

February 14, 2020

Distance Learning Project [MIM S2 12] on business models in the mobility sector: Towards a better understanding of the interplay between strategic competitive advantage, cooperation, digitalisation and sustainability

In the **spring semester 2020** a cooperative course is held by the University of Lodz, Poland, the Europa-Universität Flensburg, Schleswig-Holstein, Germany, and the University of Applied Sciences, Kempten, Bavaria, Germany as well as the Radboud University in Nijmegen, The Netherlands. The course deals with innovative business models in the mobility sector driven by digitalisation and the desire for more sustainability. The focus lies on the **in-depth analysis of different business models** reflecting the spectrum of providers of different forms of mobility.

Developments in the IT sector as well as a high relevance of environmental concerns increasingly affect mobility concepts. However, mobility concepts have to master specific market, customer as well as profit requirements. The market segment for car sharing services as one example has been increasing in countries like Germany since years. But even the big players (such as BMW or Daimler) are still **struggling to earn money** here. The **environmental perspective** is raising various questions as well. What benefits do mobility services provide which primarily support individual mobility? Is individual mobility not cannibalising public transport in the end of the day and increasing traffic and therefore pollution? It becomes obvious that certain trade-offs are to be taken into consideration here. From this perspective, it is vital to investigate and compare different types of mobility services, such as car sharing versus ride sharing versus ride pooling and also the different environments they are embedded into. This makes the investigation of business models in the sector a relevant and at the same time challenging topic from a strategic management point of view but also from societal and environmental perspectives.

One implication of the mentioned (technological) developments is that **industry borders are blurring** and new players are **disrupting existing structures**. That becomes clear when Uber, Bolt or Flixbus understand themselves as the providers of a technology platform and not providers of transport. Uber's or Bolt's business models rely on the resourceful network of drivers plus their private cars and Flixbus business model bases on a network of bus companies. Alphabet as another example has initiated Waymo, a self-driving car project as a reaction on mega trends such as urbanisation, sustainability and digitalisation. The recent ban of diesel vehicles from certain German cities intensified

discussions not only about e-mobility but also about sharing and pooling of cars as well as smart public transport solutions.

At the same time established players in the car industry start to change their business models – moving away from producing cars towards supplying mobility. Daimler (as the pioneer out of the group of OEMs in the car sharing segment) and BMW have bundled their mobility services in 2019 to become a global player regarding supplying mobility to customers. They for example cooperate in the areas of car sharing (ShareNow), ride hailing (FreeNow) or charging (ChargeNow). However, both companies are not satisfied with the commercial success so far. Therefore, they decided to stop their activities in certain markets (e.g., North-America).

Many other mobility concepts are currently launched in spite of the high commercial risks. Volkswagen has started the new mobility concept Moia. An even more radical approach is taken by the Chinese newcomer Byton: Different to the perspective of established car manufacturers, Byton defines its products as the “...next generation of smart device...which translates smartphone experiences into the world of mobility”. This is going along with a different business model and selling approach. Overall, the number of mobility services and concepts has recently been increased dramatically. This is a typical situation of a young market. Therefore, a core question is how the future development of the market will look like – will there be a consolidation of services and suppliers in future? Can relevant players can come up with sustainable mobility concepts and at the same time perform financially? How can new mobility concepts be adapted to different market characteristics such as they are found in rural versus metropolitan regions?

The consequence out of the developments mentioned above is a decreasing importance of firm-owned resources. Just owning them appears to be less relevant to firms than having access to resourceful networks. The former focus on the pure hardware is **converging into a platform business** where cooperative networks are vital for strategic success. Understanding how firms cooperate and exploit networked resources is therefore relevant also with regard to the mobility sector. Generally, focused companies like Alphabet or Uber tend to be more flexible and can react faster to changing market requirements. Market entry by new players is facilitated by the existence of service providers offering e.g. ready-made software products for mobility platforms (as Vullog does). Different to that, traditional product (and production) focused companies like the car manufacturers are struggling. As a reaction, car manufacturers start to spin off business units which are related to new mobility services as elaborated above. In summary, the hardware seems not to be the core value creator any longer and a high level of integration is increasingly seen as a hurdle.

The notion of **cultivating and accessing resourceful networks** is significant as business activities extend beyond the focal firm and into a dynamic relational space which connects stakeholders, firms and

industry participants in a dynamic business model. For instance, Waymo's as well as Uber's activities started in the Silicon Valley and the involved entrepreneurs and managers profited from the advantages of this cluster environment such as access to creative ideas, talented personnel and financial resources. Cooperation enables access to firm-external resources and that often makes disruption possible – i.e., smaller players and start-ups may be able to come up with innovations that incumbents have difficulties in taking over without cannibalising their “old” products (e.g., combustion engine cars versus e-cars).

Building on these points of reference, in this year's DLP we are especially interested in business models in the mobility sector in the context of the interplay between strategic competitive advantage, cooperation, digitalisation and sustainability. The aim is to come to an in-depth understanding of different cases that fit into this category so to also come to cross-case comparisons. This project is designed to acquaint the participants with in-depth theoretical and practical knowledge of the described field of business models with the focus on the mobility sector. Further, the participants gain experience in cooperating in international teams regarding the related topics.

We aim to investigate the following cases:

Case 1: MaaS Global as the first mobility as a service operator with the Whim App

Case 2: Free Now (formerly mytaxi) as a ride hailing concept for ordering a taxi or a driver via mobile application, a joint venture between Daimler & BMW

Case 3: BerlKönig as a ridesharing service in Berlin provided by the Berliner Verkehrsbetriebe (BVG)

Case 4: Sixt mobility services (renting, sharing, subscription) as an integrated concept which offers various forms of mobility

Case 5: Deutsche Bahn's autonomous shuttle in Bad Birnbach as a self-driving bus service

Case 6: Uber and/or Bolt as ride sharing services (e.g., you may take Uber's and/or Bolt's operations in Poland as a case)

Case 7: LimeBike as a sharing service provider for bicycles and scooters

Case 8: Vulog as a software provider for mobility platforms

Case 9: Ampaire as a developer and provider of electric as well as hybrid drives for small, passenger planes, and converted “traditional” planes into electric/hybrid ones

Case 10: Free choice to select a provider of an interesting innovative mobility concept

Potentially relevant questions for all teams:

- (a) Which are the major facets of the investigated business model, e.g., what is the central value proposition, which are the targeted customer segments, what are the underlying core competencies, which technology is used, what is the role of digitalisation, how central are sustainability issues and how are they addressed?
- (b) How far can the investigated mobility services fulfil different requirements (e.g., environmental, social, commercial and customer driven aspects)? Where are the trade-offs and how can they be addressed respectively dealt with by the investigated mobility concept provider?
- (c) How do cooperative elements contribute to value creation? Which inter-organisational respectively relational resources are core to value creation regarding the investigated case?
- (d) What implications does the location a mobility concept provider is active in has – e.g., which potential does a concept hold for a rural versus a metropolitan region?
- (e) Which are the resulting implications for strategic competitive advantage realisation with the investigated business model?

Aims and Objectives

- to experience working in an intercultural and interdisciplinary team
- to integrate knowledge from different modules and apply it into a research study
- to learn how to set up a small empirical research
- to learn how to present the research results
- to experience working in a distance learning project

Tentative Assignment

The final goal of this course is the production of a paper dealing with one of the outlined subjects in a team of students from the different locations and to give presentations about them at the University of Lodz/Poland. The topics should not only focus on theoretical facets of the specified topic but also look at the practical side of it. If students are able to collect primary data via interviews or surveys that is laudable. If such possibilities do not exist, it however is also possible to gain the required data by doing secondary research, analysing homepages and other relevant material. The Dutch students are involved into the project while working on related topics for their bachelor theses and contribute their lessons learnt.

The paper of each group should consist of approximately 25 pages excluding attachments, table of contents etc., printed in Times New Roman 12 pt. spacing 1.5. Next to the Credit Points given for the course at the different Universities, the students get a joint certificate signed by the partners about their participation in the project.

Preliminary Outline 2020:

NN	KU/RUN: Meeting for the KU/RUN students with introduction to the course & planning of joint kick-off workshop
February 24 16.00-17.30 Room: WZ 245	UL: Meeting for the Lodz students with introduction to the course & planning of joint kick-off workshop
March 11 16.00-18.30 Room: MAD 126	EUf: Meeting for the Flensburg students with introduction to the course & planning of joint kick-off workshop
March 18 16.00-18.30 Room: MAD 126	EUf: Meeting for the Flensburg students with final preparations for the joint kick-off workshop in March at EUf, jointly booking the tickets for the travel to Lodz in May
March 23-25 23.03.: 16.00-21.00 24.03.: 09.00-21.00 25.03.: 08.30-14.00 Room: MAD 130 & DUB 008 & further rooms	Joint kick-off in Flensburg with the participants from the partner Universities with: <ul style="list-style-type: none"> • international team building • introduction lectures regarding the core topic • discussion of the selected topics for the papers • introduction into a general research framework • students' presentations regarding their research projects.
March/April/May	Group work at the different locations supported by video conferences in which each group briefly presents and afterwards discusses the current state of their work (10 minute presentations) as well as communication via other channels such as e-mail and moodle3.
TBA	LU/KU/RUN: Group meetings
April 08 16.00-18.30 Room: MAD 126	EUf: Group meeting – discussion of the state of the seminar papers Discussion of topic structuring and preparation of the video conference for the Flensburg students
TBA	LU/KU/RUN: Group meeting & Discussion of topic structuring and preparation of the video conference for the Kempten, Lodz and Nijmegen students
April 22 (tbc) 16.00-18.30 EUf: MAD 126/127	Video conference with all participants at the involved locations, optional decentral organisation of video link ups in the groups depending on group size
April 29 16.00-18.30 Room: MAD 126	EUf: Group meeting (final preparation for excursion to Lodz)
TBA	LU/KU/RUN: Group meetings
May 06-09	Common workshop with the participants from the partner Universities in Lodz with: <ul style="list-style-type: none"> • Expert lectures • Group work • Student presentations
TBA	LU/KU/RUN: Final discussion of the current state of the research papers for the Lodz students
May 20 (tbc) 14.00-18.30 Room: MAD 126	EUf: Mini-Conference on » Business models in the mobility sector: Towards a better understanding of the interplay between strategic competitive advantage, cooperation, digitalisation and sustainability « with presentations of MADI students on »Insights from the Russian Market«. [MADI is the THE MOSCOW AUTOMOBILE AND ROAD CONSTRUCTION INSTITUTE / STATE TECHNICAL UNIVERSITY]
May 27 16.00-18.30 Room: MAD 126	EUf: Final discussion of the current state of the research papers for the Flensburg students
June 03 (tbc)	Delivery final paper

Helpful Articles

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