist organizations implement the appropriate programmes and controls to mitigate risks, knowing to what extent these standards covers performance appraisal could be helpful for managers and practitioners alike.

The remainder of the paper is organized as follows. The next section defines the state of the art about people assessment methods, as well as its components and principal implications. This is followed by the description evaluation framework. Subsequently, several ICT related initiatives are analyzed using the evaluation framework. Lastly, the paper presents the principal conclusions and future work of the study.

## **2. STATE OF THE ART**

IT workers professional practice must be continually revised and improved in order to adapt workers' competences to technical innovations and soft skills to evolving markets (Casado-Lumbreras et al., 2009). Thus, in all industries, but more in particular in IT, one of the leading activities for managers is to discover to what degree workers are competent. In this scenario, the performance appraisal of human resources has been explored both from a theoretical and applied viewpoint.

The use of rating scales in performance evaluations is deeply rooted in the history of personnel psychology (Landy & Farr, 1980). However, performance appraisal is a delicate issue (Myloni, Harzing, & Mirza, 2004). Cole (2001, p. 798) defines performance appraisal as a formalized, systematic assessment and discussion of an employee's performance and his/her potential and

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