Services and Indsutries of the Future: Academic experience

Prof. Farouk YALAOUI, D. Hab, PhD.

ISIFT, Institute of Services and Factories of the Future of Troyes LOSI, Laboratoire d'optimisation des Systèmes Industriels, Institut Charles Delaunay, CNRS, UTT, Université de Technologie de Troyes, 12 rue Marie Curie, BP 42060, 10004 Troyes Cedex, France

Abstract:

This talk presents an overview of the recent trends, challenges and opportunities for the factories of the future world-wide. A full overview of the evolution of manufacturing is exposed to illustrate the different changes that have challenged industries so far.

As production is more than ever personalized, the effects of this new form of production on industrial sectors are given by presenting among other things the change in the business model, in product varieties and in the production cycle. This talk will also be an introductory talk to the factory of the future.

Its second part will mainly show how the different countries, with focus on France, are trying to implement their change to reach the factory of the future. Moreover, the common pillars the factory of the future are presented to demonstrate the technological challenges that each company, university, research center may face on its way to the factory of the future.

With its international, European and national network, the University of Technology of Troyes has set the topic as one of its major strategic orientations and is fostering by every means the development of research, technology and innovation within the area. Some examples of such initiatives will be given and illustrated.

Keywords: Factory of Future, Industrie 4.0,