

JOURNAL PAPER

Title : Skills for Industry 4.0: a structured repository grounded on a generalized enterprise reference architecture and methodology-based framework

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Abstract : This paper outlines a conceptual framework and a repository of skills for Industry 4.0 that manufacturing managers and other stakeholders can use for training, hiring and developing human resources. The framework and the repository of Industry 4.0 skills were developed by involving industrial practitioners, technology providers, recruitment agencies, research and education organizations in scenario-based focus groups and semi-structured interviews. The results of this study contribute to improving our current understanding of the skills required for Industry 4.0, and they can be used for the identification and assessment of workers' skills as well as the design of skill development programs that match the needs of the industry and for the definition of policies that support the development of human capital to improve the employability of individuals and the performance of manufacturing companies.

Keywords: Industry 4.0, Skill, Competency, Foresight, Human resources, Training

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