

<b><u>Work Package</u></b>	<b>WP7-Dissemination</b>
<b><u>Task</u></b>	Task 7.3. Articles
<b><u>Outcome</u></b>	Scientific Paper
<b><u>Coordinator/Partner</u></b>	P2-TUCLUJ
<b><u>Conference/Journal</u></b>	Conference - The 5 <sup>th</sup> Edition of The International Conference on Smart Systems in All Fields of the Life and their Applications in Aerospace, Robotics, Mechanical Engineering, Manufacturing Systems - ICMERA 2014
<b><u>Title</u></b>	New Management Approaches for Increasing the Competitiveness in Mechanical Engineering Industry
<b><u>Authors</u></b>	Violeta FIRESCU (TUCLUJ) Ciprian LĂPUȘAN (TUCLUJ) Dan MÂNDRU (TUCLUJ) István KUNOS (ME)
<b><u>Date</u></b>	October -2014
<b><u>Web address</u></b>	<a href="http://www.scientific.net/AMM.656.507">http://www.scientific.net/AMM.656.507</a>

## New Management Approaches for Increasing the Competitiveness in Mechanical Engineering Industry

Violeta FIRESCU<sup>1,a</sup>, Ciprian LĂPUȘAN<sup>2,b\*</sup>, Dan MÂNDRU<sup>2,c</sup>, István KUNOS<sup>3,d</sup>

<sup>1</sup> Department of Management and Economic Engineering, The Technical University of Cluj-Napoca, 103-105 Muncii Avenue, 400641, Romania

<sup>2</sup> Department of Mechatronics and Dynamics of Machines, The Technical University of Cluj-Napoca, 103-105 Muncii Avenue, 400641, Romania

<sup>3</sup> Department of Management, University of Miskolc, H-3515 Miskolc-Egyetemváros, Hungary

<sup>a</sup>violeta.firescu@mis.utcluj.ro, <sup>b</sup>ciprian.lapusan@mdm.utcluj.ro, <sup>c</sup>dan.mandru@mdm.utcluj.ro, <sup>d</sup>szvkunos@uni-miskolc.hu

**Keywords:** industry competitiveness, competencies management, coaching.

**Abstract.** The European industry, especially mechanical engineering industry, has lost step by step its competitiveness in the years that followed the global crisis. Implementing new management approaches that sustain the strategic objectives of the company is part of the solution for recovering the lost market share. One of the important issues that influence the reaching of the organization's strategic objectives regards the qualification and the training needs of its employees. In the present paper coaching was used to develop a competencies development matrix (CDM) that responds to a Romanian company strategy. The matrix was used to define the training needs and the first stage of prioritization of the competencies development for the company (technical and management CDMs). The results are going to be used in the next step of coaching within the company and are also useful for the industrial management specialists in the process of competencies defining, prioritizing and modelling in mechanical engineering.

### Introduction

To be competitive companies have to as fast as possible come up with low price products and services and with the required quality. The European industry, especially mechanical engineering industry, has lost step by step this advantage. Recovering the lost market requires new management approaches and innovative technical solutions that sustain the strategic objectives of the company. Creating new collaborations between companies and research entities can lead to implementation of modern management methods and to development of innovative solutions. The paper focuses on the process of competencies development in order to increase the competitiveness of the company.

The research presented in this paper is part of the project *RePCI - Reshaped Partnerships for Competitiveness and Innovation Potentials in Mechanical Engineering* ([www.jamk.fi/repci](http://www.jamk.fi/repci)). One of the main objectives in the project is to promote the idea that the staff development of companies is continuous and based on the strategic choice relative to the competitiveness. The project has the aim to raise the collaboration between higher education institutes and companies, especially companies in mechanical engineering, cooperation that can lead to increasing the competitiveness of the companies in this field. *JAMK University of Applied Sciences* (Finland) is the coordinator of the project while *The Technical University of Cluj-Napoca* and *Firm P* (the subject of the study) are the Romanian partners.

The organizational coaching was used in order to create a partnership between *The Technical University of Cluj Napoca* specialists and *Firm P* management team. The main question of the research regards the technical and management competencies (present and desired within the studied company) that are needed to reach the strategic objectives. The following chapters describe the first stage and the main results of the coaching process started within the company.