

Master's Thesis Evaluation by the Opponent

Title of the Master's Thesis:

Industry 4.0: Digital transformation replicability in manufacturing

Author of the Master's Thesis:

Bc. Lucie Geroldová

Goals of the Master's Thesis:

Providing a road map for manufacturing companies in order to transform the way they do their business in the context of digital revolution. The author also aims to identify key pillars, drivers, and trends of the fourth industrial revolution and their impact on the business, providing specific examples and thus answer the question: "Is there a clear goal that each company can identify and follow, gradually undergoing a digital transformation?"

Evaluation:

	Criteria	Description	Max. points	Points
Content 70%	Output Quality	Master thesis provides an exhaustive overview of the Industry 4.0 (I4) topic, along with its impacts, potential benefits and challenges. Author successfully manages to devise a framework guiding the companies when preparing for the implementation of I4 elements.	20	18
	Goals	The thesis fulfills the formulated objective, however, the goal itself could be more specifically structured into several subgoals.	10	9
	Methodology:	Author has drawn from a large number of sources, however, there are few (e.g. McKinsey, Coleman, ..) that were used rather frequently, thus the methodology itself is to some extent a synthesis of these approaches. Also, given the stressed importance of OEE and quality control in general, it would have been interesting to mention the overlap of I4 and lean production systems.	20	18
	Theory/ Conceptualization:	Author extensively captures the whole I4 topic and proves that she thoroughly understands the topic.	20	20
Formal requirements 15%	Structure:	Structure of the thesis is logical and easy to follow.	3	3
	Terminology:	Author is able to articulate her opinions on a very high level.	4	4
	Formalities:	Thesis's layout and extent fully corresponds to the required level of a master thesis.	4	4
	Citing:	Number of sources and formal style of citation is appropriate.	4	4
Delivery	Presentation document:	Is the presentation itself structured in a clear way? Is it appealing and easy to follow? Does it convey the message efficiently?	5	

	Presentation skills:	Are you conveying the message efficiently and timely? Do you use appropriate words, speed, tone of voice, gestures, movement etc. to express your thoughts in a clear manner?	5	
	Argumentation:	Are you able to readily and briskly react to questions or comments? Are you able to explain unclear parts and connect comments to relevant places in your presentation or parts of particular analyses? How well are you able to defend to your ideas and recommendations?	5	
			100	0

Other comments:

Master thesis provides a very good and well articulated synthesis of the existing research related to I4, combined with a field confirmation of author's findings on a case company.

Author covers in detail the impacts of I4 on the individual elements of the business model and illustrates the potential impacts/benefits of I4 implementation on multiple case examples.

Potential space for improvements to the thesis could be seen primarily in capturing the link and synergies of I4 and lean practices, or in more detailed elaboration of individual steps of the suggested framework.

Questions or comments to be discussed during the thesis defence:

Which areas of manufacturing (automotive, aerospace, forging, etc.) have the highest potential for I4 implementation and what do they have in common?

What is the link and synergies between I4 and lean production systems?

Considering the rising importance and general public awareness concerning startups, is the author aware of some existing startups that provide solutions for the I4 implementation? What do these solutions offer?

The name of the opponent:

Ing. Dominik Novák, MIM

The employer of the opponent:

Deloitte Advisory s.r.o.

Date 5. 6. 2018

Signature of the Supervisor:

