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Industry 4.0, Digital Twin and Global Competition – Challenges and Opportunities

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ABSTRACT

According to the World Economic Forum, 65% of children entering primary school today will ultimately end up working in completely new job types that currently do not exist. Industry 4.0 transformation is shaping our talent pipeline in the manufacturing industry. Disruptive technologies are forcing the development of new business models. Uber Technologies has nearly eliminated long standing taxi industries. Nowadays the biggest question is who will win the game of smart industrialized revolutions? Lack of skilled qualified workforce with this smart integration is forcing academic community to embrace new smart curriculum. This talk will showcase the challenges and opportunities of disruptive technologies in industrial sectors. Industrial engineering tools and techniques can prepare the next generation workforce for the upcoming challenges. Digital twin and MSV (Modeling, Simulation and Visualization) from the Automation Alley Industry 4.0 will presented. Readiness of engineering graduates on smart technologies and continuous improvement around the global are various. Focus should be given to reduce the gaps globally. It will add global competitiveness. Automotive supply chain and logistics optimization will be presentation with smart integration.

Keywords: Industry 4.0, Smart Manufacturing, Digital Twin, Supply Chain and Logistics