

March 24, 2021

Topic description and team assignments

Distance Learning Project [MIM S2 12] on business models in the mobility sector: Investigating the interplay of inter-organisational competitive advantage, digitalisation and sustainability in times of a global pandemic

Introduction and core objectives of the course

The Distance Learning Project (DLP) is an international cooperative course between i. University of Lodz, Poland, ii. Europa-Universität Flensburg, Schleswig-Holstein, Germany, iii. University of Applied Sciences Kempten, Bavaria, Germany and iv. Radboud University in Nijmegen, The Netherlands.

In the spring semester 2021 the course deals with innovative business models in the mobility sector driven by mega trends such as digitalisation, sustainability and urbanization. The focus lies on the in-depth analysis of different business models reflecting the spectrum of providers of different forms of mobility and their cooperative activities in this segment. 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 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.

Mobility in the light of digitalization, sustainability and Covid-19

Beside multiple factors innovative mobility concepts are especially driven by the increasing attention on the environment and digitalization. New ICT possibilities (e.g., connected mobile devices and AI) and changing ways to interact and collaborate with each other (e.g., sharing economy) are supporting innovative approaches in the mobility and automotive sector. The ban of diesel vehicles from cities intensified discussions not only about e-mobility but also about sharing and pooling of cars as well as smart public transport solutions. While environmental reflections rather support concepts such as sharing services, the Covid-19 pandemic has rather retarding effects. Social distancing and a general economic downturn seem to have negative impacts on certain new market segments. For instance, individual mobility in form of owning a car has been up in the year 2020. For example, the German used car market has shown a significant increase while several mobility companies have struggled during 2020/2021. In summary there are various supporting but also retarding factors at the same time when innovative mobility concepts are in focus.

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. Further, it is of interest which actors are involved into different business models and how they cooperate. All these facets taken together, make the investigation of business models in the mobility sector a relevant and at the same time challenging topic from a strategic management point of view but also from societal and environmental perspectives. Various questions are resulting out of

that: 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.

Industry characteristics and players in the markets

During the years established and new players have introduced and tested new mobility services, often based on a trial-and-error approach. Companies such as Uber, Bolt or Flixbus are disrupting existing structures and they 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 (Google) as another example has initiated Waymo, a self-driving car project as a reaction on mega trends such as urbanisation, sustainability and digitalisation.

At the same time established industry players have started 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. Under the business unit of YOUR NOW they cooperate in the areas of car sharing (ShareNow), ride hailing (FreeNow) or charging (ChargeNow). New car manufacturers such as Lynk & Co. (owned by the Chinese car manufacturer Geely, which also owns Volvo) are introducing subscription and sharing services in combination with new electric-vehicles. That is a completely different approach compared to the traditional perpetual ownership and buying model.

Overall, there was a phase of strong increase in the number of mobility services and concepts. This led to opaque market structures and confusion on the customer side. This is a typical situation of a young market. However, there are currently first indicators of consolidation and supplier specialisation. For example, Daimler and BMW are not satisfied with the commercial success of YOUR NOW. Therefore, they decided to stop their car sharing activities in certain markets (e.g., North-America) and even think about selling FreeNow to the competitor Uber. Consolidation and specialisation are not just taking place on supplier side. Different customer segments emerge as well. Therefore, suppliers need to satisfy various customer requirements, from a cost-price down to a strong service-quality focus. A one-size-fits-all model is therefore not working any longer.

In consequence, a core question is how the future development of the market will look like – will there be a consolidation of services and suppliers in the future? Can relevant players 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 those found in rural versus metropolitan regions?

Cooperative value adding service networks versus traditional linear product-focused business models

Developments mentioned above impact the functionality of traditional business models. Whereas the car industry had a strong focus on the pure hardware, this is currently **converging into a platform business**. Disruptive industry newbies like Alphabet or Uber tend to be more flexible and can react faster to changing market requirements. 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). For example, new mobility providers can use specialised services (e.g., ready-made software products for mobility platforms, e.g., supplied by Vulog) and build

up a cooperative value adding network. 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. 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.

At the same time the importance of firm-owned resources is decreasing, and cooperative networks are vital for strategic success. Traditional product (and production) focused companies are rather struggling as their value adding systems follow a different logic. As one reaction, some car manufacturers have started to spin off business units which are related to new mobility services. In summary, the hardware seems not to be the core value creator any longer and a high level of integration (of value creation activities) and firm-internal resources losing their value may increasingly be seen as a hurdle. Understanding how firms cooperate and exploit networked resources is therefore highly relevant.

General aims and objectives of this project

- 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

More specifically, we aim to investigate the following cases (one case to be investigated per group):

Case 1: Bird [fast-growing e-scooter “on demand” system – operating in the US and Europe incl. Germany (Hamburg, Berlin), Netherland (Amsterdam) and Poland (Krakow)]

Case 2: nextbike [European bike sharing pioneer promoting cycling as one part of urban mobility]

Case 3: Lynk & Co. [new (marketing) concept of a Chinese vehicle manufacturer]

Case 4: Cluno [provider of a subscription model for mobility (acquired by Cazoo in February 2021)]

Case 5: Vive la Car [provider of a subscription model for mobility, founded in 2019]

Case 6: MaaS Global [first mobility as a service operator from Finland with the Whim App]

Case 7: Wunder Mobility [technology provider for shared mobility services]

Potentially relevant questions for all teams (please make a choice and further specify!):

- (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? Who can appropriate the largest share in the created value in the end of the day?

- (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) How has the current COVID-19 pandemic affected the business model's development? What may be future implications?
- (f) Which are the resulting implications for strategic competitive advantage realisation with the investigated business model? Which different revenue models are in use and how are they combined?

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. The student groups are also required to give presentations about their research in a digital conference format in the end of the term.

The topics should not only focus on theoretical facets but also look at the practical side. 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 (please see the guidelines for the research papers for relevant specifications). 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.