

## Master's Thesis Evaluation by the Supervisor

### Title of the Master's Thesis:

An Analysis of the e-Mobility Development and Strategy of Conventional and Emerging Car Manufacturers in the Automotive Industry

### Author of the Master's Thesis:

Mandya Aziz

### Goals of the Master's Thesis:

To answer the research question: "What are the differences in strategy and development regarding electric mobility (e-mobility) between conventional and emerging car manufacturers?"

### Evaluation:

	Criteria	Description	Max. points	Points
Content 70%	Output Quality	The results are well presented and discussed. The author provides a great overview of automotive industry with the focus on future e-mobility. The topic itself is highly relevant and in certain respect could be used for better understanding the nature of the automotive business and its future evolution. The biggest value of the thesis could be seen in the comprehensive summary of strategies by various car makers, some minor drawbacks could be seen specifically in methodology. I also missed better elaboration on the future of batteries (deeper analysis of trends e.g.) And there is one confusion regarding conclusions (see the question for the defence below) . Regarding practical relevance of the thesis I would say that provided text may be useful for broader public rather than industry experts who may be well informed about conclusions of the thesis.	20	17
	Goals	I would support the author's findings regarding value chain, eco-system etc. In the same time when speaking about strategy, there could be also other elements where the original OEMs and the emerging ventures differ.	10	9

	Methodology:	Regarding methods the author used basically two frameworks: Porter's five forces, Innovator's dilemma and interviews with producers. In case of Porter's the author discusses individual forces and factors but rather on theoretical level. I missed some better analysis. E.g. when speaking about market concentration, calculation of HH index or similar would be appreciated. The same could be said about market attractiveness measured by profit margins, etc. Thus, I may agree with author's statements, but the way of conducted analysis is not clearly and necessarily resulting in those. Furthermore, author uses the original book from 1998. Since then this framework has been updated. At least the sixth force "complementary products" has been added. I feel that in the context of given research it would be valuable to have it.  In the same time for given purpose it would be valuable to use also some more dynamic frameworks for understanding the automotive market dynamics, e.g. Competitive life cycle analysis or others. Evaluating different approaches to strategy could be also done by using some known frameworks e.g. Strategy palette.  My last comments refer to the interviews. The author did not describe, how the interviews were conducted in detail. He just admits that the analysis was not available due to confidentiality reasons. But still some better description of the method would be appreciated.	20	12
	Theory/ Conceptualization:	The literature review is one of the strongest elements of this thesis. It really provides many interesting insights into the topic.	20	20
Formal requirements 15%	Structure:	The thesis is a consistent, well-organised logical whole. Furthermore, it is written in a very readable and catchy way.	3	3
	Terminology:	Meets expectations.	4	4
	Formalities:	Formal layout, extent and other formalities meet the requirements.	4	4
	Citing:	The way of citing meets the expectations. I would be just careful with statements like "...emerging car manufacturers are welcomed with excitement by the public..." It has to be either proven by the research or cited since it is rather strong statement and it is not clear whose finding it is.	4	3
Delivery 15 %	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:**

I have to admit that I enjoyed reading the thesis, since it provided me with many also new information to me. In the same time some answers for questions which popped up in my mind when reading the thesis remind unanswered.

**Questions or comments to be discussed during the thesis defence:**

Looking at page 101, you claim that "...NIO has completely outsourced its production..." Thus, it seems that the level of vertical integration of this new emerging car maker is rather low. But then looking at your conclusions and specifically figure 32, it is the total opposite. Could it be explained?

I would be also interested what are the trends and inventions in battery technology. (This chapter was kind of half done). It would specifically interesting to pursue an analysis regarding the intentions of different car makers to switch almost filly to BEV and the availability of raw materials needed for battery productions. Is that sustainable? We know that we have supplies of oil for next 30-50 years in case of current developments, but what is the outlook for nickel and other scarce resources with expected pace of BEVs spread?

**The name of the Supervisor:**

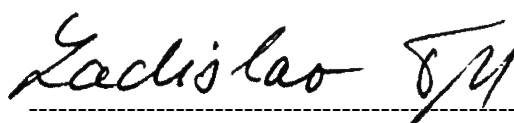
Ing. Ladislav Tyll, MBA., Ph.D.

**The employer of the Supervisor:**

KSG FPH VŠE

**Date** 27. 5. 2019

**Signature of the Opponent:**

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