



# Undergraduate Project 2017-2018

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## **Project title: Change Management at a Shoe Factory**

### **Background**

Manufacturing is a key part of the economy. To remain competitive or become even more so, automation that supports innovation is also essential for the manufacturing sector. Advanced ICT supported manufacturing is currently gaining a lot of traction with initiatives such as Industry 4.0 in Germany, Factory of the Future in Italy, the High Value Manufacturing Catapult the UK etc. Part of this development is advanced coordination of manufacturing allowing for increased flexibility and reduced costs.

EU H2020 “vF Interoperation supporting buSiness innovaTion” (FIRST, <https://www.h2020first.eu/first/bin/view/Main/>) aims to provide new technology and methodologies to describe manufacturing assets; to compose and integrate existing services into collaborative virtual manufacturing processes; and to deal with evolution of changes. Under EU H2020 FIRST project, we propose a final year project, which is to develop IT application experiments that address advanced added value production process and systems, which incorporate industry 4.0 concepts.

### **Project description**

The project is in the area of system design and process modelling. What are involved in change of a traditional shoe factory into a smart factory of producing shoes? What will be changed from a shoe factory producing traditional shoes in a smart factory producing smart shoes? Concepts, such as high speed shoe factory, smart factory and smart shoes, need to be reviewed. More specifically what would be change related to shoe production processes. The final thesis provides an overview of related technologies, reviewing key concepts, and providing production process models related to different kind of shoe production processes, as well as how to manage the change among different production processes.

### **Project aims**

- Understanding of high speed shoe factory, smart factory for shoe production, smart shoes concepts
- Critical reviewing related technologies of high speed shoe factory, smart factory for shoe production, smart shoes.
- Providing process models of different production processes
- Identifying key issues change management related to change different production processes.

## **Artefact**

- Research report
- Overview of related technologies of high speed shoe factory, smart factory for shoe production, smart shoes.
- Process models of different production processes
- Review of change management related to change different production processes

## **Evaluation**

- Are related Process models of different production processes provided?
- Are change management among different production processes discussed?

## **References:**

- [1] [http://icams.ro/icamsresurse/2016/proceedings/VI\\_Economics\\_04.pdf](http://icams.ro/icamsresurse/2016/proceedings/VI_Economics_04.pdf)
- [2] <https://www.economist.com/news/business/21714394-making-trainers-robots-and-3d-printers-adidass-high-tech-factory-brings-production-back>
- [3] <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=6011690>
- [4] <http://ieeexplore.ieee.org/document/1458327/>