

## Master Thesis

<b>Title of Master Thesis:</b>	Importance and success factors of mobility startups offering physical and digital mobility services in German speaking countries
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02. August 2017

Date



Signature

Master Thesis

**Importance and success factors of mobility startups offering physical and digital mobility services in German speaking countries**

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## Abstract

Mobility faces a number of important challenges. “Digitalization, automatization, interconnection, new mobility-based services, emission-free engines, urbanization and rising mobility volumes are driving this change.”<sup>1</sup> Moreover, the growth of cities is accompanied by a dynamic growth of urban transport. The objective of this master’s thesis is to analyze the importance of mobility startups, i.e. their role in response to increasing and changing mobility demand. Hence, challenges in mobility and factors that drive new mobility startups are examined. The source of data in this master’s thesis is mainly based on secondary data, especially for the content analysis. An empirical study, consisting of interviews with mobility startups and mobility market experts, is included in order to investigate success factors of mobility startups. The focus lays on mobility startups in German speaking countries, offering physical as well as digital mobility services, i.e. car sharing, ride sharing, e-hailing, intermodal mobility and parking services. The results of this paper show that the specific success factors of mobility startups, identified through the empirical study, largely correlate to the general success factors of startups that have been detected through the literature review. Hence, no specific mobility startup success factors regarding the founders’ characteristics, their education and work experience, the team, growth, crisis response and the startup location were identified. However, the startups’ business models stand out as they operate in market fields, where demand is existent and they can consequently provide mobility solutions in response to the current mobility challenges. Conclusively, mobility startups are indeed important and successful, as they have the ability to act more flexible and faster than public institutions and can respond to mobility challenges with innovative ideas. However, competing with settled public transport institutions is a challenge and hence the future of mobility startups lies in partnerships between classic business models and new startup solutions.

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<sup>1</sup> IAA, 2017



# Table of Contents

- Abstract ..... I
- List of figures ..... 1
- Acknowledgement ..... 2
  
- 1. Introduction..... 3
  - 1.1. Problem Statement ..... 3
  - 1.2. Research questions and objective ..... 3
  - 1.3. Methodology and structure of the work ..... 4
- 2. Foundations..... 8
  - 2.1. Mobility..... 8
  - 2.2. Startups ..... 9
  - 2.3. Startup market ..... 11
    - 2.3.1. Austrian startup market..... 13
    - 2.3.2. German startup market ..... 16
  - 2.4. Mobility startups..... 18
- 3. Mobility Market ..... 20
  - 3.1. Overview..... 20
    - 3.1.1. Austrian mobility market..... 21
    - 3.1.2. German mobility market..... 23
  - 3.2. Challenges in mobility ..... 24
  - 3.3. Mobility trends and mobility startup drivers ..... 26
  - 3.4. Mobility startup market fields ..... 30
    - 3.4.1. Mobility services ..... 31
      - 3.4.1.1. Car sharing..... 31
      - 3.4.1.2. Ride sharing ..... 32
      - 3.4.1.3. E-hailing ..... 32
      - 3.4.1.4. Intermodal mobility ..... 33
      - 3.4.1.5. Parking services ..... 33
    - 3.4.2. E-mobility ..... 34
      - 3.4.2.1. Electric vehicle..... 34
    - 3.4.3. Connected car ..... 34

- 3.4.3.1. Autonomous driving ..... 35
- 4. Mobility startups analysis ..... 36
  - 4.1. Mobility startup descriptions ..... 36
  - 4.2. Utilization of Big Data in mobility startups ..... 42
  - 4.3. Restrictive regulations ..... 45
  - 4.4. General startup success factors ..... 47
- 5. Empirical study ..... 54
  - 5.1. Design of the survey ..... 54
    - 5.1.1. Validity and reliability of results ..... 56
  - 5.2. Results of the study ..... 57
    - 5.2.1. Expert interviews ..... 57
      - 5.2.1.1. VCÖ ..... 57
      - 5.2.1.2. BMVIT ..... 59
    - 5.2.2. Mobility startup interviews ..... 62
      - 5.2.2.1. Wunder ..... 62
      - 5.2.2.2. Match Rider ..... 64
      - 5.2.2.3. Wegfinder ..... 66
      - 5.2.2.4. Taxi.de ..... 69
      - 5.2.2.5. SCO2T ..... 72
      - 5.2.2.6. Parkbob ..... 75
  - 5.3. Study analysis ..... 77
    - 5.3.1. Comparison among mobility startups study results ..... 78
    - 5.3.2. Comparison of startups results with literature review ..... 80
    - 5.3.3. Future prospects of mobility startups according to expert interviews ..... 82
- 6. Final conclusion ..... 84
  - 6.1. Limitations ..... 85
  - 6.2. Future research ..... 86
- 7. References ..... 87
- 8. Appendix ..... 98
  - 8.1. Mobility market experts interviews ..... 98
  - 8.2. Mobility startup interviews ..... 107

## List of Figures

Figure 1: Business Life Cycle .....	10
Figure 2: Distribution of startups in Austria by industry in 2016 .....	14
Figure 3: Distribution of startups in Austria by internationalization in 2016.....	15
Figure 4: Distribution of startups in Germany by industry in 2016 .....	17
Figure 5: Distribution of startups in Germany by funding sources in 2016.....	18
Figure 6: New mobility services .....	19
Figure 7: Types of mobility.....	21
Figure 8: Number of persons transported in Austria in 2015 .....	22
Figure 9: Transportation choices in selected EU countries.....	23
Figure 10: Number of persons transported in public passenger transport in Germany in 2016 by transport mode.....	24
Figure 11: Trends in mobility .....	28
Figure 12: Mobility market fields .....	31
Figure 13: Big Data in mobility.....	44
Figure 14: Reasons why startups fail.....	48

## Acknowledgement

At this point, I would like to thank all those who, through their professional and personal support, contributed to the success of my master's thesis: "Importance and success factors of mobility startups offering physical and digital mobility services in German speaking countries".

First of all, my thanks go to Prof. Kummer, who has supervised and assessed my master's thesis. I am especially grateful for the helpful suggestions and the constructive criticism in creating this work.

A special thanks goes also to all the participants of my mobility startup and mobility market expert interviews, who brought in their expertise into this topic:

Christian Adelsberger

*Founder – Parkbob GmbH*

Gregor Fischer

*CEO – Wegfinder / iMobility GmbH*

Frank Anders

*Co-founder – Match Rider UG*

Lukas Loers

*Manager Strategy & Partnerships – WunderCar  
Mobility Solutions GmbH*

Balázs Bárány

*Co-founder – SCO2T / Transport Service  
Solutions GmbH*

Franz Schwammenhöfer

*Logistics representative – Bundesministerium für  
Verkehr, Innovation und Technologie*

Alexander von Brandenstein

*Founder – Taxi.de / Talex mobile solutions GmbH*

Dolores Stuttner

*Assistant for transport policy – VCÖ-  
Mobilität mit Zukunft*

I would like to thank them for their willingness to provide information and for their interesting answers to my questions.

Finally, I would like to thank my mother, not only for making this study possible, but also for her patience and support during this time.

# 1. Introduction

## 1.1. Problem Statement

Mobility is the art and methods of moving people and it is the next big thing.<sup>2</sup> Mobility faces a number of important challenges and the mobility of tomorrow will be another one. “Digitalization, automatization, interconnection, new mobility-based services, emission-free engines, urbanization and rising mobility volumes are driving this change.”<sup>3</sup> Moreover, the growth of cities is accompanied by a dynamic growth of urban transport. More and more people want to enter the city in the morning, move through the city during the day and back home in the evening. Especially, digitization is changing the way people use different modes of transport nowadays. Increasingly more people are planning their transport chain daily, avoiding traffic jams by taking train and tram, bike or car sharing.<sup>4</sup> Hence, the demand for mobility is growing and with it the pressure on policy makers and suppliers to counter this trend with suitable offers. In response to this, a host of startups have come onto the scene. They form a unique relationship with their individual users by offering physical as well as digital services that enhance especially urban life.<sup>5</sup> In terms of the trend towards shared mobility, more cars and bikes are being shared in cities, via both peer-to-peer and business-to-consumer models. Integrated mobility platforms are also gaining traction.<sup>6</sup> Specifically, IT applications are invented to support the use of intermodal mobility offers with their ever-new division and combination of different modes of transport. These diverse apps provide a wealth of user data that helps vendors to better design their offerings to meet customer needs.<sup>7</sup>

## 1.2. Research questions and objective

Based on the introduction, the following research questions arise:

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<sup>2</sup> Burlage, 2016

<sup>3</sup> IAA, 2017

<sup>4</sup> Clausecker et al., 2015

<sup>5</sup> Plassat, 2015

<sup>6</sup> Van Audenhove et al., 2014

<sup>7</sup> Clausecker et al., 2015



- What are the new arising challenges and trends in mobility?  
How does the mobility market/mobility startup market look and what are the different mobility startup fields/categories? (market overview/analysis)
- What are the drivers for mobility startups and what is their importance in response to mobility challenges and trends and their contribution to the rising mobility demand?
- Are there specific success factors of mobility startups (e.g. background of founders, education, etc.)?

The objective of this master's thesis is to analyze the importance of mobility startups, i.e. their role in response to increasing and changing mobility demand. Firstly, the challenges in mobility and the factors that drive new mobility startups are examined. Secondly, an analysis of the mobility market itself and especially the mobility startup market with its different fields is conducted. Finally, an empirical part, consisting of interviews with mobility startups and mobility market experts, is included in order to investigate success factors of mobility startups. For this a comparison of the study results with the literature findings is conducted.

### 1.3. Methodology and structure of the work

At the beginning of the project a detailed literature analysis of the mobility term itself was conducted. This was followed by a literature review on startups in general as well as on specifically mobility startups in order to generate a general definition. The next step was to analyze the mobility startup market, its challenges and drivers and its different fields. Subsequently, a list of leading mobility startups worldwide was generated. Greater focus, however, was laid on mobility startups in German speaking countries, offering physical as well as digital mobility services, i.e. car sharing, ride sharing, e-hailing, intermodal mobility and parking services. The source of data in this master's thesis is mainly based on secondary data, especially for the content analysis. Relevant information was gathered from academic literature including books, articles and empirical studies. The secondary data

was accessed via online libraries, e.g. WU-Katalog and Google Scholar, journals, e.g. JSTOR and EBSCO, and industry specific magazines, e.g. VCÖ, Verkehrsjournal, Neue Mobilität. Moreover, mobility associated websites were accessed in order to identify different mobility startups addressed in this paper and to collect information about these as well as to identify upcoming challenges and trends in the mobility sector. Therefore, websites like gruenderszene.de, futurezone.at and techcrunch.com were also used.

In order to investigate specific determinants that support the success of a mobility startup in a positive way, primary data was collected through the means of interviews with mobility startups and mobility market experts. This method was used to identify specific success factors of mobility startups via standardized questionnaires. The aim was to collect more detailed data about the startups and also personal data of founders, e.g. their background, education, etc. (see Appendix 8.2). For this, an analysis of emerging mobility startups in different mobility startup market fields within the German market was carried out. For each mobility startup market field two startups were selected as representatives and introduced regarding their business operations. One startup per each respective mobility startup market field participated as an interview partner in the empirical study, except for the ride sharing market, where two startups participated. Moreover, interviews with two mobility market experts were carried out. Consequently, a comparison of the survey results between the different mobility startups was conducted. Furthermore, these results were compared with the literature of this paper, in order to find out, whether the literature regarding general success factors supports or differs from the specific success factors identified from the survey results of the mobility startup interviews. Finally, these comparison results were compared with the results of the expert interviews, in order to get a future prospect of the mobility market and the success and importance of mobility startups.

In order to assure validity and reliability of the results, questionnaires were created in a standardized way for the collection of primary data via interviews. This holds for the content and order for all interviewed mobility startups as well as for mobility market experts respectively. Moreover, all the identified mobility startup market fields are covered by interviews with at least one mobility startup per each market field. Regarding the expert

interviews, experts from two different institutions were chosen. This enables to gather expertise from interviewees with different backgrounds and access to mobility. What is more, the interviews were transcribed and crosschecked with each other to enable the investigation of possible similarities and differences. Concerning the secondary data, reliability is provided by the usage of reliable sources as already stated above.

Regarding the structure of this work, the definitions of the individual terms for a common understanding are given in chapter 2. This chapter also includes an overview of the Austrian and German startup market, as this work focuses on startups from German speaking countries. For this, a literature review was conducted.

The main part of this work is formed by the chapters 3 and 4, which respectively deal with the analysis of the mobility market and mobility startups. In chapter 3, a brief overview of the mobility market is given, including its challenges and trends. Particularly, the Austrian and German mobility markets are depicted, as the focus lies on startups from German speaking countries. Furthermore, the mobility startup market is analyzed with its different fields and drivers. As mentioned above, a literature analysis was carried out for this chapter.

The fourth chapter deals with the analysis of mobility startups. Accurately selected mobility startups from German speaking countries, offering physical as well as digital mobility services, i.e. car sharing, ride sharing, e-hailing, intermodal mobility and parking services, are described regarding their business operations. Furthermore, an investigation of how mobility startups collect and use big data is conducted. What is more, possible restrictive regulations concerning mobility startups are discussed. Lastly, general startup success factors are presented, which serve as a comparison to the specific mobility startup success factors resulting from the analysis of the interviews with mobility startups. The information contained in this chapter was generated by a literature review.

The fifth chapter contains the empirical study, which includes the design of the survey and its results. For this chapter, primary data was generated via interviews. Hence, the survey design comprises the detailed methodology of the empirical study. The survey results, on

the other hand, present the outcomes of the interviews with the different mobility startups and mobility market experts. Lastly, this chapter encompasses the analysis of the survey results. This includes a comparison between the results of the different mobility startups with each other in order to investigate specific mobility startup market field success factors. Moreover, these results are compared with the literature of this paper, to examine whether there are overlaps between general and mobility startup specific success factors. Finally, for exploring future prospects of the mobility market and the importance and success of mobility startups, the literature and the survey results of the mobility startups are compared with the results of the expert interviews.

In the sixth chapter a conclusion is given, based on both, theoretical and empirical, parts of this work. This chapter also includes the limitations of the paper and future research possibilities.

## 2. Foundations

This chapter is devoted to a uniform understanding of the definitions of the individual terms regarding mobility and startups. Particularly, the terms which are important for the subsequent chapters are explained. Furthermore, a brief overview of the focused on Austrian and German startup market is given.

### 2.1. Mobility

Mobility is described as the movement of people and things in spaces. The term generally can be split into physical, psychological or social mobility. In the transport context, the concept of mobility is restricted to the mobility of people outside home for the purpose of overcoming spatial distances. Mobility moreover serves to make the best possible use and extension of the habitat. In many cases, mobility is also defined as the willingness and ability to intend or to make spatial changes.<sup>8</sup>

Individual scientific disciplines use the term mobility differently. It can be differentiated roughly between "vertical" (e.g. social ascent or descent) and "horizontal" (i.e. geographic or physical) mobility. As a further form of mobility, intellectual mobility must be mentioned.<sup>9</sup>

Physical mobility can again be divided into migration mobility and circular mobility, or traffic mobility<sup>10</sup>. Hautzinger and Pfeiffer state that immigration mobility combines spatial movements of households with which a permanent change of apartment or place of residence is associated. Circular mobility, on the other hand, refers to the daily recurring displacements of households and their members.<sup>11</sup>

It is precisely this circular mobility of people that relates to regular traffic operations, which is the subject of this work. Thus, if it is referred to mobility in the following, any change in

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<sup>8</sup> Bmvit.gv.at, 2017

<sup>9</sup> Bmvit.gv.at, 2017

<sup>10</sup> Bmvit.gv.at, 2017

<sup>11</sup> Hautzinger and Pfeiffer, 1996

location, which takes place outside of one's own home and is related to everyday life associated activities of persons, is meant.<sup>12</sup>

### 2.2. Startups

There is no single definition for startups and the demarcation to growth companies is fluent. In order to explain the peculiarities and problems in the evaluation of startups compared to established companies, the lifecycle concept can be used. This dynamic approach is based on the assumption of ideal-type phases of a company, namely the introduction, growth, maturity and finally the decline. The first phase, for example, characterizes a high investment expenditure for obtaining necessary resources, which is usually opposed to only small sales. In the growth phase successful companies can penetrate the market. Rising sales revenues lead to an increase in production capacities and distribution systems and mean the achievement of the profit threshold or the first positive cash flow. The growing size of the company makes standardization and professionalization of all operational systems and processes necessary.<sup>13</sup> Consequently, as seen it can be seen in the illustration below, startups can be allocated to very beginning of the business life cycle, the startup phase.<sup>14</sup>

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<sup>12</sup> Bmvit.gv.at, 2017

<sup>13</sup> Bartel, 2011

<sup>14</sup> Rightstartconsulting.com, 2017

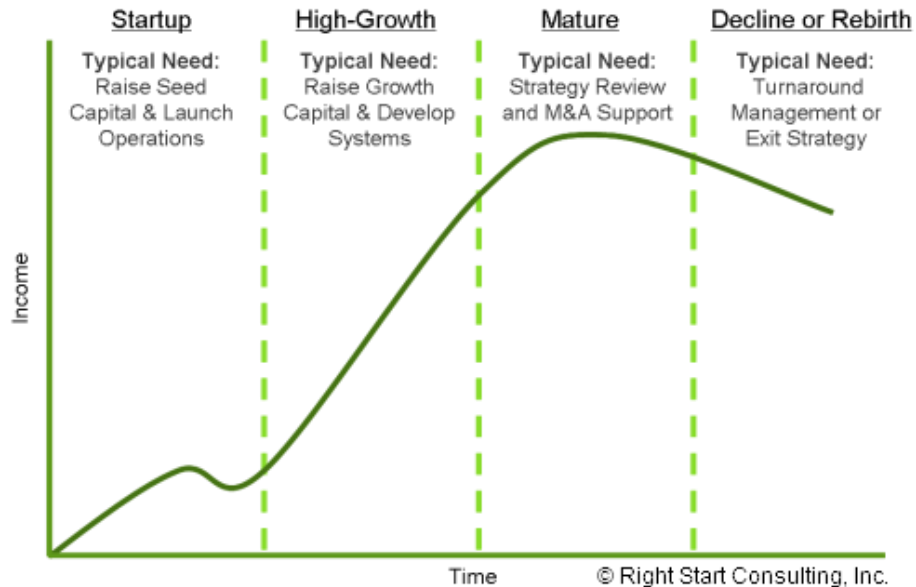


Figure 1: Business Life Cycle (Rightstartconsulting.com, 2017)

Therefore, a startup is a recently established company, which is in the first phase of a company's life cycle. However, the age alone does not make a business a startup. Another important feature of a startup is the level of innovation with which the founders and above all their ideas surprise and convince. Startups have, in the best case, an above-average potential to grow. In addition to an innovative idea, a successful startup also requires the development of a scalable business model as well as a detailed elaboration in a business plan. The capital required must also be procured. It is precisely the right financing that often bothers an entrepreneur the most. Since in most cases only a small startup capital is available to implement the idea, many startups are striving to expand their business at an early stage. In order to strengthen their capital base, they generally rely on venture capital.<sup>15</sup>

In principle, a successful startup goes through different development phases, namely from the orientation in the market through the growth development to the possible IPO and exit. These do not have to look the same for each startup but they follow a similar scheme. Usually, there are six phases, which have fluid transitions between each other, specifically

<sup>15</sup> Gründerszene Magazin, 2017

the orientation phase, planning phase, foundation phase, construction phase, growth stage and maturity stage<sup>16</sup>.

Regarding the question how long a startup stays one, an article of Forbes suggests that “if you are generating revenues below \$20 million, have less than 80 employees, and remain resolutely in control of the company you started, you're likely running a startup”.<sup>17</sup>

Startups can be further categorized into different types. The most popular ones are small business, lifestyle, buyable, social and scalable startups. Small business startups are the vast majority. For example, electricians, consultants, etc. fall under this category. These small business startups mainly hire local talents and their aim is to earn enough to feed their families. Another category are the lifestyle startups, which have a blurred line between profession and passion, as these startups are launched according to their founders' passions. Buyable startups are primarily web or mobile based and are often sold to a third party. Social startups are, unlike to the other types, not driven by profit but by a cause. The goal is generally to make the world a better place. Finally, examples for scalable startups are Twitter, Facebook, etc. These startups have a simple but powerful concept and think their ideas can change the world.<sup>18</sup>

The upcoming section gives a short overview of startup markets, specifically the Austrian and German one, as the focus of this paper lays on startups from German speaking countries.

### 2.3. Startup market

The market is an important key factor for startups. It can influence everything a startup does, as the strategy and tactic for a specific market does not often work for another. The type can determine a startup's acquisition activities, spending and customer feedback. Moreover, different market types result in different customer needs, product features,

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<sup>16</sup> Sammer, 2017

<sup>17</sup> Robehmed, 2013

<sup>18</sup> Faldyn, 2014



adoption rates as well as launch strategies and channels. Generally, startups enter one specific market type. Choosing the wrong one can result in severe consequences in the customer creation stage.<sup>19</sup>

Therefore, it is crucial for startups to understand the different market types, that are listed in the following:

- *Existing market*

In this type the market, its users and competitors are known.<sup>20</sup> A startup enters the existing market in order to compete with a product that is already used by a customer base. The aim is to compete on performance and product features and to steal market share.<sup>21</sup>

- *New market*

A startup can create a new market by building a product that is not demanded yet but the startup believes will generate customer demand. It is a product that allows the customers to do something, they were not able to do before.<sup>22</sup> In this type of market, the customers and the customer's preferences are not known. Moreover, competitors are not yet existent. Hence, product features are less important for attracting customers.<sup>23</sup>

- *Re-segmenting an existing market as a low-cost entrant*

Entering this market type, startups believe that a large enough customer base will use a product with inferior features that is still good enough to solve a specific problem. This counts as long as the product is offered at a low enough price.<sup>24</sup>

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<sup>19</sup> Blank, 2017

<sup>20</sup> MaRS, 2011

<sup>21</sup> Dexter, 2017

<sup>22</sup> MaRS, 2011

<sup>23</sup> Dexter, 2017

<sup>24</sup> MaRS, 2011

- *Re-segmenting an existing market as a niche player*

Startups entering this market type, try to identify a part of the market for which they can provide a more focused solution than currently available. The thought lies in providing a higher value with the more focused solution.<sup>25</sup>

- *Clone market*

A clone market means taking a successful business model from one location and copying it to another one. This offers several advantages, however a product cannot be simply copied into another market in an identical way. It is important to consider local factors like the different regulations, culture, etc.<sup>26</sup>

### 2.3.1. Austrian startup market

The startup scene in Austria is experiencing a strong boom which has been steadily increasing over the years.<sup>27</sup> Every year between 500 and 1000 startups are founded.<sup>28</sup> Particularly Vienna is developing into a central European hub with a great appeal for innovative founders from Germany and abroad.<sup>29</sup> Most Austrian startups are located in Vienna, while around two thirds of the young companies are based in the other federal capitals.<sup>30</sup> The dynamic development in Austria's startup scene can be seen in the increasing number of startups, which has more than doubled in 20 years and amounted to 37.120 in 2014.<sup>31</sup>

A study carried out by the WU founding center shows precise profiles of startup founders and provides comprehensive information on the most common business models, financing and the personnel structures of the young companies. The results show that Austrian startups do not only shine internationally with innovative ideas, but also create important jobs. After only 2,19 years an average of 7,5 persons is already employed in a startup.

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<sup>25</sup> MaRS, 2011

<sup>26</sup> Dexter, 2017

<sup>27</sup> Invest in Austria, 2016

<sup>28</sup> WKO, 2017

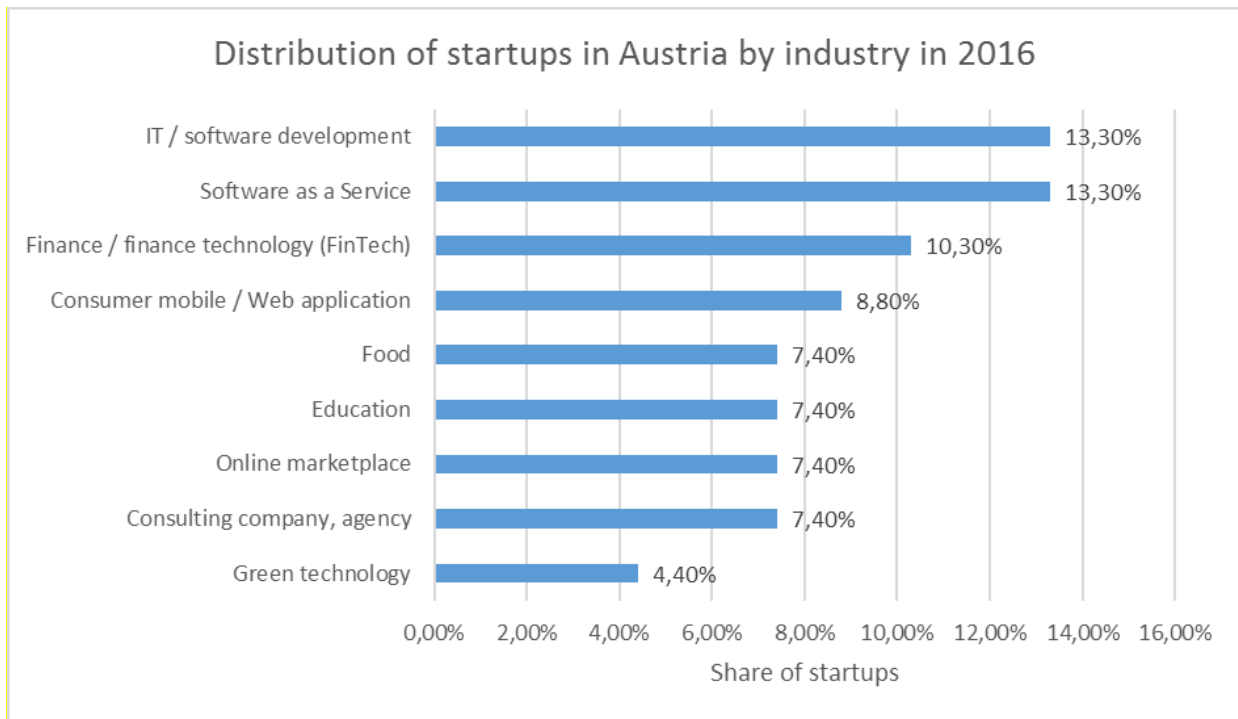
<sup>29</sup> Invest in Austria, 2016

<sup>30</sup> Wirtschaftsuniversität Wien, 2016

<sup>31</sup> Invest in Austria, 2016

Almost all entrepreneurs stated that the number of employees would continue to increase by an average of 5.5 persons over the next twelve months. Regarding the founders' profiles, on average, entrepreneurs are mostly male and 31,6 years old at the time of the foundation. Only 15,5% of all founders are female, with the number rising only slightly in recent years. It is also noticeable that female founders start with an average of 27,5 years, while their male counterparts are 31,6 years old at the time of the founding.<sup>32</sup>

Almost half of the surveyed Austrian startups operate within the digital industry sector (44%), mainly providing service software, IT & software development and e-commerce, as it can be seen in figure two. Twenty percent are devoted to challenges in the life sciences sector. Around half of all startups in Austria are brand new with world novelties, with 19,3% claiming to be unique in Europe with their products.<sup>33</sup>



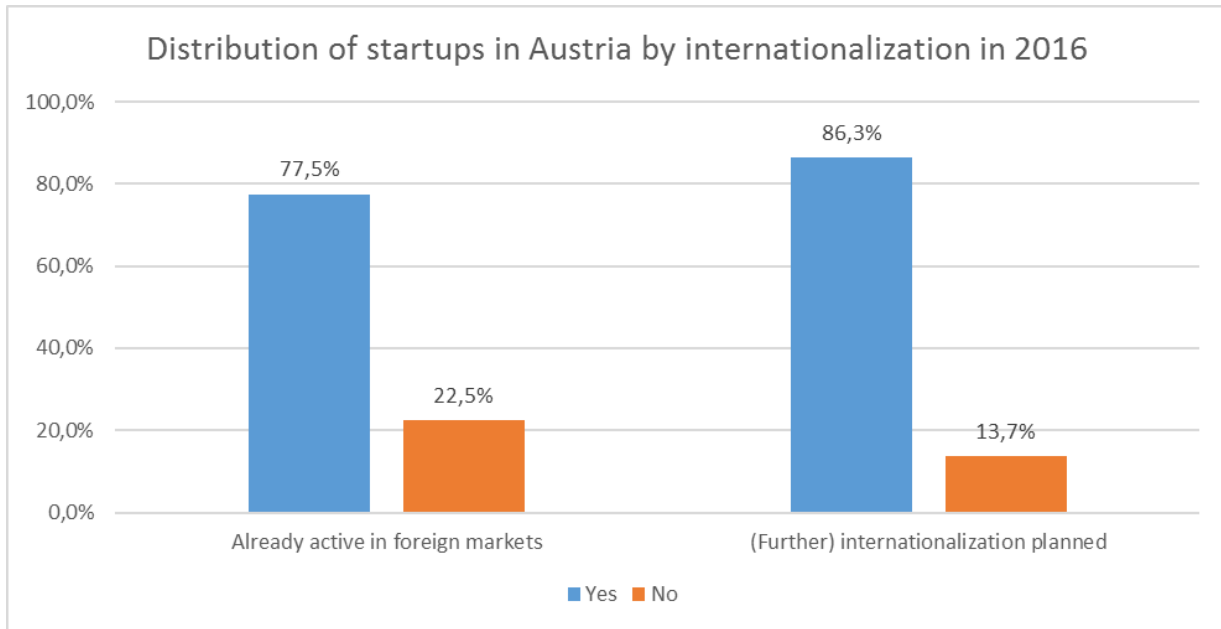
**Figure 2: Distribution of startups in Austria by industry in 2016 (adapted from Statista, 2017)**

The majority would like to start their own company in a team with at least a second person. The Austrian founders' scene is characterized by a high degree of international diversity,

<sup>32</sup> Wirtschaftsuniversität Wien, 2016

<sup>33</sup> Statista, 2017

with one-fifth of the founders not being Austrian citizens. This figure is almost twice as high as the European average.<sup>34</sup> It is also exciting that around 33% of the startups offer their products and services worldwide and 44% in all of Europe. Only 23% remain on the national market with their offer, as seen in figure three.<sup>35</sup>



**Figure 3: Distribution of startups in Austria by internationalization in 2016 (adapted from Statista, 2017)**

For their first step into entrepreneurship, entrepreneurs use about 90% of their own savings. The second most important source of money consists of state subsidies for half of the companies. 24,8 % rely on financial support from family and friends. Also, bootstrapping (24,8%) and financing by business angels (23,9%) are popular models.<sup>36</sup>

The most common foundational motives are implementing ideas or taking advantage of market chances.<sup>37</sup>

<sup>34</sup> Wirtschaftsuniversität Wien, 2016

<sup>35</sup> Statista, 2017

<sup>36</sup> Wirtschaftsuniversität Wien, 2016

<sup>37</sup> WKO, 2017

### 2.3.2. German startup market

Creating new startups plays a major role in Germany's economic development. New startups bring innovations, create jobs and thus promote the idea of competition.<sup>38</sup> In fact, the results of the study "Deutscher Startup Monitor" show that the startups in the study represent 3,034 founders and 14,513 employees, with an average number of 11.9 employees.<sup>39</sup> Moreover, the results show that the founders' average age when first starting the business is 27,3 years. Men start earlier with 26,8 years, while women start with 31 years. Currently more women than ever before are among the founders. However, the share of 13,9% is still very low. Furthermore, the workforce of German startups is becoming more international, with 30% of employees that currently do not have the German citizenship.<sup>40</sup>

More than half of all startups are based in one of the five startup hotspots Berlin, Rhine-Ruhr, Stuttgart/Karlsruhe, Munich and Hamburg. Most of them operate in one of the six areas IT/Software Development (15%), Software as a Service (10.2%), Industrial Technology/Production/Hardware (8.9%), E-Commerce (8.7%), or Consumer Mobile/Web Application (6%), as seen in figure four.<sup>41</sup>

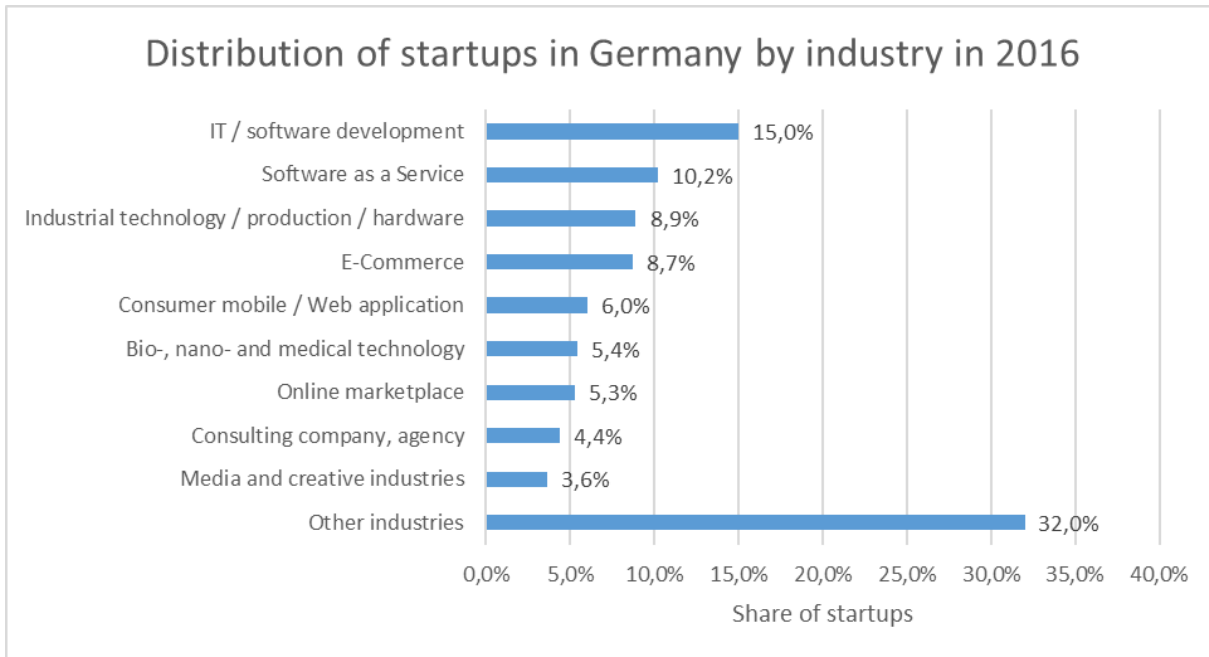
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<sup>38</sup> Sternberg and Dümichen, 2017

<sup>39</sup> Kollmann et al., 2016

<sup>40</sup> SPIEGEL ONLINE, 2016

<sup>41</sup> Statista, 2017



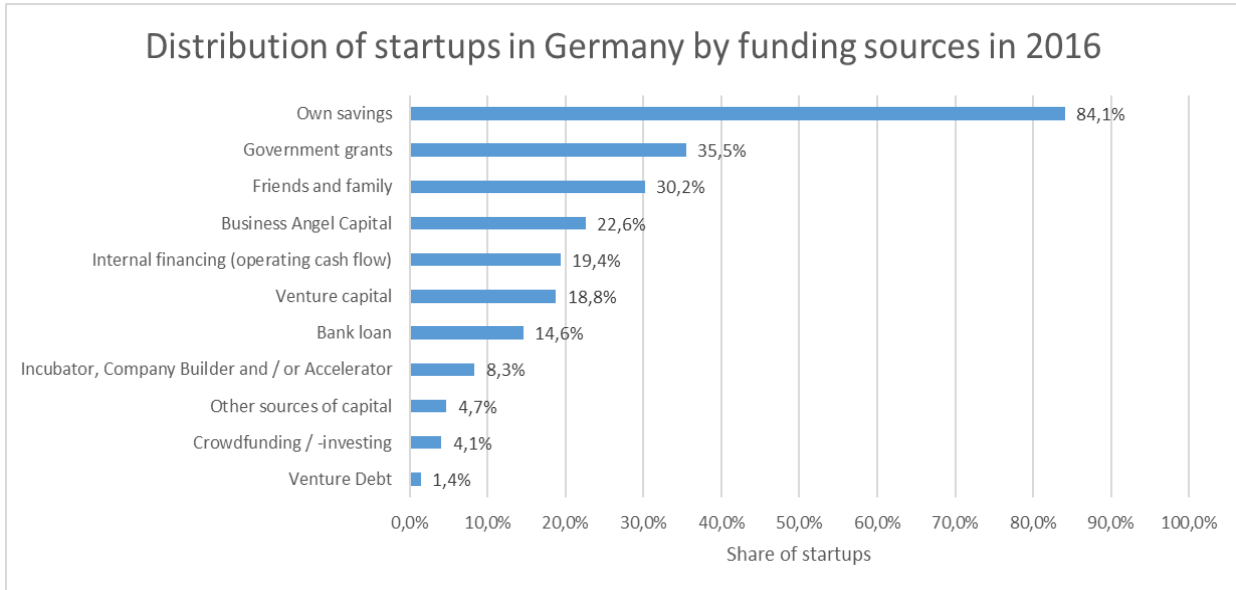
**Figure 4: Distribution of startups in Germany by industry in 2016 (adapted from Statista, 2017)**

German startups offer worldwide market innovations in the areas of products (44.3%) and technologies (34.9%). If no worldwide market innovation is offered, then Germany-wide market novelties are more frequent than EU-wide ones. The study also indicates that almost half of the startups (46.7%) achieve their sales exclusively in Germany, with a large part of the startups planning a (further) internationalization in the future.<sup>42</sup>

Regarding the source of funding, the majority of the startups (84.1%) use their own savings and almost a third use capital from the family and friends' circle, depicted in the figure below. The share of financing by business angels and venture capital has declined, while the share of startups which receive state subsidies has risen.<sup>43</sup>

<sup>42</sup> Kollmann et al., 2016

<sup>43</sup> Kollmann et al., 2016



**Figure 5: Distribution of startups in Germany by funding sources in 2016 (adapted from Statista, 2017)**

## **2.4. Mobility startups**

A mobility startup is a startup committed to create new business models for different fields within the mobility market (i.e. mobility services, e-mobility, connected car) in order to innovate the mobility of persons by making it ever more multimodal, on-demand, and shared, thus increasing consumer choice and convenience.<sup>44</sup> Mobility startups offer flexible, integrated mobility solutions tailored to the individual mobility needs, which can be used to travel from A to B. They are highly interconnected with various value-adding partners, organizationally and information technologically.<sup>45</sup> A wide range of new products, technologies and physical as well as digital mobility services are offered, which aim to counter various mobility trends like mobility as a service, mobility on demand, mobility platforms, in-vehicle connectivity, electrification, car sharing and autonomous driving.<sup>46</sup> The illustration below shows the mentioned range of new mobility solutions compared to their traditional counterparts. A description in greater detail is given in chapter three.

<sup>44</sup> Bouton et al., 2015

<sup>45</sup> Rehme and Richter, 2017

<sup>46</sup> Hannon et al., 2016

	<b>Traditional mobility solutions</b>	<b>New mobility services</b>	
<b>Individual-based mobility</b>	Private car ownership	Car sharing: peer to peer	A peer-to-peer platform where individuals can rent out their private vehicles when they are not in use
	Taxi	E-hailing	Process of ordering a car or taxi via on-demand app. App matches rider with driver and handles payment
	Rental cars	Car sharing: fleet operator	On-demand short-term car rentals with the vehicle owned and managed by a fleet operator
<b>Group-based mobility</b>	Car pooling	Shared e-hailing	Allows riders going in the same direction to share the car, thereby splitting the fare and lowering the cost
	Public transit	On-demand private shuttles	App and technology enabled shuttle service. Cheaper than a taxi but more convenient than public transit
		Private buses	

**Figure 6: New mobility services (Bouton et al., 2015)**

The next chapter gives a brief overview of the mobility market, including its challenges and trends.



## 3. Mobility Market

### 3.1. Overview

The early beginnings of personal mobility reach back to around 4000 BC. Many factors have contributed to the evolution of mobility throughout history. However, the factors technology, economy, culture, and environment have had the greatest impact. Especially technology has shaped personal mobility and hence this factor is seen as a catalyst for advancements. Technology can improve personal mobility in terms of efficiency, speed, and convenience. Nevertheless, this factor can only succeed in reshaping personal mobility if it is accepted by the society. Economy is another important factor with a big impact on mobility. For instance, the Great Depression can be seen as an extreme example of how economy affects mobility. Furthermore, culture and personal mobility have a cyclic relationship, which means that these two factors affect each other. As an example, it can be stated that the adoption of vehicles has led to social changes like the increased city sizes and the move away from walking. Finally, environmental concerns affect the evolution of personal mobility as well. In fact, in some cities automobile emissions are at dangerous levels. Hence, vehicle manufacturers are put under immense pressure, making them invest in more efficient engines and alternative fuel sources.<sup>47</sup>

Discussing the mobility market, one has to primarily consider the different options of passenger transport, which can be divided into public and private transport. Public transport consists of scheduled services on routes that are fixed, whereas private transport is based on vehicles that provide specific services to the rider. Private transport, therefore, offers better flexibility. However, the capacity is restricted and the environmental impact is higher. There can be different modes of passenger transport, like air, road, rail and water. The transport of a person can also involve several of the modes, which is then called intermodal or multimodal transport. A distinction can further be made between motorized and non-motorized mobility of passengers, as seen in the figure below.<sup>48</sup>

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<sup>47</sup> Touesnard, 2004

<sup>48</sup> En.wikipedia.org, 2017

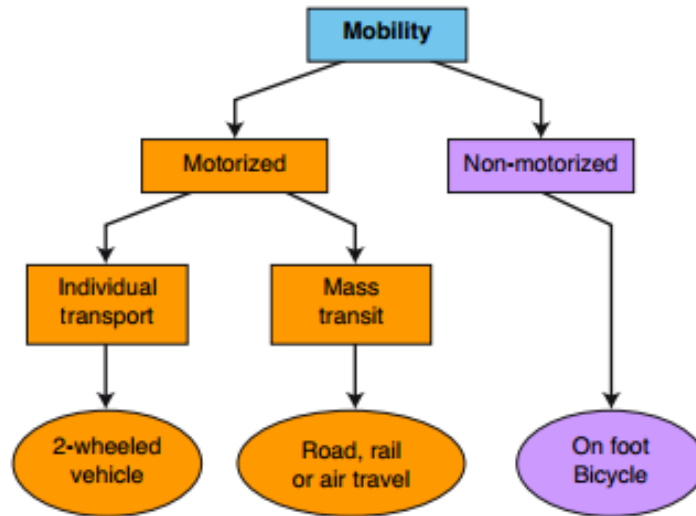


Figure 7: Types of mobility (Trends and challenges in passenger mobility, 2009)

Automobile and public transit dominate the short-haul transport, usually consisting of buses, accompanied by commuter rails, trams and rapid transits (e.g. metro). Long-haul transport, on the other hand, involves the use of automobiles as well as trains and aircrafts.<sup>49</sup> “Taxis and buses can be found on both ends of the public transport spectrum. Buses are the cheaper mode of transport but are not necessarily flexible, and taxis are very flexible but more expensive. In between there is the demand-responsive transport (e.g. shuttles), offering flexibility whilst remaining affordable.”<sup>50</sup>

As the focus of this paper lies on startups from German speaking countries, the following section includes a short analysis of the Austrian and German mobility market.

### 3.1.1. Austrian mobility market

Mobility has a significant impact on life and secures personal freedom and access to services for work and leisure. An efficient transport system, from a social point of view, plays

<sup>49</sup> En.wikipedia.org, 2017

<sup>50</sup> En.wikipedia.org, 2017

a major role for the economy. The transport sector, therefore, is of great economic importance.<sup>51</sup>

Austria ranks in the sixth place among the countries with the highest road quality and comprises a motorway network of 2.187 kilometers, with a vehicle population of around five million. In the past 10 years, a continuous increase in the number of motor vehicles has been recorded and amounted to more than 6,5 million in 2015. The Austrian motorcycle market is also showing steady growth. Sales of bicycles amounted to 390,000 in 2015. In 2015, Austria had roughly 5,500 kilometers of rail network. In total, almost 282 million passengers were transported on the rail network. The relevance of rail passenger transport is reflected in the average share of 12% of the total passenger transport. In the same year, a total of 143,000 flights departed from Austrian airports. Vienna Airport is the largest airport in Austria. In 2015 there were almost 11 million passengers arriving, while another 11 million used it as a departure airport and about 100.000 people as a transit point.<sup>52</sup>

In general, the Austrian passenger transport is led by bus services and the ÖBB rail service. The aviation and shipping sector carry fewer people in comparison. In the past few years, there has been an increase in the number of persons transported by bus and transports by the ÖBB rail company are increasing as well as the number of passengers transported at Austrian airports.<sup>53</sup>

Number of persons transported in 2015	
Road (Austrian bus lines 2014)	675,5 Mio.
Rail (ÖBB)	238,0 Mio.
Aviation	27,3 Mio.
Shipping (estimation of via donau)	1,2 Mio.

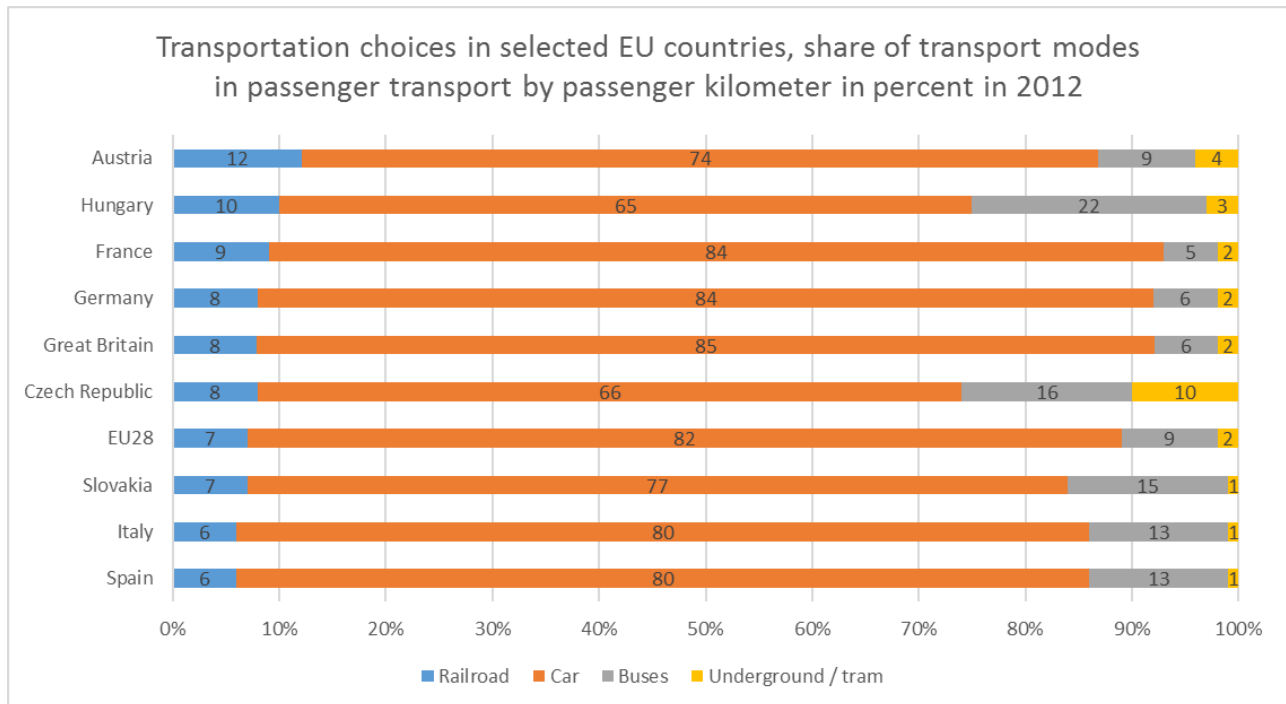
**Figure 8: Number of persons transported in Austria in 2015 (adapted from WKO, 2016)**

<sup>51</sup> Statista, 2017

<sup>52</sup> Statistik Austria, 2017

<sup>53</sup> WKO, 2016

However, the main means of passenger transport is the use of passenger cars. The share of the EU-28 average in 2012 is 82%, with Austria being below this number with 75%. The second most common means of transport in Austria are buses. The rail share amounts to 11% in Austria.<sup>54</sup>



**Figure 9: Transportation choices in selected EU countries (adapted from WKO, 2016)**

### 3.1.2. German mobility market

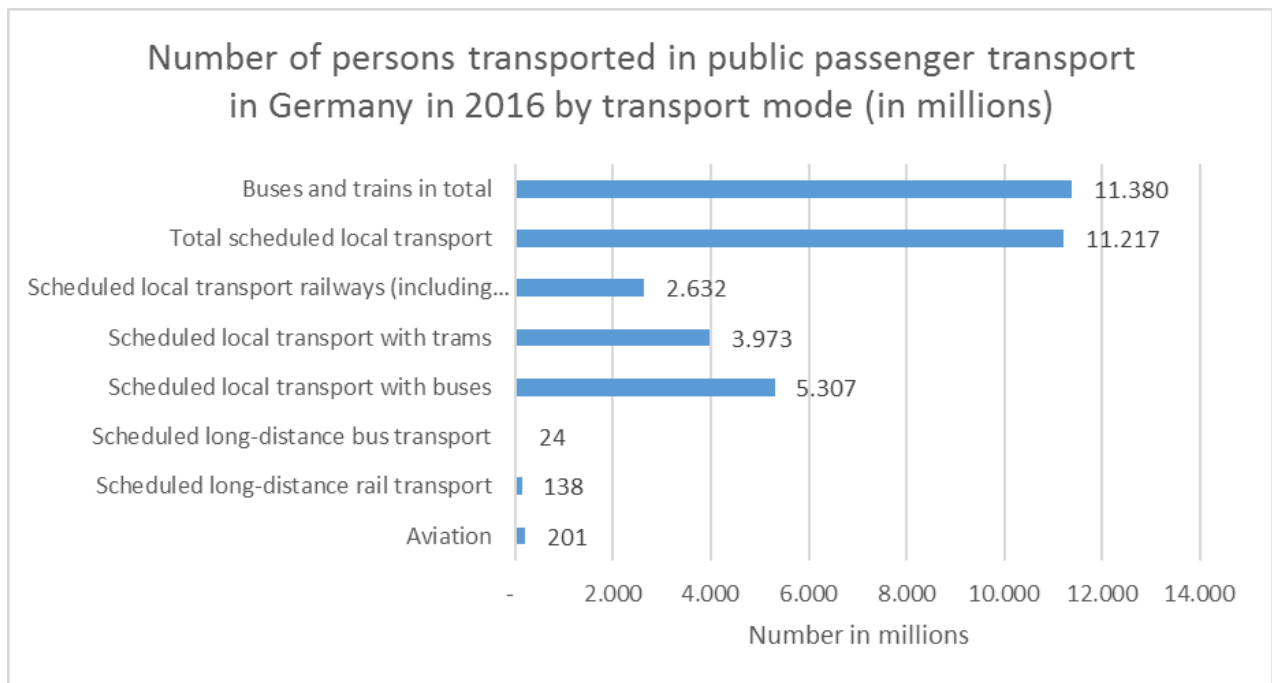
Germany owns a motorway network of 830.000 kilometers and a railway network of 33.400 kilometers. The number of vehicles in 2016 amounted to 61,5 million.<sup>55</sup>

In 2016, public passenger traffic in Germany was used more intensively than ever before. Passenger numbers for buses and railways rose by 1,8% and passenger numbers in air traffic rose by 3,5% compared to 2015. Passengers took 11,25 billion journeys on sched-

<sup>54</sup> WKO, 2016

<sup>55</sup> Verkehr und Mobilität in Deutschland, 2016

uled bus and rail services, which was 1,7% more than in 2015. In urban transport (including suburban railways) passenger numbers rose by 2,5%. Traffic by road, city and subway trains grew by 2,4%. Public transport buses were also used more frequently in 2016 than in the previous year. In the long-distance transport of railways and buses, there were increases in 2016: fares accounted for 138 million passengers, 5,3% more than in 2015. It is estimated that around 24 million passengers traveled by bus, nearly 5% more than 2015. The number of passengers at German airports also reached a new peak in 2016, with 201 million flights.<sup>56</sup>



**Figure 10: Number of persons transported in public passenger transport in Germany in 2016 by transport mode (adapted from Statista, 2017)**

### **3.2. Challenges in mobility**

Mobility faces a number of important challenges. These challenges include both megatrends and specific trends in mobility or social development. An explanation of these challenges is given in the following paragraphs.<sup>57</sup>

<sup>56</sup> Statistisches Bundesamt, 2017

<sup>57</sup> Clausecker et al., 2015

- *Growth*

Demand for mobility is growing and with it the pressure on policy makers and suppliers to counter this trend with suitable offers.<sup>58</sup>

- *Climate protection*

Unlike industry, households or the energy industry, mobility is the only one of the major sectors whose CO2 emissions continue to grow. Nevertheless, people expect the steady optimization of their mobile opportunities.<sup>59</sup>

- *Noise*

While driving and airplanes are becoming quieter, noise pollution is increasing as a result of the increase in traffic as a whole. At the same time, the acceptance of traffic noise in the population decreases.<sup>60</sup>

- *Urbanization*

The growth of cities is accompanied by a dynamic growth of urban transport. More and more people want to enter the city in the morning, through the city during the day and back home in the evening. At the same time, the requirements and wishes for an attractive living space in and around the city are increasing.<sup>61</sup>

- *Demographic change*

The average age of the population continues to grow rapidly. Specifically, the number of young people in education and work continues to decline in absolute terms and in proportion to the rest of the population, while elderly people remain mobile for longer. This has an influence on the demand for mobility with regard to the use, selection and design of the means of transport.<sup>62</sup>

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<sup>58</sup> Clausecker et al., 2015

<sup>59</sup> Clausecker et al., 2015

<sup>60</sup> Clausecker et al., 2015

<sup>61</sup> Clausecker et al., 2015

<sup>62</sup> Clausecker et al., 2015

- *Value change*

The number of younger people for whom the acquisition of the driving license, and often also of their own car, is self-evident immediately after the age of majority, continues to decline. In this generation, the car is increasingly losing its importance as a status symbol.<sup>63</sup>

- *Individualization*

Just as life styles are differentiated altogether, the mobility of people becomes more individual with increasing speed. A growing number of people decides every day anew whether they are driving, using buses and trains, cycling, or combining different mobility options.<sup>64</sup>

- *"Share Economy"*

New forms of shared mobility (e.g. car sharing, ride sharing, etc.) put the "classical" mobility providers under political and economic pressure.<sup>65</sup>

- *Budget & Financing*

Public funding for the financing of public transport as well as the maintenance and development of transport infrastructure are scarce and do not meet the existing mobility needs. Rising mobility demand will further exacerbate the problem.<sup>66</sup>

### 3.3. Mobility trends and mobility startup drivers

Resulting from these challenges, mentioned in the previous section, mobility nowadays is influenced by many trends. "Digitalization, automatization, interconnection, new mobility-based services, emission-free engines, urbanization and growing traffic volumes are all driving the change in mobility."<sup>67</sup> Especially digitization is changing the way people use different modes of transport nowadays. More and more people are planning their transport

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<sup>63</sup> Clausecker et al., 2015

<sup>64</sup> Clausecker et al., 2015

<sup>65</sup> Clausecker et al., 2015

<sup>66</sup> Clausecker et al., 2015

<sup>67</sup> IAA, 2017

chain daily, avoiding traffic jams in the morning by getting into the city by train and tram and then switching to bike and car sharing in the evening for example.<sup>68</sup> Therefore, as a multitude of different trends is constantly changing mobility and demand, “new mobility solutions are required, integrating infrastructure, traffic systems, vehicle use and resources such as energy, space and time, which are increasingly limited. On-demand mobility and car and ride sharing services are becoming important trends in transportation.”<sup>69</sup> New IT applications support the use of intermodal mobility offers with their ever-new division and combination of different modes of transport. At the same time, these apps provide a wealth of user data that helps vendors to better design their offerings to meet customer needs.<sup>70</sup> Moreover, “cities are becoming smarter, exploiting distributed control of highly sensorized equipment and infrastructure.”<sup>71</sup> Consequently, “vehicles of the future have to integrate into the urban environment in a compatible way, meet the needs of people and fulfil their individual mobility service requirements.”<sup>72</sup> As a result, “innovative concepts and research approaches are needed to address the future of mobility resulting in new customer oriented business models and services.”<sup>73</sup>

The following chart shows significant trends, which also reflect the various market segments in mobility that are described in chapter 3.4.

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<sup>68</sup> Clausecker et al., 2015

<sup>69</sup> UPC Innovation and Technology Center, 2017

<sup>70</sup> Clausecker et al., 2015

<sup>71</sup> UPC Innovation and Technology Center, 2017

<sup>72</sup> UPC Innovation and Technology Center, 2017

<sup>73</sup> UPC Innovation and Technology Center, 2017



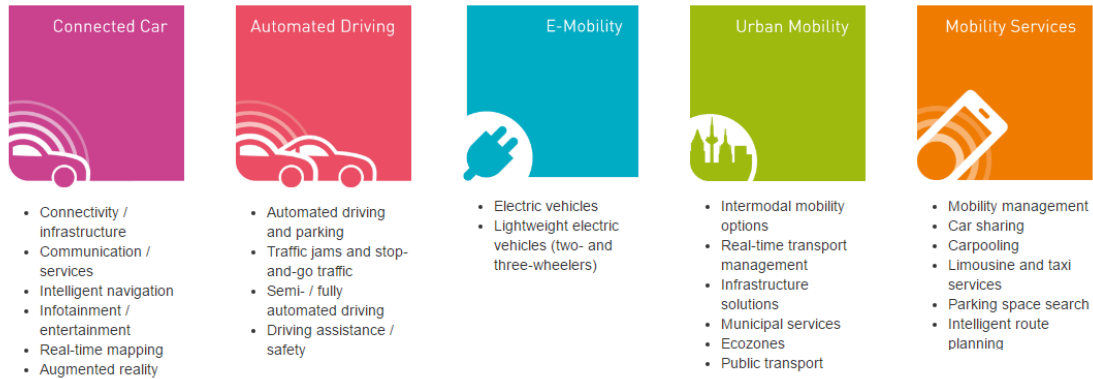


Figure 11: Trends in mobility (IAA, 2017)

The trends shown in the graph above can subsequently be justified by the following facts:

- *Urbanization determines the mobility of most people*

More people live in cities than in the countryside, with a growing trend. People will increasingly influence the improvement and planning of urban transport and therefore enhance the trend of urban mobility.<sup>74</sup>

- *The bicycle is experiencing a renaissance*

The number of bicycles on roads has increased. Health consciousness combined with practical benefits make people rethink. In short distances the bicycle is undoubtedly the fastest means of transport. In addition, the cities have done a lot for cyclists. Bicycle lanes have been expanded and taking bikes in trains and buses is now much easier. Hence, mobility management is taking on an important role.<sup>75</sup>

- *Car sharing established*

Although more and more people try not to use their car often, a renouncement of it is not possible in every situation. This is the main reason why more and more people are using car sharing and as a result trigger the increased trend of mobility services.<sup>76</sup>

<sup>74</sup> Die 7 wichtigsten Mobilitätstrends, 2017

<sup>75</sup> Die 7 wichtigsten Mobilitätstrends, 2017

<sup>76</sup> Die 7 wichtigsten Mobilitätstrends, 2017

- *Public transport remains indispensable in terms of mobility*

In order to prevent an urban traffic collapse, public transport cannot be waived. Therefore, public transport will continue to be the strong backbone of urban transport.<sup>77</sup>

- *E-mobility takes its time with the conquest of the streets*

Lower price surcharges by manufacturers and decreasing battery prices, better efficiency and a wider range of vehicles are the reason for an increasing number of people opting for an electric car. The biggest problem currently, however, is the lack of comprehensive infrastructure.<sup>78</sup>

- *Autonomous driving – a dream that still takes time*

Assistance systems within the vehicle are becoming more and more important tasks. Tracking, parking assistance, warnings against falling asleep and the traffic sign recognition are some of these tasks. The biggest challenge, however, is the development of the first autonomously driven series production car. There is a strong competition going on among manufacturers and other companies. Daimler and Google, for example, are pumping billions into such autonomous systems, which, however, also entail major security problems, that must be eliminated. These can be the lack of accuracy of the maps, connectivity of the vehicles with one another and imminent hacker attacks. Likewise, it is important to clarify legal issues in advance such as liability resulting from possible accidents.<sup>79</sup>

- *Mobility is becoming more sustainable, spontaneous and flexible*

The trend in terms of future mobility models is clearly heading towards "sharing instead of owning". The available space becomes a valuable asset because of the increasing population numbers. This requires innovative solutions such as taxi, train and bus to be linked intelligently with the latest methods and models. Smartphones will have a central and decisive meaning, as they are always ready for use. This allows mobility apps to be used,

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<sup>77</sup> Die 7 wichtigsten Mobilitätstrends, 2017

<sup>78</sup> Die 7 wichtigsten Mobilitätstrends, 2017

<sup>79</sup> Die 7 wichtigsten Mobilitätstrends, 2017

which in order allow a flexible and spontaneous use of different means of transport. This means, for example, that all information regarding available means of transport is displayed in connection with the most favorable, shortest or fastest route.<sup>80</sup>

### 3.4. Mobility startup market fields

To counter all these challenges and trends in mobility, as previously indicated, startups have come onto the scene.

“Mobility startups encompass activities that provide products and services which aim to optimize the mobility of people by, for example, combining or connecting different means and modes of transport (notably car/road, train/rail, airplane/air and ship/water), by optimizing the effectiveness and resource efficiency or reducing the cost or environmental impact of mobility, for example through the use of new materials, new energy sources and grids. Mobility startups build upon competences in transport on the one side and/or IT and mobile services on the other side, but may also cut into other sectors such as mobile navigation services. The activities of these emerging companies add value by providing, for instance, integrated, smart, clean, service-oriented and/or user-focused mobility services and related products. They provide new services to the particular needs of both businesses (B2B) and customers (B2C). This includes the provision of different forms of facilitation and mediation services such as tracking and management services and related products as well as the organization of specific service offers, such as car sharing in relation to other forms of transport”.<sup>81</sup>

The following illustration depicts the different fields within the mobility startup market with their subcategories, which are respectively explained in the subsequent section.

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<sup>80</sup> Die 7 wichtigsten Mobilitätstrends, 2017

<sup>81</sup> Emergingindustries.eu, 2017

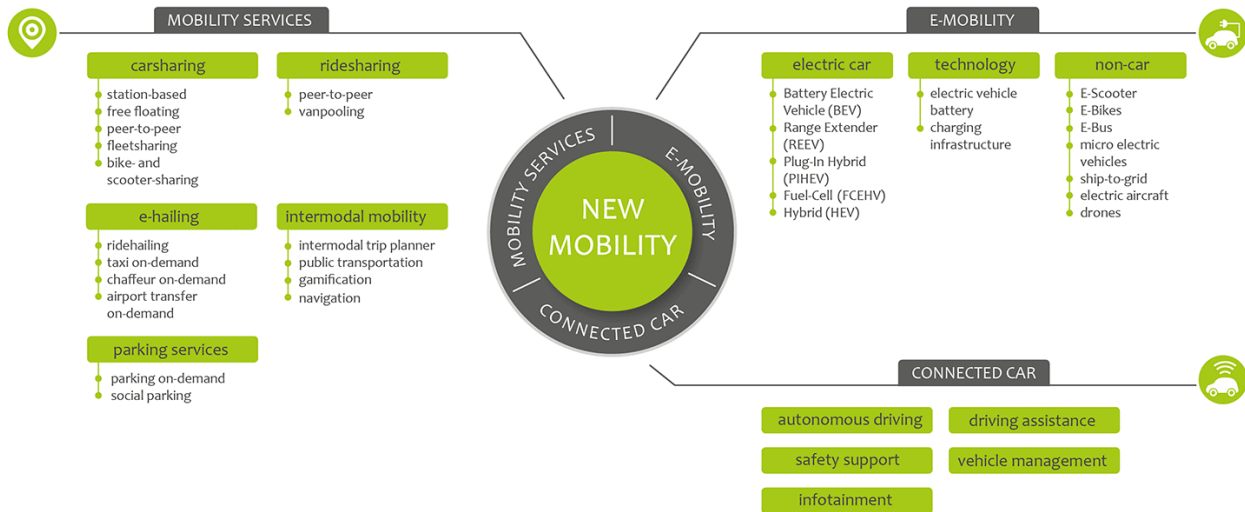


Figure 12: Mobility market fields (Green-venture.net, 2017)

### 3.4.1. Mobility services

Mobility services cover a variety of transportation arrangements, as it can be seen in figure 12, which allow people to enjoy the benefits of mobility. Basically, they include the transport provided by transport companies (e.g. bus service), “as well as the temporary option to use a vehicle (e.g. one that belongs to a car sharing company).” Moreover, they comprise the service that actually enables the use of these transport options (e.g. car sharing, public transport information system).<sup>82</sup>

The different segments belonging to the topic of mobility services are explained in the following parts, including some examples of prominent representatives in these sectors.

#### 3.4.1.1. Car sharing

Car sharing is the organized, joint use of motor vehicles. Customers first have to conclude a master contract with the provider or become a member of a car sharing association. Then they receive an access medium for all cars and can use them on their own in the

<sup>82</sup> Skinner et al., 2004

future. The vehicles are booked by phone, via app or via the Internet. In case of station-based car sharing, the vehicles are available on reserved parking spaces. The vehicle can be picked up there and also has to be brought back to there. In case of free-floating car sharing, vehicles are randomly distributed in a defined operational area. They can be located by mobile phone and can be parked somewhere in the operating area of the provider after the trip. While station-based vehicles are bookable far in advance, free-floating vehicles can only be booked spontaneously. However, for free-floating vehicles the return time must not be determined in advance.<sup>83</sup> Established companies in this sector are Car2go and DriveNow. Car2go from the German automobile manufacturer Daimler follows the free-floating concept as well as DriveNow which is a joint venture between BMW and Sixt.<sup>84</sup>

### **3.4.1.2. Ride sharing**

Ride sharing is the formation of driving groups with a private car for a specific common path. The vehicle owner determines whether and to which destination a ride is undertaken. The trip also takes place if there is no third person or if only people who were not mediated via a ride sharing platform are involved. As a rule, the travel expenses are shared or charged mutually for alternate trips.<sup>85</sup> Famous examples for ride sharing are the French company BlaBlaCar and the German equivalent Fliinc.

### **3.4.1.3. E-hailing**

The taxi industry has also been modernizing. Taxis can now be reserved by an “e-hail” internet or phone application maintained either by the taxi company or a third-party provider. E-hail apps are usually software programs for smartphones which allow passengers to identify the location of available cabs in a specific area and on the other hand allow drivers to identify the location of a passenger who desires to travel. Passengers can hail the cab via their electronic device and the driver consequently receives a hail request from

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<sup>83</sup> Carsharing.de, 2017

<sup>84</sup> Hepler, 2014

<sup>85</sup> Randelhoff, 2014

that passenger if the application delivers the connection of such a passenger to a driver. Payments can be done electronically.<sup>86</sup> Prominent representatives for this market field are Uber and Lyft, which are both American examples.

### **3.4.1.4. Intermodal mobility**

Intermodal mobility describes “the use of different transport modes on one route, whereas multimodal mobility is defined as the use of different transport modes on different routes.”<sup>87</sup> “People who often combine different transport modes show intermodal mobility patterns. In contrast, sharing a ride to a destination and returning by train would be classified as a multimodal trip. An important requirement for both multimodal and intermodal mobility is that users have the choice between different modes of transport. This technically means that there are at least public transport options and adequate bike lanes which are ideally complemented by shared mobility services.”<sup>88</sup> Various apps and platforms have been established to facilitate intermodal mobility. They provide solutions to move people as fast, cheaply, comfortably and ecologically as possible. Hence, these apps enable customers to plan their journey with diverse means of transportation, make reservations and also pay for the journey.<sup>89</sup> This mobility market field encompasses several renowned companies like Moovit and Citymapper.

### **3.4.1.5. Parking services**

Parking services basically provide apps with detailed directions to nearby parking locations. They intend to “save time and money by locating the most convenient parking location.”<sup>90</sup> These apps also “include comprehensive parking information regarding hours of operation, rates, entrance points and payment types, all on a real-time basis.”<sup>91</sup> ParkWhiz and Parking Panda are prominent American examples.

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<sup>86</sup> Defined Term, 2017

<sup>87</sup> Jonuschat, Stephan and Schelewsky, 2015

<sup>88</sup> Jonuschat, Stephan and Schelewsky, 2015

<sup>89</sup> Prediction for SiMobility Connect, 2017

<sup>90</sup> App Store, 2017

<sup>91</sup> App Store, 2017

### **3.4.2. E-mobility**

“Electro mobility is a general term for the development of electric-powered drivetrains designed to shift vehicle design away from the use of fossil fuels and carbon gas emissions. The term electro mobility includes full electric vehicles, as well as hybrid electric vehicles and those using hydrogen fuel cell technology. All of these represent ideas for electronically driven vehicles for the future.”<sup>92</sup>

#### **3.4.2.1. Electric vehicle**

“An electric vehicle is a vehicle which uses one or more electric motors for propulsion. Depending on the type of vehicle, motion may be provided by wheels or propellers driven by rotary motors, or in the case of tracked vehicles, by linear motors. Electric vehicles can include electric cars, electric trains, electric trucks, electric lorries, electric airplanes, electric boats, electric motorcycles and scooters, and electric spacecraft. Electric vehicles store electricity in an energy storage device, such as a battery. The electricity powers the vehicle's wheels via an electric motor. Electric vehicles have limited energy storage capacity, which must be replenished by plugging into an electrical source. They have the potential of significantly reducing city pollution by having zero tail pipe emissions. However, an important goal for electric vehicles is overcoming the disparity between their costs of development, production, and operation, with respect to those of equivalent internal combustion engine vehicles.”<sup>93</sup> The probably best known representative in this sector is the American company Tesla Motors. Nonetheless, also other car manufacturers like Ford Motor, Renault and Fiat Chrysler are stirring up the market with their vehicles.<sup>94</sup>

### **3.4.3. Connected car**

Connected car means “the presence of devices in an automobile that connect the devices to other devices within the car and or devices, networks and services outside the car

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<sup>92</sup> Techopedia.com, 2017

<sup>93</sup> Electricvehiclesnews.com, 2017

<sup>94</sup> Shahan, 2016

including other cars, home, office or infrastructure. Internet access is usually connected to a local area network. Many experts are saying that connected cars are part of the giant Internet of Things. For example, internet connections can provide connections that warn of traffic, collisions and other safety alerts. Concierge services from apps or automakers alert the drivers about the departure time needed to arrive on time by using their calendars and also send text message alerts to friends or business associates to make them aware of the drivers' arrival times."<sup>95</sup> The connected car market is led by companies like BMW, Daimler, Fiat Chrysler, Ford Motor and various others.<sup>96</sup>

### **3.4.3.1. Autonomous driving**

"An autonomous car is a vehicle that can guide itself without human conduction. This kind of vehicle has become a concrete reality and may pave the way for future systems where computers take over the art of driving. An autonomous car is also known as a driverless car, robot car, self-driving car or autonomous vehicle. Autonomous cars use various kinds of technologies."<sup>97</sup> "They can be built with GPS sensing knowledge to help with navigation. Moreover, they may use sensors and other equipment to avoid collisions. They also have the ability to use a range of technology known as augmented reality, where a vehicle displays information to drivers in new and innovative ways."<sup>98</sup> Renowned companies that are makers of advanced driver assist technologies or systems are Google, Audi, BMW, Intel, Mobileye, as well as plenty of other companies.<sup>99</sup>

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<sup>95</sup> auto connected car news, 2017)

<sup>96</sup> Connected CarTech, 2015

<sup>97</sup> Techopedia.com, 2017

<sup>98</sup> Techopedia.com, 2017

<sup>99</sup> CB Insights, 2016



## 4. Mobility startups analysis

“The most noticeable area impacted by startups is mobility.”<sup>100</sup> Many startups have come onto the scene in order to counter the challenges in mobility, with most of them operating worldwide. “Changes in mobility were first led by firms like Zipcar and Car2go, and now by Waze, Tesla, Uber, and Lyft”<sup>101</sup>, some of them already being mentioned in the previous part.

In the following, an analysis of emerging mobility startups in different mobility startup market fields within the German speaking market is given. First, for each market field two startups are selected as representatives and introduced regarding their business operations. Secondly, an investigation of how mobility startups collect and use big data is conducted. The third part discusses possible restrictive regulations concerning mobility startups. Lastly, general startup success factors are presented, which serve as a comparison to the specific mobility startup success factors resulting from the analysis of the interviews with the mobility startups.

### 4.1. Mobility startup descriptions

For the underlying analysis, the focus lays on mobility startups from German speaking countries, offering physical as well as digital mobility services, thus covering the mobility market fields of car sharing, ride sharing, e-hailing, intermodal mobility and parking services. Consequently, for each mobility startup market field two startups are presented, of which some participated as interview partners in the empirical study in chapter five. Hence, that chapter gives more insights and a more detailed description of the company structure and culture of the participating startups.

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<sup>100</sup> Abrahamson, 2015

<sup>101</sup> Abrahamson, 2015

- Car sharing startups

### **Free2Move**



Free2Move is a startup based in Berlin and was founded in 2013 under the name Carjump, before selling the majority shares to the PSA (Peugeot, Citroën) group in December 2016.<sup>102</sup> The Free2Move app bundles all car sharing providers and displays the closest vehicle regardless of the provider. Free2Move is thus adopting a new car sharing approach and has set itself the goal of revolutionizing the German mobility market in the long-term.<sup>103</sup> Free2Move makes it easy to find the right car, avoiding switching between the different providers' apps, as it aggregates car sharing providers on a platform. Vehicles near to the users' location can be chosen and the distance, vehicle model, type of drive and price can be compared. Three types of car sharing are supported, namely stationary, flexible and private-to-private. Hence, users only have to register once for being able to use many car sharing providers. Free2Move is available wherever its supported providers are available.<sup>104</sup>

### **SCO2T**



SCO2T was founded in Vienna in 2014.<sup>105</sup> It is Austria's first scooter sharing service and is the only one of its kind in the world to offer several classes of vehicles. The next SCO2T can be found via the map on the smartphone. SCO2T is a free floating sharing service. This means that the SCO2Ts simply park in parking lots in the city. Even at the end of the rental the user does not have to look for special parking spaces, but can just park the SCO2T in the next closest legal parking slot to get as close as possible to his destination. The rent of a scooter can be started via the SCO2T app. The startup offers the scooter categories 50 and 125cc, which all contain 2 helmets. Recently the startup also added 20 electric scooters to its fleet. In addition, all vehicles are equipped with a mobile phone

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<sup>102</sup> Carsharing-news.de, 2017

<sup>103</sup> Gründerszene, 2017

<sup>104</sup> Carjump.de, 2017

<sup>105</sup> Sco2t.com, 2017

holder and a USB port for charging mobile devices. The service area covers mainly all Viennese inner districts.<sup>106</sup>

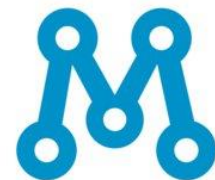
- **Ride sharing startups**

### ***Wunder***



Wunder was established in Hamburg in 2013. It is a “carpooling community to get connected with people going in the same direction to work and back home. The app automatically matches users with other community members based on work and home location as well as travel time and suggests a payment fare according to the distance, enough to cover reasonable expenses (like gas and maintenance). Wunder suggests a price that does not let drivers make a profit by carpooling. It enables car owners to share the empty seats in their vehicles and passengers to commute more easily. The benefits of Wunder are sharing costs, reducing the number of cars on the road, avoiding crowded public transportation and therefore helping the environment.”<sup>107</sup> The startup focuses on markets in Eastern Europe, Asia and South America, as the service was banned in Germany. Currently Wunder is operating in six mega cities, such as Delhi, Mumbai, Bangalore, Manila, Cebu, Kuala Lumpur and plans to expand to 10 more cities in 2017.<sup>108</sup>

### ***Match Rider***



“Match Rider is a ride sharing platform designed for everyday and spontaneous rides up to 100 km.”<sup>109</sup> It was founded in Heidelberg in 2012. The startup’s vision is to “integrate carpooling into everyday lives, making sharing rides as reliable as taking the bus or train.”<sup>110</sup> “The service makes the pick up process very simple and transparent by using Match Points, which are similar to bus stops. They are located directly along the driver’s route and are therefore minimizing any detours. To

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<sup>106</sup> Sco2t.com, 2017

<sup>107</sup> help.wunder.org, 2017

<sup>108</sup> help.wunder.org, 2017

<sup>109</sup> Angel.co, 2017

<sup>110</sup> Angel.co, 2017

build a critical mass Match Rider has a branded Ride Board platform for companies and organizations, where members can share rides within their respective communities. The system links to other forms of mobility through its Match Points including public transportation stops and car and bike sharing stations.”<sup>111</sup> Journeys can be booked based on daily scheduled routes via the app.

- **E-hailing startups**

### ***Blacklane***



Blacklane is a startup based in Berlin, which was established in 2011. It offers thousands of passengers a large network of licensed professional drivers, as the company cooperates with local chauffeur services. Passengers can plan and book limousines at a given time on the website or via the Blacklane app. Customers can either indicate their pickup location and destination, or the number of hours they want to book. A further feature is the ability to choose the car class and the budget. The tariffs are fixed, so if a traffic jam occurs, or the driver has to travel detours, the price does not increase. Blacklane is currently available in 250 cities around the world.<sup>112</sup>

### ***Taxi.de***



Taxi.de was founded in Hamburg in 2011. The startup is the successor of TaxiButton, the first German company to offer a mobile application for ordering a taxi. The focus of the startup lays on innovative solutions that are designed to be cost-effective and efficient for fleet optimization and control purposes. In addition to locating, planning, controlling and contracting, reports and the maintenance of customer data are another main focus.<sup>113</sup> Hence, besides the online ordering service, Taxi. de offers also the service of developing individualized software solutions for taxi companies or independent drivers.<sup>114</sup> With the Taxi.de app, users can directly order a taxi to the place they are at the moment. Taxi.de

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<sup>111</sup> Angel.co, 2017

<sup>112</sup> Blacklane.com, 2017

<sup>113</sup> XING AG, 2017

<sup>114</sup> Gründerszene, 2017

allows the app users to close transport contracts with participating taxi companies via the Taxi.de software. The startup does not provide any own transport services. By booking via the Taxi.de software, a contract is concluded between the user and the taxi company. Accordingly, the placement of the transport contract by Taxi.de is free of charge for the passenger.<sup>115</sup>

- **Intermodal mobility startups**

### ***Ally***



Ally is a free app for urban transport founded in 2012 with headquarters in Berlin and Porto Alegre. The app shows arrival and departure times in real time, including all stops and live updates to permit an optimal journey through the city. In addition to buses and railways ally also integrates the new mobility services such as DriveNow, Car2Go and ZipCar. Basically, ally brings together all city transport options in one app and enables its users to compare price and time of car sharing, bike sharing, public transport, taxi and more. Thanks to its real-time navigation and a dedicated community that is actively involved in continuously improving transportation information, the free smartphone app sets new standards. In addition to the already existing transport information of local transport providers, the strong community contributes to unique real-time information. In this way, ally users receive live updates as well as access to the best transport information. The startup recently decided to open another development office in Porto Alegre (Brazil), and is currently launching its app in almost 100 cities around the world.<sup>116</sup>

### ***Wegfinder***



Wegfinder is the successor of Nextstop, an app established in Vienna in 2013 enabling its users to find the ideal combinations of individual and public transport and also offering tickets in this regard. The app provides departure times and displays available bookable or rentable transport within the users' areas on a map.

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<sup>115</sup> Taxi.de, 2015

<sup>116</sup> Gründerszene, 2017

Hence, bookings and ticket purchases can also be carried out. Nextstop, the startup's predecessor, offered only an overview of public transport timetables and was launched for several cities in Austria in own versions. As a successor to Nextstop, Wegfinder is no longer restricted to a region, but offers route planning for all available means of transport within Austria from a single source.<sup>117</sup> Of course all features of the predecessor Nextstop are still integrated within Wegfinder. Bus stops including departure times in the user's location and addresses or special places, such as restaurants, bars and attractions across Austria can be searched. The users' favorite means of transport are combined, whether these are public transport, car sharing, bike sharing, car or footpath. The app then shows how the selected combination can bring the user from A to B in the quickest way, providing route plans and schedules. Timetables, departure times and real-time data for public transport are presented, as well as an interactive map, which includes all stops and takes possible delays and disturbances into account.<sup>118</sup>

- **Parking services startups**

### ***Parkpocket***



Parkpocket is a mobility startup in the mobility market field of parking services. The startup was established in Munich in 2013. Parkpocket shows free parking lots in car parks in real-time. The app gives information regarding prices, opening hours and electric stations, and calculates the estimated parking fee. If a suitable parking garage is selected, the journey time to the car park and the footpath to the destination can be calculated precisely timed and the navigation can be started directly. Thus, Parkpocket creates transparency and predictability for the confusing parking chaos of inner cities. The startup provides the intelligent parking information in real time through close cooperation with cities, municipalities and car park operators, to whose databases Parkpocket is directly connected. The aim of the startup is to provide the customer with a high degree of data quality. Therefore, the raw data that Parkpocket refers to is subject to a strict control and refining process. Customers of Parkpocket can use the service on the one hand through the free app and

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<sup>117</sup> Kotrba, 2017

<sup>118</sup> nextstop, 2017

on the other hand, the data can also be integrated into devices, services and connected car solutions. Parkpocket is currently available in Germany, Austria and Switzerland. A further expansion to other European markets is already in progress.<sup>119</sup>

### **Parkbob**



Parkbob was founded in Vienna in 2015 and offers a free smartphone app, that allows the user to display on a map which public parking spots are probably free nearby.<sup>120</sup> Parkbob combines real-time parking data from a wide range of sources with an extensive database of parking rules and links these with geo-information. In addition, Parkbob is integrated into the A1 Handyparken app, to enable an all-round service.<sup>121</sup> The available parking spaces are displayed on a map in the form of green dots. The transparency of these points tells how likely it is that the car park is still free. The richer the green, the more likely it is that the car park is still available.<sup>122</sup> The Parkbob app informs the customer where to park, how long he can park there and how much he has to pay if the car park is subject to a fee.<sup>123</sup> The app can therefore warn the user whether he has just entered a pay zone or possibly even a no parking zone.<sup>124</sup> In addition, the app provides the possibility of purchasing a parking ticket.<sup>125</sup>

## **4.2. Utilization of Big Data in mobility startups**

Big Data describes a large volume of data, which can be structured or unstructured. While the term “Big Data” is relatively new, its concept is already ages old. One of the earliest descriptions, which is now used as a mainstream definition of big data, includes the three Vs, specifically volume, velocity and variety. Data can be collected from various sources and streams at an unprecedented speed. Therefore, it must be dealt with in a timely manner. Moreover, data comes in all types of formats, from structured, e.g. numeric data to

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<sup>119</sup> Gründerszene, 2017

<sup>120</sup> Steinschaden, 2016

<sup>121</sup> derbrutkasten.com, 2017

<sup>122</sup> Parkbob GmbH, 2017

<sup>123</sup> Parkbob GmbH, 2017

<sup>124</sup> Steinschaden, 2016

<sup>125</sup> Parkbob GmbH, 201

unstructured, e.g. text documents. Apart from the amount of data, it is more important how organizations use the data. In fact, analyzing Big Data can lead to better decisions and strategic business moves.<sup>126</sup>

Consequently, Big Data represents a new era in data exploration and utilization and is penetrating more and more application areas. One of these areas of application is personal mobility. The trend towards Big Data in mobility is mainly triggered by a technological revolution in mobility, which is attributable to the advancing digitization. Technology trends of the coming years, like intelligent and networked vehicles, autonomous driving and virtualized mobility services that organize multimodal mobility chains, require and generate lots of mobility-related data. Consequently, the ongoing trend towards a mobile lifestyle, rising population figures, progressive urbanization as well as the demand for sustainable mobility necessitates a far-reaching change. In order to continue to enable a high degree of mobility, mobility systems must be understood and reorganized. In this regard, Big Data can be an essential building block for the reorganization and can serve as a data base for the future development of new business models.<sup>127</sup>

Smartphones and navigation systems make people and machines a productive source of data, and the ever-increasing amount of digital information is creating new opportunities and business models, particularly in the area of mobility. Hence, many mobility startups are taking advantage of people leaving digital tracks in the web, no matter whether they move virtually or real. The main aim is to facilitate traffic planning in the future and to significantly reduce traffic congestion by using the traffic data provided by individuals as well as the different means of transport.<sup>128</sup> “Services like real-time ride sharing and car sharing, for instance, are helping urbanites to get around without owning a car. Moreover, new apps are allowing commuters to compare the time, cost, convenience, carbon footprint and health benefits across all modes of public and private transport, broadening their range of choices and allowing for on-the-fly decision making that takes into account real-time conditions. For their part, automakers are focused on connected vehicles that can

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<sup>126</sup> Sas.com, 2017

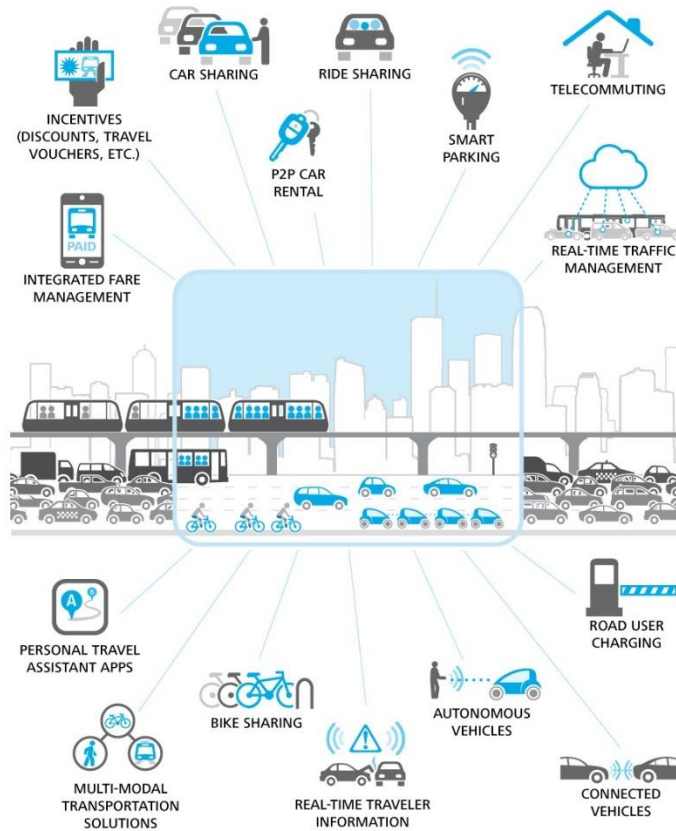
<sup>127</sup> Fasel and Meier, 2016

<sup>128</sup> Jähnichen, 2015



access, consume, create and share information with other vehicles and the surrounding infrastructure in real time, improving traffic flow and safety.”<sup>129</sup>

The illustration below depicts the various mobility startup fields that can be facilitated by using Big Data.



**Figure 13: Big Data in mobility (Dovey Fishman, 2012)**

Basically, Big Data can serve as a development of new business models for mobility startups. The results of using Big Data is that the mobility field will look very different going forward. By integrating Big Data, mobility startups can help to create a massively networked mobility field, which is user centered and therefore taking into account the users' needs and data flows. Moreover, integration can be facilitated, so that users can move easily from point A to point B, regardless of mode, service provider, or time of day. What

<sup>129</sup> Dovey Fishman, 2012

is more, a reliance on new models of private-public collaboration can be created, which takes advantage of the increasingly diverse ecosystem of public and private entities.<sup>130</sup>

### **4.3. Restrictive regulations**

The management of urban mobility operates in an environment that is rather fragmented and hostile to innovation. The urban management systems do not truly allow market players to compete and establish business models.<sup>131</sup> Therefore, public authorities should collaborate more closely with mobility startups as they address mobility challenges. Furthermore, they should ensure that startups have the best conditions to flourish.<sup>132</sup> However, nowadays ride sharing services such as Uber, Lyft and many others are under intense scrutiny.<sup>133</sup> These companies are facing regulatory challenges to their business model, as for example car sharing operators have to negotiate deals with cities to get permits to operate and to use public parking spaces. Solving regulatory challenges is not easy. Uber and Lyft, for example, are tough competition to the existing taxi industry. Other new mobility measures are also controversial. For example, drivers in many cities are not happy about having to make space for bicycling lanes. Trade-offs are inevitable, and difficult. While many mobility innovations make sense in theory, politics will make accommodating them exceptionally challenging. Due to that regulatory environment, it is important that startups have public-policy departments. Companies like Uber, for example, hired former lobbyists, regulators, lawyers, public-relations experts, and economists in the hope that doing so will enable them to continue to operate and to shape regulation that supports their business models.<sup>134</sup>

The biggest hurdles for Autonomous Vehicles, on the other hand, may not be only technological, but are also the definition and harmonization of regulations at a city, state, national, and even international level. Safety requirements for integration of software and hardware in vehicles and the use of services in movement are as high as in hardly any

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<sup>130</sup> Dovey Fishman, 2012

<sup>131</sup> Van Audenhove et al., 2014

<sup>132</sup> Plassat, 2015

<sup>133</sup> Matus and Heck 2015

<sup>134</sup> Bouton et al. 2015

other industry.<sup>135</sup> Hence, automated driving requires maximum high safety standards. Automated systems must be reliable, system-redundant and protected against foreign interference, i.e. hacking. Transparent rules and transnational solutions are essential. Legal answers to the question of security, the correctness of the data, or even liability claims in the event of damages must be found as well.<sup>136</sup>

Furthermore, driving laws need to be tackled as they are regulated varyingly from country to country. “If connected cars are to have the flexibility of navigating freely, reaching a consensus on legislation to allow this type of freedom amongst countries will require efforts of epic proportions. Building a car to meet every variation of every law in every state can be very cost-prohibitive.”<sup>137</sup> Therefore, “deploying technologies that independently monitor and improve road safety are an essential part of creating the trust needed to accelerate the future of this mobility field.”<sup>138</sup>

Another concern, in order to make use of the potential of mobility innovations, is the question of data protection that must be solved. “The ability to analyze and interpret data can open up countless growth opportunities for mobility startups, however, those opportunities are not without challenges.”<sup>139</sup> The aspects of security and data protection are a serious obstacle to the extensive use of high-quality data. When using the location and movement data generated by individuals, it must be ensured that no conclusions can be drawn about individuals. Therefore, it is particularly important to create a corresponding legal framework and a basic infrastructure for the data protection compliant information exchange, for example by developing suitable anonymization procedures. Only when it is possible to achieve maximum security in the use of data, the services and offers will find the appropriate acceptance and dissemination.<sup>140</sup>

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<sup>135</sup> Nolte 2014

<sup>136</sup> Lühmann, Hartmann and Schiefner, 2015

<sup>137</sup> Raza, 2015

<sup>138</sup> Matus and Heck, 2015

<sup>139</sup> Quan, 2013

<sup>140</sup> Jähnichen, 2015

#### 4.4. General startup success factors

Amid the possible obstacles mentioned in the previous section, this part presents general startup success factors. These also serve as a comparison to the specific mobility startup success factors resulting from the analysis of the conducted interviews with the mobility startups.

More than 90% of intended startups do not happen or fail after only a few months.<sup>141</sup> Hence, even if starting a business may seem easy nowadays, finding long-term success or even getting the needed fund for the next big idea, is not so easy.<sup>142</sup> “Startups are full of promise and excitement, but the flip side is that they are also full of risk and uncertainty, which can occur during the foundation and the first business years of a startup.”<sup>143</sup> This can be due to the inexperience of the founders. Since they are usually very young, they often have little experience in the management of a company. Furthermore, it is often not clear in the early days whether the product can be developed in the necessary quality, nor can it be predicted whether the market will accept the product at all. These reasons are mainly responsible for the fact that only a few startups are successful. As a rule, seven to eight out of ten young companies fail. For the remaining one to two, the expected growth does not occur. Only 10 percent of young entrepreneurs usually reach the desired success. Among the other most important reasons for the failure are the insufficient interest in the developed product, exhausted money reserves and a not well fitting founding team.<sup>144</sup> The major reasons why startups fail can be seen in figure 14.

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<sup>141</sup> Bernecker, 2015

<sup>142</sup> Johnson, 2015

<sup>143</sup> DeMers, 2015

<sup>144</sup> Weis, 2016

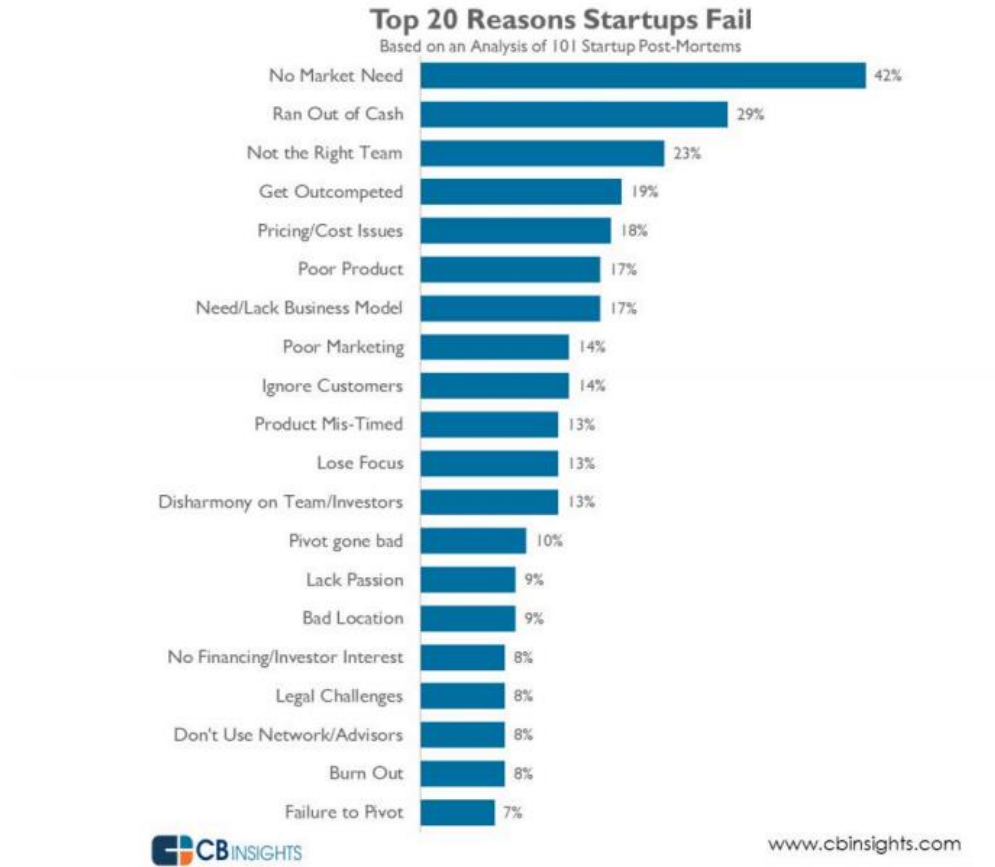


Figure 14: Reasons why startups fail (The Top 20 Reasons Startups Fail, 2014)

Given that, it is hard to find out the reason why one startup is able to succeed over another. Primarily, this is “because there is no one factor for success, but there are dozens.”<sup>145</sup> Many articles state common reasons, so generally those dozens may be lowered down to the ten most critical ones, as depicted in the subsequent part.

- *The idea*

“The strength of the founder's idea might seem to be the biggest factor responsible for a business' success, but it is indeed only a small element of how things might turn out.”<sup>146</sup> It is safe to say that even the best business idea is exposed to competition and can be copied. Hence, in some cases the idea needs to be fundamentally changed.<sup>147</sup>

<sup>145</sup> DeMers, 2015

<sup>146</sup> DeMers, 2015

<sup>147</sup> Bernecker, 2015

- *The leader*

“Leadership is important in startups. Leaders make the decisions, set the vision and inspire people to work harder for a group’s goals. A skilled and experienced leader can turn even a weak idea into a successful one.”<sup>148</sup> Hence, founders need high flexibility, willingness to learn, a lot of endurance and perseverance. They must be capable of developing and focusing on a vision. Nevertheless, they must not be too stubborn.<sup>149</sup>

In fact, several studies address the question of the influence of personality traits on founders’ success. In most cases the "Five-Factor Model" according to Gordon Allport and Odbert is used to capture the five key dimensions of human personality. These independent "big five" are neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. The stronger the characteristics of "neuroticism", "extraversion", and "openness to experiences" are, the greater is the likelihood of entrepreneurial success.<sup>150</sup>

However, psychologists state that the five-factor model does not adequately illustrate the relationship between personality traits and entrepreneurial success. Hence, it may be appropriate to use additional personality traits. These five features are degree of risk tolerance, willingness to trust others, ability to be patient, ability to make impulsive decisions, and strength of internal and external control beliefs. Consequently, people with a higher internal control conviction have a higher success probability. Likewise, the relationship between a high risk tolerance and the decision to establish a startup is stronger.<sup>151</sup>

Summarizing, it can be said that startup founders are creative, original, communicative, emotionally stable and willing to take risk. However, it should be mentioned that the willingness to take risk should ideally be in the middle field in order to be a successful entrepreneur. However, weak risk appetite as well as a too high risk tolerance can lead to entrepreneurs quickly giving up their startup again.<sup>152</sup>

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<sup>148</sup> DeMers, 2015

<sup>149</sup> Sternsberger, 2014

<sup>150</sup> GründerDaily, 2011

<sup>151</sup> GründerDaily, 2011

<sup>152</sup> GründerDaily, 2011

- *The team*

“Entrepreneurs are important, but they rarely accomplish great things alone. Successful businesses employ anywhere from a handful to hundreds of people, and those people will be the ones maintaining the business, driving innovation and executing the high-level goals.”<sup>153</sup> Over time, the team has become an increasingly important factor for startup success.<sup>154</sup> Ideally, the team consists of people with different skills, to cover all important roles.<sup>155</sup> In general, a mediocre business idea with a top team rather leads to success than a top business idea with a mediocre team. This is since in the rarest cases, the first approach of a startup is already successful. Therefore, the team must quickly recognize the weakness of the business approach and adapt the model and hence be flexible and adaptable.<sup>156</sup>

- *The capital*

“Working capital is as important as the early stages of funding. If an investor cannot be found, personal and familial investments can be possibilities as well as the opening of a credit. Once credit is secured, it is essential to remember to keep an eye on the cash flow.”<sup>157</sup>

- *The plan*

“The plan has to involve more than just the core idea. It includes the goals, targets, operations and more. Everything written down in the business plan counts as part of the plan.”<sup>158</sup>

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<sup>153</sup> DeMers, 2015

<sup>154</sup> derbrutkasten.com, 2016

<sup>155</sup> Sternsberger, 2014

<sup>156</sup> Bernecker, 2015

<sup>157</sup> DeMers, 2015

<sup>158</sup> DeMers, 2015

- *The execution*

“A plan is only as valuable as its ability to be executed.”<sup>159</sup> A high level of performance is decisive for success, as a startup requires a lot more effort than an established company.<sup>160</sup>

- *The timing*

“Timing is important from a competitive perspective, and it has led many businesses to prominence despite a chaotic and busy market at their time of entry.”<sup>161</sup>

- *The crisis response*

“The response to a crisis is far more important than how likely the avoidance of it is. One poorly treated crisis is all it takes to put a company under.”<sup>162</sup>

- *The marketing*

“An inferior product that’s branded in a more appealing, exciting, and unique way will always outsell its superior product that happens to have plain, non-memorable branding. This point may seem superfluous, but it critically affects customers’ buying decisions.”<sup>163</sup>

“Branding is all about mission, message, and living it. Successful companies create a clear message, then repeat it, reinforce it, and drive it home consistently in everything they do.”<sup>164</sup>

- *The growth*

“Finally, the path chosen towards growth plays a significant role. A balance must be found, and growth must be treated carefully.”<sup>165</sup>

In addition to these ten critical reasons, an analysis published in 2015 by the venture capital firm First Round Capital states some further factors that predict startup success.

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<sup>159</sup> DeMers, 2015

<sup>160</sup> Sternsberger, 2014

<sup>161</sup> DeMers, 2015

<sup>162</sup> DeMers, 2015

<sup>163</sup> DeMers, 2015

<sup>164</sup> Gospe, 2017

<sup>165</sup> DeMers, 2015



Information on over 300 companies and nearly 600 founders, “including founder characteristics such as age, gender, education, firm location, and prior work and startup experience”<sup>166</sup> was gathered. Consequently, “the study found several correlates with success.”<sup>167</sup>

- *Gender*

Globally, twice as many men than women become entrepreneurs. However, the number of female entrepreneurs is increasing rapidly.<sup>168</sup> In fact, the study found that startups with at least one female founder significantly outperform all-male teams by 63%.<sup>169</sup>

- *Age*

The average age of founders is approximately 34.5. Yet, the study found that startup teams with an average age of below 25 tend to rather succeed. Especially in the technology sector younger founders seem to be a key factor for success.<sup>170</sup>

- *Education*

Furthermore, the study indicates that founders graduating from top universities perform better. Indeed, teams including at least one founder member that went to an elite school, tend to be more successful. Hence a good education can be an important factor for startup success.<sup>171</sup>

- *Firm location*

Location might be thought of as being able to make a dramatic difference in performance. However, the founding location does not seem to be an important factor for startup success. Startups founded outside big hubs, can be as successful in terms of performance. This holds especially true for the technology sector.<sup>172</sup>

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<sup>166</sup> Marion, 2016

<sup>167</sup> Marion, 2016

<sup>168</sup> Marion, 2016

<sup>169</sup> First Round 10 Year Project, 2015

<sup>170</sup> Marion, 2016

<sup>171</sup> First Round 10 Year Project, 2015

<sup>172</sup> First Round 10 Year Project, 2015

- *Work experience*

Founders with prior experience in large technology companies tend to be more successful. Having employees that already have experience in hard skills such as project management, but also soft skills, such as networking can be vital to effectively navigate through the early-stages of a startup.<sup>173</sup>

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<sup>173</sup> Marion, 2016

## 5. Empirical study

### 5.1. Design of the survey

For the empirical study, the first step was to examine the German and Austrian mobility startup market. Hence, two emerging startups each, respective to their mobility startup market field, originating from and/or operating within the German speaking area, as identified in chapter 4.1., were chosen as the representatives. After identifying the correct contact person in the respective startups, the first contact took place via phone call, followed by an e-mail. The e-mail served to present the master's thesis and the planned survey again. In order to simplify the preparation, the interview questions were sent to the interviewees in advance per e-mail as well.

Out of all the contacted mobility startups operating in the different mobility startup market fields (as listed in chapter 3.4.), one startup per each market field, agreed on taking part in the survey, except for the ride sharing market field. In that case, two startups agreed on participating in the interview. Hence, six interviews were carried out with startups from the five different mobility startup market fields identified in this paper. As a representative for car/scooter sharing startups, an interview with the co-founder of SCO2T, Balázs Bárány, was conducted. For ride sharing startups, the manager for strategy & partnerships at Wunder, Lukas Loers, agreed on taking part in the survey, as well as Frank Anders, the co-founder of Match Rider. Alexander von Brandenstein, founder of Taxi.de, was interviewed as an ambassador for e-hailing startups. For intermodal mobility startups, the CEO of the Austrian startup "Wegfinder", Gregor Fischer, was interrogated. Finally, for parking services startups, Christian Adelsberger, founder of Parkbob, was questioned.

The interview partners of the different mobility startups were mainly the founders, co-founders or other executives. Hence, all the interviewees could answer all asked questions. The interview questions referred to the mission of the startups, its founders' personality and background, the company culture and the startups' vision for the future. In sum,

there were fifteen questions. The interviews were all carried out by telephone during working days, in German with a duration of about 25 minutes. Moreover, the interviews were recorded for later transcription.

Following the interviews, the content was transcribed in order to achieve a better understanding of the perceived content. Afterwards, all interviews were summarized and translated into English. Hence, the contents presented here represent a second round of interpretation and distillation by the interviewer after a reflection phase in order to be able to produce the paper's context without the direct impression of a previous interview.

In addition to the interviews of the six mentioned mobility startups, two more interviews were conducted with two selected mobility market experts. The process is similar to the one of the mobility startup interviews. Again, the first step was to identify possible experts in mobility. For this, websites related to mobility like the Austrian BMVIT and WKÖ were searched through for possible interview contacts. Moreover, contacts from industry specific magazines like VCÖ and Gründerszene were searched. After identifying the correct contact person, the first contact took place via e-mail, stating the master's thesis purpose and presenting the planned survey. In order to simplify the preparation, the interview questions were sent to the interviewees in advance per e-mail. Consequently, Mr. Schwammenhöfer, logistics representative at BMVIT and Ms. Stuttner, assistant for transport policy at VCÖ, agreed on taking part in the survey.

The interview questions referred to the challenges in mobility, the importance of mobility startups and future prospects in mobility and for mobility startups. In sum, there were fifteen questions. The interview with Mr. Schwammenhöfer was carried out by telephone in German during a working day, with a duration of about 45 minutes. The interview was recorded for later transcription. Following the interview, the content was transcribed and translated into English. The answers to the interview questions from Ms. Stuttner, on the other hand, were received per e-mail in German and also translated into English.

Following all the above steps, the consequent action was to analyze the survey results, which are presented in chapter 5.2. The analysis includes the investigation of specific

determinants that support the success of a mobility startup in a positive way. Hence, a comparison of the survey results between the different mobility startups was conducted. Furthermore, these results were compared with the literature of this paper, in order to find out, whether the literature regarding general success factors supports or differs from the specific success factors identified from the survey results of the mobility startups. Finally, the literature and survey results of the mobility startups altogether were compared with the results of the expert interviews, in order to get a future prospect of the mobility market and the success and importance of mobility startups.

### **5.1.1. Validity and reliability of results**

Regarding the evaluation of the results, especially the validity and reliability need to be assured. Therefore, for the collection of primary data via interviews, questionnaires were created in a standardized way in terms of content and order for all interviewed mobility startups as well as mobility market experts. Moreover, in order to cover all the identified mobility startup market fields, at least one mobility startup per each market field was interviewed. Regarding the expert interviews, experts from two different institutions were chosen. This enabled to gather expertise from interviewees with different access to mobility and backgrounds. What is more, the interviews were transcribed and crosschecked with each other to investigate possible similarities or differences.

## **5.2. Results of the study**

This section contains the results of the survey. The answers of both interviewed mobility market experts as well as the answers of the six interviewed mobility startups are presented.

### **5.2.1. Expert interviews**

Regarding the mobility market experts, as already mentioned, the interviews were carried out with Mr. Schammenhöfer, the logistics representative at BMVIT, and Ms. Stuttner, the assistant for transport policy at VCÖ. The decision to choose these two interview partners is based on their respective expertise regarding mobility markets. The section below contains a summary of the interviewee's answers to the fifteen interview questions. It has to be noted that both experts are active in the Austrian market. Hence the answers primarily refer to the Austrian mobility market but can also be generalized for the German speaking mobility market in some cases.

#### **5.2.1.1. VCÖ**

The VCÖ was founded in 1988. It is the organization in Austria that is fully committed to environmentally sustainable, socially equitable and economically efficient mobility. The VCÖ indicates traffic problems and gives solutions. The goal of the VCÖ is to provide a mobility system that allows all people, regardless of their age, gender or social position, fair mobility opportunities and to reduce the impact of traffic on people and environment.<sup>174</sup>

My interview partner from VCÖ was Ms. Stuttner, the assistant for transport policy at VCÖ. Ms. Stuttner considers the shift of passenger transport towards decarbonization as a major challenge in mobility nowadays. In addition, the integration of e-mobility is essential to promote climate protection. A further challenge is to increase the attractiveness of public

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<sup>174</sup> Vcoe.at, 2017

transport, whereby the public transport network is to be expanded, above all, in the regions. Hence, Ms. Stuttner deems the innovations in mobility as very important, as it needs new developments to curb air and environmental pollution as well as the increased land consumption caused by the transport sector.

Regarding the factors that lead to an increased foundation of mobility startups, Ms. Stuttner states the increased demand for alternative forms of mobility as well as for vehicles powered by renewable energies. A further factor is the need for bridging possibilities for the "last mile". Considering how important the foundation of new mobility startups is, Ms. Stuttner answered, that the establishment of mobility startups is important, as these can supplement the existing mobility and transport concepts. She added that in order for mobility startups to affect mobility and to counter current challenges, they need to find ideas for solving current traffic problems.

Considering if mobility startups can better counter current mobility challenges than public transport, Ms. Stuttner states that mobility startups are an important addition to public transport. The necessary reduction in energy use in the transport sector requires, in addition to increasing the efficiency of new technologies, new mobility concepts that lead to a reduction in energy consumption and traffic volumes. Here, mobility startups can provide good approaches. In order to consider a mobility startup successful, Ms. Stuttner thinks that the startup should provide the willingness to develop solutions for current needs and problems and to respond to current trends. As a possible obstacle for mobility startups, she lists the lower financial resources of mobility startups than larger, well-established public transport providers. Young mobility startups must first establish themselves and build up a customer base.

When asked about why innovations in the public transport sector usually occur late or fail, Ms. Stuttner states that changes in larger firms are more difficult to enforce, since this often requires lengthy processes. There is often a focus on proven processes and procedures. However, she does not consider mobility startups as a competition to public institutions but rather considers them as a complement to existing companies, for example as a shuttle to the railway, hence bridging the "last mile". Consequently, mobility startups

provide a good basis for increased cooperation with public transport. However, they can also operate independently.

Regarding the future of mobility, problems such as the current high consumption of urban traffic and high levels of air pollution will be still faced according to Ms. Stuttner. Mobility startups have the potential to promote exchange as well as partnerships between classic business models and new startup solutions. Hence, mobility startups are likely to enable the creation of partnerships between classic and young, innovative companies. This results in learning effects for both sides, which lead to new findings in the mobility sector. Lastly, relating to how the government should react to the increased spread of mobility startups, Ms. Stuttner indicates that governmental steering can be achieved by promoting sustainable project ideas.<sup>175</sup>

### **5.2.1.2. BMVIT**

The Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT) is responsible for the maintenance and expansion of Austrian networks. This comprises the classic transport networks such as railways and expressways, as well as waterways and airspace, and infrastructure that is often invisible to the general public, such as the telecommunications network. In addition, the BMVIT finances innovations and technology in several research programs and initiatives.<sup>176</sup>

My interview partner from BMVIT was Mr. Schwammenhöfer, the logistics representative at BMVIT. Regarding the challenges in mobility, Mr. Schwammenhöfer points out, that one always mentions the urban space, but leaves out peripheral spaces. This is mainly due to the difficulty in terms of design in peripheral spaces. Moreover, the expectations of people that are different, also count as another difficulty in rural areas. However, the major challenge in mobility, according to Mr. Schwammenhöfer, are emissions caused by traffic. The CO<sub>2</sub> levels need to be reduced and as the set limits are nearly reached by freight transport already, shortages in passenger transport have to take place. Therefore, it is

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<sup>175</sup> Stuttner, 2017

<sup>176</sup> Bmvit.gv.at, 2017



essential to switch to new technologies like electric mobility. Consequently, Mr. Schwammenhöfer perceives innovations as very important. However, he reckons that one has to give the innovations time.

According to Mr. Schwammenhöfer, the areas where a mobility startup can operate are the information area and the area of location change services. Typical for the information area are apps that provide mobility information. As a service provider, a mobility startup can bring together the providers and the demanders of various mobility services. However, mobility startups face difficulties in the area of change of location services, as the largest entry barriers to the market exist here. These include barriers that are artificial. Nevertheless, the investment-related nature of a location change service is the predominant entry barrier. In addition, existing systems have already divided the market. Hence, Mr. Schwammenhöfer believes it is easier for mobility startups to operate in the area of networking because existing structures can be accessed.

Regarding the importance of mobility startups establishments, Mr. Schwammenhöfer thinks that these startups are exciting as they bring a bit of movement into the market. They have quite different approaches, in part because they are based on a very high customer orientation. In doing so, they set standards, which, once used to them, are missed when using conventional transport providers. Mr. Schwammenhöfer thinks that the influence of personal mobility through mobility startups is spatially affected. Car sharing, for example, works very well in the west of Austria, because it is common there that one leaves the car cleaner than it was found. This is different in Vienna. Due to the fact that the use in the west of Austria happens more conscientious, fewer people have bad experiences and hence the number of users increases.

With regard to the question whether mobility startups can counter the current challenges better than public transport, Mr Schwammenhöfer sees the advantage of the mass performance capability of public transport in the foreground. Public transport does not need to cover all costs. Mobility startups, on the other hand, face the problem of financing. The problem with financing consists in the fact that income can be obtained mainly by offering a paid service. In the area of mobility services, which is information-based, however, the

willingness to pay money in Austria for this service is exactly the same as in Germany and throughout Europe, exactly zero. A further possibility to gain revenue would be to act as an intermediary for a specific company. However, this usually results in the acquisition of the startup. What is more reasonable is ad-based revenue.

The problem associated with the location change services is the need for a trading license when it comes to an exchange of services. This obstacle has already caused many sharing platforms to fail. A further obstacle, especially for mobility startups in the information area, is the obligation of public transport to provide free information to the public. Hence many intermodal possibilities like “Park and Ride”, etc., are already proposed by public transport, thus destroying many mobility startup business cases. The problem in Austria is, above all, the comparatively favorable access to every mobility offer of public transport. This means that there is relatively little space for third parties.

On the subject of the outstanding or rather sluggish innovations in public transport, Mr. Schwammenhöfer replies that the public transport system is very complex, with a very long holding period and therefore there is hardly room for innovation. Regarding whether mobility startups are seen as a competition to public transport, Mr. Schwammenhöfer states that public transport companies are large with a very powerful employee representation, which shows persistence. Therefore, especially in rural areas, where long distances must be put back, in order to get to any kind of sharing offers, public transport is the main player. However, Mr. Schwammenhöfer thinks that there could be cooperation between public transport and mobility startups. For example, local public transport faces difficulties with the customer interface. This is reflected, for example, in the bulky design of the ticket shop. Mobility startups act better here because they only offer a part of the products for a specific customer group, so the ticket purchase can be done very easy and quickly. Nevertheless, many collaborations have so far failed, as public transport has been very rigid in its structures and this hardly allows for innovation.

Mr. Schwammenhöfer sees the future of personal mobility in capitalization. Mobility startups will be bought up, as large companies will not be part of the innovation, but will rather buy away the innovations from the market. In conclusion, it should be noted that

the demand in Austria for the startup area of mobility is limited. The founding of a mobility startup may be easy, but the market entry and penetration is very difficult. Mr. Schwammenhöfer's opinion is that this will continue in the future. Location change service providers will insist on selling their tickets. Although the state puts out tenders relating to the topic of "mobility of the future" and supports these specific startups to get established, none of the startups so far could yet prevail in the market, according to Mr. Schwammenhöfer.<sup>177</sup>

### 5.2.2. Mobility startup interviews

In order to gather information regarding mission, founder, company culture and vision, interviews were carried out with six out of the ten listed startups in chapter 4.1. This is since one startup per each market field, agreed on taking part in the survey, except for the ride sharing market field, where two startups participated. The respective startups, as already mentioned, were chosen because of their origin from the German speaking area and mainly also because of their operations in the different mobility startup market fields within this specific area. The interview partners of the different mobility startups were mainly the founders, co-founders or other executives.

The section below contains a summary of the interviewees' answers to the fifteen interview questions.

#### 5.2.2.1. Wunder

My interview partner from Wunder was Mr. Loers, the manager for strategy & partnerships at the startup. The idea of the mobility startup Wunder is that people transport other people from A to B. The startup thought about which product would make the most sense for the people and where the demand is the highest. Consequently, the idea of carpooling was born. In Germany, the service has been stopped because drivers had no licenses and this was banned by authorities. Therefore, the startup extended its operations successfully to

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<sup>177</sup> Schwammenhöfer, 2017

Eastern Europe, in cities such as Budapest, Prague and Warsaw. The platform has also been launched in cities like Nairobi, Sao Paolo and Manila due to the high demand and simplicity of a launch from afar. Summarizing, the ideal customers of the startup are people in megacities, who have no access to comparable alternatives.

In answer to the question whether Mr. Loers thinks that the startup is successful, he replied that if one makes a mobility offer, one also needs to cover a great demand. Indeed, the demand is very high because people have no other options, such as in Manila where trams are crowded and streets are crowded as well with cars through working traffic. This results in people taking a longer time to get to work. Moreover, because most people in cities like Manila live in poor conditions, they are ready to share. These reasons cause Wunder to work well and hence Mr. Loers considers the startup as successful. In summary, Wunder is successful because the startup operates in cities where demand and factors such as high traffic volume prevail. Wunder can counteract this, mainly because there are no comparable alternatives on the market.

Mr. Loers also answered a few questions about the startup founder. Mr. Froh, founder of Wunder, founded the startup mainly because he wanted to be independent and to be his own boss. Mr. Froh studied at the WHU (Otto Beisheim School of Management) in Vallendar. After training, he worked at McKinsey for two years. Then he founded a startup, which was purchased by Airbnb. This led Mr. Froh to lead the German export for Airbnb, a position in which he remained for three years. Mr. Froh is regarded as very motivated. This is reflected above all in his coping with high workload. Further characteristics, which describe the founder, are strong negotiation skills and risk acceptance.

The factors that Mr. Loers describes as critical to the success of the startup are a viable financing and a steadfast team. Moreover, the product must have a strong product-market-fit. When asked about the biggest problems of the startup so far, Mr. Loers answered that one learns all the time from mistakes. In retrospect, one always thinks, certain things could have been made differently. Reflecting, he thinks there should be more tax benefits for founders though. Moreover, regarding the founding location Hamburg, Mr. Loers feels that there should be a startup hub.

Regarding the company culture, Mr. Loers lays his focus on factors such as enthusiasm and motivation for the product. Likewise, sometimes it is necessary to be ready to work overtime. The expectations for the team are connected with fast work, whereby the quality also has to be in the foreground. It is also important that ownership exists. Every person is important in the startup. Ideal candidates for Wunder are characterized by their willingness to work hard. Advantageous for a candidate would also be startup background, in order to show that one has experience with dealing with unforeseeable problems quickly and that one is able to find a solution independently. There is no specific reason why the startup was founded in Hamburg. This is by chance, as the city was the founder's home.

According to Mr. Loers, the next steps for the startup include making money. Wunder is also planning to expand their operations into other cities and to establish itself as market leader for the product worldwide in all megacities. The vision is that Wunder will be able to allow much more shared cars and that people will no longer drive to and from work alone in their cars. Wunder, hence, wants to reduce cars on the roads, thus also reducing CO<sub>2</sub> emissions and relieving cities. In summary, the mobility startup would like to allow more people a favorable ecological way to work by car via app every day. However, Mr. Loers sees regulations and safety & security as obstacles in the coming years. Technology can also be a threat, considering if no apps are to be used in the future anymore. A further obstacle could be the fact that no more revenue is generated. Wunder wants to overcome these obstacles especially through its fast and direct decisions. Rapid reactions and responses give Wunder an advantage as opposed to big rigid companies that first need to set up meetings to come to a solution.<sup>178</sup>

### **5.2.2.2. Match Rider**

My interview partner from Match Rider was Mr. Anders, the co-founder of the startup. The idea for the startup Match Rider comes from the fact that the four founding members are

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<sup>178</sup> Loers, 2017

all passionate cyclists. During exercising this activity, they felt disturbed by car traffic, especially of individual transport. Accordingly, the founders wanted to do something about it, in order to dissolve the problem of increased individual traffic and hence to have less people driving with their own cars. Consequently the background idea of the startup is the reduction of traffic. Match Rider offers several products. For the latest and most widely distributed product, Match Rider Go, the ideal customer is anyone with mobility needs. Mr. Anders described the startup as successful, as it receives positive feedback from customers. Hence, from the customer's perspective, Mr. Anders considers the startup as certainly successful.

Mr. Anders comes from a family of entrepreneurs and therefore he already knew at 16 that he would like to become self-employed. During his economics studies, his thought became more concrete and Mr. Anders decided to progress in the mobility scene. As to his strengths, Mr. Anders says that he is a very analytical person. He adds that this also means that he could not have started the startup alone. He feels that his team is very important as every team member brings other strengths into the startup. For example, programmers are needed as well as employees who are familiar with marketing. Consequently, Mr. Anders thinks that this heterogeneity is very important.

Regarding the factors that are critical to the success of the startup, Mr. Anders says that you need to have staying power in the industry. It is essential to understand the market. Moreover, especially in the European sector, one must also know the legal framework. Answering the question of the biggest problems and errors that the startup experienced so far, seems difficult to Mr. Anders. Nonetheless, he believes that all the decisions that the startup has taken so far, have brought them to where they are now. There were many things that Match Rider had to learn. In part, these were also negative experiences, which in result, however, have made the startup stronger.

Mr. Anders' expectation regarding the corporate culture is that every employee is fully committed and does his very best. Furthermore, it is important to him that everyone is very open to each other. The startup strives to give each employee the greatest possible freedom in his work area. Influenced by a different startup, the so-called "worry circle" was

introduced. Every employee has a very clear concern. This is argued by the fact that no one can take care of everything. Therefore, each employee is solely responsible for his own work area.

For its next steps, Match Rider already holds a few products in the pipeline, which are also based on shared mobility. However, there is no specific plan yet. Mr. Anders' comment on the future of personal mobility is that currently the market is extremely dynamic. However, he is convinced, that the startup is already increasing and will continue to increase the awareness of shared mobility. Mr. Anders is aware of the fact, that the startup cannot do this all by itself. This also includes other shared mobility providers, especially in order to also influence rural mobility.

As a possible obstacle for the next few years, Mr. Anders states financial bottlenecks. He thinks this is a challenge for every startup. Concerning the distinction from the competition, Mr. Anders indicates that Match Rider's business model is a bit different than any other ride sharing concepts. Rather than offering free-floating ride sharing, the startup offers reliable distance-based journeys. Consequently, the business model represents the decisive difference to the competition.<sup>179</sup>

### **5.2.2.3. Wegfinder**

My interview partner from Wegfinder was Mr. Fischer, the CEO of the startup. Wegfinder focuses on the subject of intermodality. This means Wegfinder was founded to have an Austrian platform that makes travel planning intermodal. Classic public offerings such as train, bus, etc. are combined with individual offers such as car sharing, scooter sharing, ride sharing, etc. In this respect, the goal is to offer the customer information. The further goal is to also sell tickets, or to convey tickets to customers. In principle, Wegfinder does not address specific customer groups, but is rather open to everyone. However, Mr. Fischer says that in general a younger target group is addressed. This includes the age

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<sup>179</sup> Anders, 2017

group of 15-40 years and thus forms the main core. This is mainly because a new generation is the majority. It is not compelling anymore to own a car or to even acquire the driver's license. In this respect, it is certainly an urban younger target group, which primarily uses Wegfinder's service. Urban, because the intermodal mobility is the most pronounced in Vienna and less on the countryside. In principle, however, as already mentioned, Wegfinder would like to appeal to all of Austria. For example, the startup would also like to approach train users and offer them possible last-mile options. A further target group are smart changers, who are otherwise often traveling by car and public transport and need different solutions ad hoc sometimes. Especially for those, it is exciting to see what all the other possibilities are and to compare them.

Mr. Fischer describes the startup as definitely successful. There are several ways to evaluate this. One are the internally set objectives of the owners, which are achieved. The external factors can be displayed by the generated downloads. Wegfinder's predecessor Nextstop had already cumulated 100,000 downloads, even before the switch to Wegfinder. In this respect customer feedback is also very important, thus much emphasis is placed on good evaluations in the app stores.

The founders of Wegfinder are ÖBB, the Austrian Federal Railway company, and Speedinvest. Mr. Fischer is the company's managing director. The main initiator was the ÖBB, which has recognized that in a very large company, the structures are not always optimal for implementing innovative things. This was a very wise decision according to Mr. Fischer and also a reason for his entry. He thinks, that one has to give things, that you believe in and want to try, rather free space and create a world in which one can act very startup-like. Thus, the first step was to outsource the planning of the startup. The second step was to recognize to not have a deep-rooted mind. It is essential to think like a startup. Hence, this is partially also what motivated Mr. Fischer to join the startup. He has been working for corporates already 20 years and felt like it was enough. Mr. Fischer mentioned that lot of overhead within corporates was an obstacle for him to be productive like in a startup.



Mr. Fischer's educational background is technical with regard to IT and telecommunication. Nevertheless, he has never really been in technical departments, but has always been working in business areas within telcos. He has therefore always been very active in the field of digital and mobile products. This motivated him to enter the startup, especially since at the moment mobility is traded as a megatrend. Mr. Fischer is interested in how this trend develops, particularly regarding individualization and urbanization and of course also digitalization. Mr. Fischer believes that mobility and specifically intermodal mobility is an extreme future issue, with a lot happening already nowadays and the possibility to actively shape the field. He also thinks that currently there are still too few solutions.

On the characteristics that best describe him, Mr. Fischer says that flexibility is the most important one. Moreover, the balancing act between cooperation in the team and the transfer of one's own expertise is important. According to Mr. Fisher, it is also essential to have a very strong customer and product orientation. It is essential that the startup employees work for the product and not for a social status within the company. Regarding success, Mr. Fischer states that the startup is successful when it is accepted and used by the customers. Customer use is therefore a very important factor. Mr. Fischer also wishes that tickets are sold via Wegfinder. The download number, how active the customers are, the customer feedback, etc., as already mentioned, also represent important indicators for Mr. Fischer for calling the startup successful. The main challenge that Wegfinder still has at the moment, though, is that there are too few good resources. For example, there are not enough developers in Austria. Furthermore, it is also a challenge to reject the corporate thinking and to be willing to take a risk and not to hedge decisions several times like corporates would do.

Regarding the company culture, Mr. Fischer calls open communication and flat structures as very important. It also belongs to the startup that everyone within the company, independent of function, notices and reads customer reviews. Moreover, it is important that every startup employee identifies with the subject, the product and thus with the company. One must sometimes also be willing to work overtime during peaks. The way of communicating is very personal at Wegfinder. This also has the advantage of speed. The team

consists of 14 people and the expectation to the team primarily lies in the introduction of innovations and thus the active participation.

The startup location Vienna has been selected relatively arbitrary. Mr. Fischer says that it is actually not so important where the office is. Because the business model is based on digital action and tickets are sold through the app, no office is needed for customers or partners. Vienna was chosen because both owners of the startup are located there. Furthermore, the proximity to many mobility partners is easier.

Regarding the next steps for Wegfinder, Mr. Fischer assumes that a consolidation of the offers will take place in the market. He thinks that there will also be a clear Austrian player for the mobility B2C topic, and that this will be Wegfinder. However, the challenge is how to speed up this idea and to introduce also the slightly older audience faster to the subject. Another challenge is the acceptance and regionalization, because there are just so many small players. Currently, many transport associations are still thinking a bit too little outside the box, and are rather just paying attention to themselves. Mr. Fischer believes that what is still missing is the political goal that mobility is something country spanning. There must be a linkage and joint marketing of the mobility services. However, Mr. Fischer sees the challenge in the federalism in Austria, because state and city interests are very often attached to politics. In regards to dealing with competition, Mr. Fischer quoted some possibilities. Cooperation is one, consolidation is the other. Wegfinder's current chosen approach, though, is that the customer decides. This is the only way to build a product for the customer, according to Mr. Fischer.<sup>180</sup>

#### **5.2.2.4. Taxi.de**

My interview partner from Taxi.de was Mr. Brandenstein, the founder of the startup. Taxi.de provides technical possibilities to its customers so that they can improve their business by using the service of the startup. The background idea lies in the elimination of inefficiencies and the raise of the companies using the startup's service to a contemporary

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<sup>180</sup> Fischer, 2017

level. The motivation of the startup is therefore to give its customers the highest degree of freedom in every way. The customer has the advantage of slimmer structures through the technical possibilities provided by Taxi.de. This also leads to cost savings and the possibility to bind customers. Mr. Brandenstein states that the optimal customers of Taxi.de have a fleet of 300 to 1000 vehicles.

Regarding the question of how to assess the success of the startup, Mr. Brandenstein indicates that success is relative to what it is measured. On the one hand, he sees the startup as successful, considering the fact that it makes money and has not gone bankrupt. On the other hand, compared to other startup success stories, such as the one of Facebook, he sees his startup as unsuccessful. Consequently, Mr. Brandenstein thinks that one is never satisfied, no matter how much success one has.

Mr. Brandenstein has long dreamed of becoming self-employed and founding something of his own. It took a little longer and he actually had to become 37 years old until he dared to try. He thinks that his age is old for establishing a startup, considering that if he had started with his model already at 20, he would have had set up for life. Mr. Brandenstein studied business economics and was a dependent employee before establishing his startup. He chose his independence through an elimination process because he no longer wanted to be a dependent employee.

As for the characteristics, which describe him best and he excels in as a founder, he lists creativity and perseverance. Mr. Brandenstein thinks these are the features that make the difference. He also mentions loyalty to the idea as an important factor. Moreover, he calls the mentioned characteristics as critical for startup success. Mr. Brandenstein indicates that one has to stick to a thing so that it come becomes something.

Among the past problems in establishing Taxi.de he remarks that Taxi.de made the mistake of not testing its software solution beforehand. Instead the service was brought out big already at the beginning. Nonetheless, Mr. Brandenstein thinks that the way how to clear out mistakes is crucial for success. He states that one has to get up one more time after each failure to succeed.

The central core value of the startup is cohesion. The general expectation of the team is that everyone is involved in the matter and has perseverance. Taxi.de consists of Sales & Marketing and Technology. Accordingly, there are specific expectations to the different teams. In the field of technology, it is self-explanatory that one must be tech-savvy. In Sales & Marketing, on the other hand, you have to be able to explain the product and must be customer-oriented. For the latter division, Mr. Brandenstein says that it does not matter what one has studied and whether he has studied. In this case the person itself plays an important role and not its educational background. On the other hand, the educational background does play an important role in the field of technology.

The decision to establish the startup in Hamburg is based on the fact that the city was and is Mr. Brandenstein's center of life. He says that Hamburg is not a founding town. This is among other things due to the high amount of documentation and accounting obligations. It consequently leads to a big burden at the beginning and therefore Mr. Brandenstein thinks that there is definitely much to improve in this area.

The next steps of the startup include the growth as a B2B provider. Taxi.de wants to strengthen its market presence and also wants to grow in other markets. Mr. Brandenstein sees the future of personal mobility in the three pillars of sharing, the community, i.e. the merging of trips and ordering at the push of a button. Possible obstacles are seen with optimism by Mr. Brandenstein because the startup ties in with the trends of mobility. He sees the strength of the startup in its ability to connect companies directly to end users. In terms of competition, Mr. Brandenstein expressed that the offered software gives the customers an internal added value. Hence, Taxi.de customers can earn money with their own customers, manage their fleets optimally, control them, plan and settle them. Current models, such as Uber, for example, do not consider the swarm but just provide the next best vehicle. This is different at Taxi.de and Mr. Brandenstein considers this difference as a competitive advantage.<sup>181</sup>

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<sup>181</sup> Brandenstein, 2017

**5.2.2.5. SCO2T**

My interview partner from SCO2T was Mr. Bárány, the co-founder of the startup. The idea for SCO2T basically arose from the founder's thoughts on the topic of traffic jams, as well as complex parking in large cities. From experience, the founders knew that moving with the scooter is much faster. Moreover, the fact of car sharing being already largely established, was obvious to the founders. However, car sharing only solves the problem of having fixed costs when owning a car. The parking issues and traffic jam topics, etc., on the other hand, are not yet picked up by car sharing. For this reason, and especially because of the fact, that one can move around faster with the scooter, the startup was founded. The ideal customer of SCO2T, consequently, is someone who drives a lot.

Mr. Bárány considers the startup as a successful, as it is focuses on the customer benefit and responds to customer requirements, as far as possible. For example, there are considerations for an area expansion. However, SCO2T would like to grow organically and would not like to promise too much and try too much at once. The startup would rather like to increase its service with new scooters step by step in accordance with the increase in the usage and user numbers.

Mr. Bárány has been an independent consultant for almost four years. By being a data scientist, with experience as an IT data analytics consultant, the other two co-founders became aware of him and approached him. At that time, the two other co-founders were still employed dependently, but it was clear to them that they wanted to become self-employed. Consequently, the three of them founded SCO2T. Mr. Bárány, though, is still working also on his own projects, which are completely independent of SCO2T. He studied a combination of economics, statistics and media. Mr. Bárány then worked in various IT functions, such as in software development and administration. In recent years, he has developed into the areas of analytics, business intelligence, and data mining. Therefore, he has a lot of experience with system administration, system architecture and some programming. That is also why he was approached by the other two founders, so that at least one of the founders actually has an IT background.

Mr Bárány does not consider himself of being in a management position at SCO2T, even though he is one of the co-founders and also makes independent decisions in his field. In general, he says, one has to be sure of what he does as an entrepreneur. One has to take risks and expect that something will not work. There are always factors that cannot be influenced, but which decide whether something works or not. Mr Bárány said that even SCO2T could have experienced technical difficulties that are insurmountable, or that the market does not accept the product as desired.

The factors that Mr. Bárány considers as critical to the success of a startup, include the acceptance by the customer and the way of handling processes. If something unexpected happens, one has to figure out whether it is something unique, or something that is repeating itself. If the problem occurs repeatedly, it is important to develop a standard process, ideally with IT support. Otherwise, time is wasted for repeated activities.

Mr. Bárány feels that the startup process in Austria is a pleasant one, as it is well supported. The biggest problem, that SCO2T experienced so far, was the topic of parking in Vienna and, consequently, the towing of scooters. If a scooter is parked incorrectly by the customer, then it gets towed away. The collection of the scooter afterwards is very costly and time intensive. Passing these costs to the customer, in many cases resulted in losing this customer. After the initial underestimate of this parking topic, it is halfway under control at the moment. The app now shows where scooters can be legally parked and thus the number of scooter tows has significantly decreased.

Regarding the corporate culture, Mr Bárány states that all three founders have huge autonomy working on their three different fields. This means that Mr. Bárány's decisions regarding IT are mainly accepted. In general, decisions are made by consensus most times. Moreover, Mr Bárány thinks that open communication is important. If something goes wrong, if someone needs help, or if one can see problems, it is important to find solutions together.

The location in Vienna was decided on, as all the founders live there. They have also recognized that the startup requires great personal commitment. In addition, there is a

certain critical mass in Vienna. Even if this location is a little difficult, because the city provides very good public transport and car sharing offers, the founders wanted to try it in this city. Their idea was, that if they can make it in Vienna, they would be able to make it in other cities as well.

The main goal of the startup for the coming years is primarily growth. SCO2T believes that in Vienna they do not offer as many vehicles as the market would accept. The challenge in the near future, however, is the danger of competition. Therefore, the startup currently needs to assert itself in Vienna, and hence an expansion into another city is not the first priority.

Regarding the future of personal mobility Mr Bárány thinks that vehicle sharing is an intermediate stage. In ten years, car sharing will probably decline a bit as autonomous vehicles will evolve. It makes a difference if one only has to make a click in the app and a vehicle passes to bring you to your exact destination. This saves time for looking for a legal parkin spot, which many times is not as close to the actual destination. Nevertheless, Mr Bárány says there will always be people who want to drive themselves. Equally, he thinks there will also always be people who want to ride a two-wheeler. That is why SCO2T will probably last for a long time, according to Mr. Bárány.

As an obstacle for the next few years, he mentions possible social processes that could make sharing unpopular again. SCO2T lives from its intensive users. If compared to the regular use, owning a scooter becomes more cost-effective, the startup loses a user from one day to the other. Generally, if it gets more favorable again to keep vehicles in Austria, through cheaper fuel, insurance, etc., many people might reconsider the equation of possession versus sharing. Moreover, not responding timely to vehicle trends, can be considered as a threat to the startup. Therefore, SCO2T must remain up-to-date to provide a better deal, compared to owning a vehicle of one's own. Regarding the competition, Mr. Bárány thinks that it could stimulate the business to a certain extent. Many people still do

not know that there is the category of scooter sharing. If they knew, they could use SCO2T exclusively, or equally, with the competition.<sup>182</sup>

#### **5.2.2.6. Parkbob**

My interview partner from Parkbob was Mr. Adelsberger, the founder of the startup. Mr. Adelsberger's personal experience with the struggle of street parking led him to the decision to establish Parkbob. He got annoyed so often that he came to the consideration that this issue needs to be improved urgently. He found it unacceptable that in the presence of today's different technologies, it was not possible to save time, money and nerves while trying to find a parking spot. The main promise of the startup, therefore, is to enable the ultimate street parking experience. This means that Parkbob wants to significantly improve the people's experience in parking situations, with the impact of drivers saving money, time and nerves. The startup's customers are automotive manufacturers, mobility providers and navigation service providers. The users of the service, on the other hand, are the drivers who are attached to the service.

Mr. Adelsberger considers Parkbob as very successful. The startup has been around for a little more than two years now and the team has grown steadily. Currently, 16 employees are working at Parkbob. However, a key factor for success is that the startup has caught a good timing for its topic. Some years ago, it was much more difficult to dock on this topic. This is because, on the one hand, the penetration of mobile services was not yet that widespread, and on the other hand, the willingness of large companies, which are Parkbob's customers, to work with startups was not that common. Timing is therefore an essential factor that led to Parkbob's success. The second factor is that the startup started relatively early to work with the right companies in this area. Parkbob entered into strategic partnerships early on. What is perhaps another factor involved in the startup's success, is its focus in general, not only on content, but also on the business model, as Parkbob defines itself as a B2B company.

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<sup>182</sup> Bárány, 2017



Mr. Adelsberger had the idea of founding a company somehow always in mind, since he also comes from a founding family. However, it was not a clear decision, but he rather stumbled into it by discussing the topic. The subject of mobility is pure coincidence. Mr. Adelsberger studied business administration and law and did not have any reference to mobility in his occupations afterwards. It could have been any other area, but it is rather the area of digitization that drives the startup. Regardless, Mr. Adelsberger considers the mobility area as very exciting because it is very much in transition. This also results in its comprehensive possibilities.

The distinguishing characteristics of Mr. Adelsberger as a founder include determination, perseverance, and a bit of madness in the sense of being a risk taker. Moreover, he states that being curious and interested in new things are other features. According to Mr. Adelsberger, many factors play a role for the success of the startup. The founder himself is a key factor, but the success of the startup is also decisively generated by the team. If one does not have a strong team, one will not get far. Furthermore, of course the investors, the ones who allow you to work with their capital, to build a team and to make something out of it, are essential to the success. Talking about the biggest problem of the startup so far, Mr. Adelsberger mentions a jump-off of a potential co-founder. As a consequence, Parkbob did not receive an almost promised funding.

With regard to the corporate culture, the founder mentioned that an internal company culture evaluation had already taken place. The resulting startup values are atmosphere and team spirit, integrity and honesty, respect and equality, appreciation, believe in product and passion. This is quite in line with the expectations of the founder. Regarding the startup location in Vienna, Mr. Adelsberger states that there were no specific considerations taken. The decision was rather made because of Vienna being the founder's center of life.

The next steps for Parkbob include internationalization. The vision is to become a global player and make life easier for millions of people every day. The startup has rapidly gained ground in the European markets in the last six months and currently covers 25 cities in Europe. From autumn onwards, the startup will be heading for North America. In addition,

Parkbob aims to turn its current partners into customers so that they can offer their customers the startup's service.

Mr. Adelsberger seems to be very clear about the fact that the future of personal mobility will change. The problem right now is that bad decisions are made when parking, because people do not have reliable information. If good information is provided, better decisions could be made and one could find a free parking space without driving around meaninglessly. In this specific context, Parkbob is convinced that it will affect the future personal mobility. However, there are many challenges, according to Mr. Adelsberger. A major obstacle could be that the startup runs out of cash and that no follow-up financing can be generated. In addition, Parkbob is battling with very large players. This is a big challenge, because the startup can become legally vulnerable. Patents or trademark rights, which others have, could lead to legal disputes. Furthermore, building and scaling the team is a huge challenge. Going from a team of 12 to 15 people to a team of 25 is a giant step. It also represents a hurdle when one has to evolve from a hitherto very chaotic towards a structured organization.

To differentiate from the competition, Mr. Adelsberger calls the fact that Parkbob is not focused on general parking, but only on public street parking, as essential. In addition, the startup emphasizes extremely on high quality and not like many other players on a large geographic coverage with inferior quality. Parkbob is about helping people make better decisions, and this is why it is critical for users to have good quality information. Furthermore, Parkbob is very technology driven. This means that the startup tries to handle activities technologically efficient and to automate tasks. This is supposed to help covering different continents and to become a global player.<sup>183</sup>

### 5.3. Study analysis

This section includes three comparisons in order to analyze the results of the conducted study. First of all, the answers of the interviewed mobility startups are compared, in order

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<sup>183</sup> Adelsberger, 2017

to see if there are any specific success factors within the five different mobility startup market fields. Secondly, these results are compared with the literature findings. This is to analyze whether the success factors, identified through the empirical study, can be generalized and match or differ from the general startup success factors generated by the literature review. Finally, all gathered results are compared to the expert opinions to explore the possible future of mobility and consequently the future importance and success of mobility startups.

### **5.3.1. Comparison among mobility startups study results**

This comparison evaluates the answers of the six interviewed mobility startups. The aim is to identify possible overlaps in the startups' answers and consequently to investigate specific success factors of mobility startups, that either hold for all or just for a respective mobility startup market field.

The interviews show that there are many correlations between the answers of the six interviewed startups. This holds especially for the fact that each mobility startup respective to their mobility startup market field, is seen as successful. The main reasons as to why the startups are considered as successful, are that they fulfill existing demand for their products. Moreover, all startups have a clear mission and vision for their idea. This includes the definition of a more or less specific customer group. The different founders were mainly motivated to establish the startup because of the will to be independent or to work in a more flexible environment without lots of overhead.

All the startup founders have studied and have either startup experience or industry experience. Their characteristics include being flexible, motivated and to be willing to cope with high workloads. Moreover, all the founders consider customer and product orientation as essential for success. It is also important for the startups to have a strong product-market-fit, a viable financing and a well-working team.

Regarding the company culture, the focus of the startups lays on enthusiasm and motivation for the product. This also includes open communication and flat structures. The expectations to the team mainly comprise the identification with the product and the startup itself, the introduction of innovations, active participation and fast working. In all cases, the startup locations were selected relatively arbitrary, not considering the fact that all startups are located in cities that provide a certain critical mass.

Concerning the startups' next steps, making money, expanding operations to other cities and the establishment as market leader are common goals among the different startups. The mentioned challenges are mainly seen in regulations, safety & security, financing, human resources and customer acceptance. Moreover, not responding to changing trends, is seen as a possible threat. In order to overcome these obstacles and to deal with competition, the interviewed startups agree that they have the advantage of being able to act fast and customer oriented and to make direct decisions. Primarily, however, they consider their business model within its respective market field as the main competitive advantage.

Summarizing it is obvious to see, that regardless of which mobility startup market field the interviewed startups are operating in, the interview results show many overlaps. Hence, there are no mobility market field specific success factors, other than the business model of the different startups itself. For sure, different types of demands are being fulfilled by the different startups. However, the way of operating, which also includes the company culture, seems pretty similar between the different interviewed startups. Moreover, although, each person is different, the characteristics of the startups' founders mainly overlap, which also shows, that no specific mobility market field success factors can be derived from this. Moreover, all startups are exposed to similar challenges, and the way they plan to handle these, again correlates between the startups.

The analysis of mobility startup specific success factors is conducted in the following section.

### 5.3.2. Comparison of startups results with literature review

This part contains the comparison of the results gained from the above section with the literature findings. This is to analyze whether the success factors, identified through the empirical study, can be generalized and match with or differ from the startup success factors generated by the literature review.

The specific success factors of mobility startups identified in chapter 5.3.1 can be summarized as the following:

- *Idea*

All the interviewed startups are operating in market fields, where the demand is existent and fairly high. A clear definition of who the main customers for the product are, also plays an important role for the success.

- *Founder*

The founders of the startups participating in this study were mainly motivated to establish the startup because of their will to be independent or to work in a more flexible environment. Their characteristics include being flexible, motivated and willing to cope with high workloads. They consider customer and product orientation, a strong product-market-fit, a viable financing and a well-working team as essential for success.

- *Education and work experience*

All the startup founders have studied and have either startup or industry experience. Some of them also come from founding families. Before becoming independent, the majority was dependently employed.

- *Team*

The company culture primarily focuses on enthusiasm and motivation for the product. This also includes open communication and flat structures. The expectations to the team mainly comprise the identification with the product and startup, the introduction of innovations, active participation and a fast working pace.

- *Growth*

The next steps for the interviewed startups include making money, expanding operations to other cities and the establishment as market leaders.

- *Crisis response*

The main challenges that the interviewed mobility startups are facing or will face lay in regulations, safety & security, financing, human resources, trends and customer acceptance. In order to overcome these obstacles and to deal with competition, the interviewed startups agree that they have the advantage of being able to act fast and customer oriented and to make direct decisions. Moreover, they consider their business model itself as different compared to other existing competitors and hence see it as a competitive advantage.

A factor that is not specifically relevant for mobility startup success, as identified via the survey, is the startup location. The locations were selected relatively arbitrary in the case of all interviewed startups. This is mainly due to the fact, that the startups were established at the residence of their founders. What needs to be mentioned though, is that all the respective locations also show a certain critical mass, which is also can be considered as an important success factor.

The common factors for startup success, as identified through the literature review, mainly correlate with the success factors specifically identified for mobility startups. Especially when it comes to the founder's characteristics, the study results and the literature findings overlap. The founders/leaders are all skilled and experienced. Moreover, they show high flexibility, endurance and determination. Furthermore, they prove their willingness to take risk. Another success factor all interviewed mobility startups state, is the importance of the team. This factor was also retrieved through the literature review. For the interviewed startups, it is especially important that all team members bring in their expertise. The startup location appears to be not so important as a success factor in the empirical study likewise as in the literature findings.

A further success factor indicated through literature review, as well as through empirical study, is the financing. The startups agree that a viable financing is important for the success. Moreover, the growth plan is a general as well as a mobility startup specific success factor. It is important to know where the startup is going to and how it will achieve that plan. Furthermore, the crisis response is a success factor, generated by both, empirical study and literature review. All interviewed startups could identify their current and future challenges and possible solutions on how to overcome these. Implicit success factors like gender and age of the founder, as identified through the literature review, play a minor role in the study. This is due to the fact that no special attention was giving to the founder's gender and age, when selecting the mobility startups for this work. Nevertheless, all the participating mobility startups have a male founder or CEO with an age of above 30 years.

Summarizing, it can be said that there are many overlaps between mobility startup specific and general startup success factors. An exception, however, might be the idea of mobility startups, that stands out. This is because mobility startups can meet the existing demand for mobility solutions, caused by the current challenges in mobility. Other than that, the study shows that no specific deviations from the general success factors, retrieved through literature review, regarding the founder, education and work experience, the team, growth, crisis response and the startup location exist.

### **5.3.3. Future prospects of mobility startups according to expert interviews**

This part compares all gathered results from the previous two sections to the expert opinions to explore the possible future of mobility and consequently the future importance and success of mobility startups.

Both interviewed mobility market experts, Ms. Stuttner and Mr. Schwammenhöfer, consider the shift of passenger transport towards decarbonization as a major challenge in mobility nowadays. Hence, both think that innovations in mobility are essential. Therefore, mobility startups are important, as they provide innovative mobility solutions and supplement the existing concepts. This is to counter mobility challenges and to consequently act

successfully. Moreover, these startups are very customer oriented and hence set standards that do not exist at conventional transport providers. Thus, this represents a factor why mobility startups are important and successful.

However, mobility startups face difficulties regarding lower financial resources and difficulties in the area of change of location services, as the largest entry barriers to the market exist here. Although mobility startups can enforce changes faster than public transport, the latter has the advantage of mass performance capability and a very powerful employee representation, which shows persistence. Therefore, mobility startups are not considered as competition to public institutions but rather as a complement to existing companies, especially for bridging the "last mile". Both interviewed experts agree that there is a good basis for increased cooperation between mobility startups and public transport.

Regarding the future of mobility, high consumption of urban traffic and high levels of air pollution will still be faced. The problem especially in Austria, however, is the comparatively favorable access to every mobility offer of public transport. This means that there is relatively little space for third parties. Moreover, in rural areas, where long distances must be put back, in order to get to any kind of sharing offers, public transport is the main player. Hence the future of mobility startups lies in partnerships between classic business models and new startup solutions, according to the interviewed mobility market experts. This would enable learning effects, which lead to new findings in the mobility sector. Thus, the government should promote sustainable project ideas. What is more, mobility startups might be also bought up, as large companies will not be part of the innovation, but will rather buy away the innovations from the market.

Conclusively, it can be said that mobility startups are indeed important and successful. They have the ability to act more flexible and faster than public institutions and can respond to mobility challenges with innovative ideas. However, several listed obstacles make it hard for the startups to compete with settled public transport institutions. Especially the demand for the startup area mobility in Austria is limited, as the market entry and penetration is very difficult. According to the results of the expert interviews, this will continue also in the future.



## 6. Final conclusion

This paper aimed to analyze the importance of mobility startups, i.e. their role in response to increasing and changing mobility demand. The conducted literature analysis consequently reveals that mobility startups are predominantly regarded as being valuable. Mobility nowadays is facing a number of important challenges. Growth, climate protection, noise, urbanization, demographic change, value changes, individualization, "Share Economy" and budget & financing were identified as the main challenges in this paper. Resulting from these challenges, many trends that influence mobility have been presented, including digitalization, automatization, interconnection, new mobility-based services, emission-free engines, urbanization and growing traffic volumes.

Driven by these trends and in order to counter them, many startups have come onto the scene. This research has identified and described different mobility market fields in which mobility startups can operate. The different categories include mobility services like car sharing, ride sharing, e-hailing, intermodal mobility and parking services, e-mobility comprising electric vehicles and connected cars encompassing autonomous driving. Subsequently, mobility startups from German speaking countries have been presented as representatives for the mobility market fields within mobility services. Primarily their operations have been described. What is more, the paper depicts that Big Data has a considerable impact within mobility startups. Big Data can serve as a development of new business models as integrating Big Data can help mobility startups to create a massively networked mobility field. However, as indicated in the restrictive regulations part, a critical concern is the question of data protection. The aspects of security and data protection are a serious obstacle to the extensive use of high-quality data. Along with this, other obstacles like the definition and harmonization of regulations at an international level and different laws are encompassed as well within the regulative restrictions part.

The underlying paper, furthermore, addressed general success factors for startups through a literature review and identified the idea, leader, team, capital, plan, execution, timing, crisis response, marketing and growth as critical contributors to success. The re-

sults of the empirical part, consisting of interviews with mobility startups and mobility market experts, largely correlate to these general startup success factors. Hence, no specific mobility startup success factors regarding the founders' characteristics, their education and work experience, the team, growth, crisis response and the startup location were identified. Moreover, regardless of which mobility startup market field the interviewed startups are operating in, the interview results show many overlaps. Therefore, also no mobility market field specific success factors exist.

However, the startups' business models stand out as they operate in market fields, where demand is existent and they can consequently provide mobility solutions in response to the current mobility challenges. Conclusively, mobility startups are indeed important and successful. They have the ability to act more flexible and faster than public institutions and can respond to mobility challenges with innovative ideas. However, competing with settled public transport institutions is a challenge and hence the future of mobility startups lies in partnerships between classic business models and new startup solutions. Mobility startups are considered as a complement to existing companies, especially for bridging the "last mile". There is a good basis for increased cooperation between mobility startups and public transport, which could enable learning effects that lead to new findings in the mobility sector.

### 6.1. Limitations

First of all, this paper focuses on the German speaking area, specifically Austria and Germany. Hence, results like the identified success factors may not be applicable in other areas. Secondly, the literature and empirical analysis mainly cover the urban space. Peripheral spaces are not explored enough in this paper to consider the gained results as valid also for these spaces. Moreover, this master's thesis does not include an analysis for all identified mobility startup markets. This work only includes startups offering physical as well as digital mobility services, i.e. car sharing, ride sharing, e-hailing, intermodal mobility and parking services. Another limitation of this paper is the fact that unfortunately it was not possible to conduct interviews with two mobility startups for each included mobility startup market field. Therefore, the answers could not be crosschecked for each market

field internally. Finally, as the interviews were conducted in German and then translated into English, the process could have triggered some loss of meaning.

### **6.2. Future research**

Considering the limitations stated above, it is obvious which areas need to be studied more. This includes analyzing not only the German speaking market, but also conducting analyses for other areas and comparing these. Moreover, interviews with more than one startup as representative for each mobility startup market field could be conducted, in order to improve the results' validity. In this regard, also other mobility startup market fields like electric vehicles, connected cars and autonomous driving could be taken into account. Finally, there should be more importance given to the analysis of mobility startup success in peripheral areas.

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## 8. Appendix

### 8.1. Mobility market experts interviews

**VCÖ: Dolores Stuttner (Assistant for Transport Policy)**

#### 1. Welche aktuellen Herausforderungen in der Personenmobilität sind Ihnen bekannt?

Die Herausforderung besteht derzeit darin, den Personenverkehr in Richtung Dekarbonisierung zu verlagern. Zudem ist zur Förderung des Klimaschutzes eine stärkere Einbeziehung des Themas E-Mobilität erforderlich. Eine weitere Herausforderung besteht darin, die Attraktivität des Öffentlichen Verkehrs zu steigern, wobei das öffentliche Verkehrsnetz vor allem in den Regionen auszubauen ist. Genauere Informationen zu diesen Themen finden Sie im VCÖ-Factsheet „Personenmobilität auf Klimakurs bringen“, das Sie hier kostenlos herunterladen können: <https://www.vcoe.at/news/details/vcoe-factsheet-2017-03-personenmobilitaet-auf-klimakurs-bringen>

#### 2. Wie wichtig schätzen Sie Innovation in der Personenmobilität heutzutage ein? Warum?

Sehr wichtig, da es neue Entwicklungen braucht, um die Luft- und Umweltverschmutzung sowie den erhöhten Flächenverbrauch, welche der Verkehrssektor verursacht, einzudämmen.

#### 3. Welche Faktoren führen Ihrer Meinung nach zur vermehrten Gründung von Mobility Startups?

Erhöhter Bedarf an alternativen Mobilitätsformen sowie Fahrzeugen, die durch erneuerbare Energien betrieben werden. Bedarf an Überbrückungsmöglichkeiten der „letzten Meile“. Informationen dazu finden Sie im kostenlosen VCÖ-Factsheet „Regionale Zentren brauchen mehr nachhaltige Mobilität“: <https://www.vcoe.at/news/details/vcoe-factsheet-2016-06-regionale-zentren-brauchen-mehr-nachhaltige-mobilitaet>

#### 4. Als wie wichtig erachten Sie die Gründung von neuen Mobility Startups? Wie wichtig sind Mobility Startups Ihrer Meinung nach? Warum?

Ich erachte die Gründung von Mobility Startups als wichtig, da diese eine Ergänzung zu bestehenden Mobilitäts- und Verkehrskonzepten liefern können.

### **5. Wie beeinflussen Mobility Startups die Personenmobilität von heute? Können Sie den aktuellen Herausforderungen entgegenwirken?**

Wenn Mobility Startups die Herausforderungen der Personenmobilität von heute meistern wollen, müssen Sie Ideen zur Lösung aktueller Probleme im Verkehrsbereich finden.

### **6. Denken Sie, dass Mobility Startups den gegenwärtigen Herausforderungen in der Mobilität besser entgegenwirken können als der ÖPNV? Warum?**

Mobility Startups stellen eine wichtige Ergänzung zum Öffentlichen Verkehr dar. Die notwendige Reduktion des Energieeinsatzes im Verkehrssektor braucht neben Effizienzsteigerungen durch neue Technologien auch neue Mobilitätskonzepte, die zu einer Verringerung des Energieeinsatzes und des Verkehrsaufkommens führen. Hier können Mobility Startups gute Ansätze liefern.

### **7. Denken Sie, dass Mobility Startups erfolgreich sind? Welche Faktoren machen ein Mobility Startup erfolgreich?**

Das hängt vom Startup-Unternehmen ab. Generell sollte das Startup die Bereitschaft mitbringen, Lösungen für aktuelle Bedürfnisse/Probleme zu entwickeln und auf derzeitige Trends zu reagieren.

### **8. Welchen Hindernissen stehen Mobility Startups derzeit gegenüber und welchen werden sie in Zukunft gegenüberstehen? (z.B. Rechtliche/gesetzliche Hürden, etc) Warum?**

Geringere finanzielle Mittel als größere, bewährte Anbieter des Öffentlichen Verkehrs. Junge Mobility Startups müssen sich erst etablieren und einen Kundenstamm aufbauen.

### **9. Warum entstehen Innovationen im ÖPNV-Bereich verspätet, oder bleiben gar aus? Welche Gründe führen dazu? Betrachten Sie diese Einrichtungen als rigide und wenig innovativ?**

Veränderungen in größeren Betrieben sind schwieriger durchzusetzen, da hierfür oft langwierige Prozesse erforderlich sind. Es erfolgt oft eine Konzentration auf bewährte Prozesse/Vorgangsweisen.

### **10. Denken Sie das öffentliche Einrichtungen Mobility Startups als Konkurrenz sehen? Nehmen Mobility Startups Ihrer Meinung nach dem ÖPNV die Kunden weg? Oder ergänzen sie sich (Verbindung verschiedener Fortbewegungsoptionen)?**

Kommt darauf an – Mobility Startups können auch Ergänzung zu bestehenden Unternehmen darstellen (z.B. als Zubringer zur Bahn und Überbrückung der „letzten Meile“ – siehe Frage 3).



**11. Warum denken Sie, dass Mobility Startups eher eigenständig gegründet werden, als in Kooperation mit dem ÖPNV? Denken Sie, dass es in Zukunft zu mehr Kooperationen kommen wird?**

Ja, ich glaube, dass Mobility Startups eine gute Basis für vermehrte Kooperation im Mobilitätsbereich liefern. Allerdings können diese auch eigenständig tätig sein.

**12. Wie sehen Sie die Zukunft der Personenmobilität?**

Die Personenmobilität der Zukunft muss sich Problemen wie dem derzeit zu hohen Flächenverbrauch des Verkehrs in Städten sowie der hohen Luftverschmutzung stellen.

**13. Wie sehen Sie die Zukunft von Mobility Startups? Wie werden diese die Zukunft der Personenmobilität beeinflussen?**

Mobility Startups bergen das Potenzial, dass diese sowohl den Austausch als auch Partnerschaften zwischen klassischen Geschäftsmodellen und neuen Lösungen aus dem Startup-Bereich fördern.

**14. Mobility Startups führen zur zunehmenden Individualisierung von Transporten. Wie sehen Sie die Auswirkungen auf die Transportbranche?**

Durch Mobility Startups ergibt sich die Möglichkeit, dass Partnerschaften zwischen klassischen und jungen, innovativen Unternehmen entstehen (siehe letzte Frage). Daraus ergeben sich für beide Seiten Lerneffekte, die zu neuen Erkenntnissen im Mobilitätsbereich führen.

**15. Wie kann bzw. soll der Staat auf die Entwicklungen rund um die vermehrte Verbreitung von Mobility Startups reagieren? Ist eine staatliche Lenkung wünschenswert bzw. notwendig?**

Staatliche Lenkung kann durch die Förderung nachhaltiger Projektideen - <http://www.start-emobility.at/> - von Startups bzw. Partnerschaften zwischen größeren/länger bestehenden und jungen Unternehmen erfolgen.

**BMVIT: Mr. Franz Schwammenhöfer (Logistics Representative)**

**1. Welche aktuellen Herausforderungen in der Personenmobilität sind Ihnen bekannt?**

Man erwähnt immer einen und vergisst alle anderen. Wenn man hört Personenmobilität kommt immer nur urbaner Raum. Die peripheren/äußerlichen Räume bleiben komplett außen vor. Gestaltungstechnisch tun wir uns auch schwerer in den peripheren Räumen, weil man mit dem System ÖV Kostendeckungsgrade von 10% fahren. Da können wir uns den ÖV nicht mehr leisten. Auf der anderen Seite, sind die Erwartungshaltungen der Menschen auch andere. In den 60er Jahren waren es andere, als es jetzt sind. Schlägt sich nieder in den Bereichen Jobs, usw (pendeln). Das ist die Herausforderung der Personenmobilität im ländlichen Bereich. Kein Unterschied zwischen unter 35 Jährigen bei Männern und Frauen, was das Mobilitätsverhalten betrifft. Früher hatten Männer höheren Führerscheinanteil, jetzt kein Unterschied mehr.

Das Mobilitätsverhalten der letzten Jahre hat sich so um die 10 Jahre hinausgeschoben. Ein 75 Jähriger hat heute das Mobilitätsverhalten von einem 65 Jährigen, was die Autonutzung, Wege, Verkehrsleistung betrifft. Und das wird sich weiterverschieben.

Hauptproblem der Personenmobilität momentan Stichwort Paris. Da müssen wir in den nächsten Jahr 6,2 Millionen CO2 binden. Mit dem Güterverkehr haben wir das sowieso schon erreicht (so viel). Daher müssen wir mit dem Personenverkehr runter. Wir müssen in neue Technologien hinein, in die Elektromobilität.

Im städtischen Bereich gibt es die 2 großen Schulen. Die einen sagen ich will im städtischen Bereich überhaupt keinen IV (Individualverkehr) mehr, oder so möglichst wenig wie geht. Die anderen sagen das ganze werde ich nie verbieten können. Der IV im Stadtbereich wird immer stattfinden. Mir ist nur wichtig, dass er effizient und ressourcen-, klima- usw. schonend ist.

Wien ist erste Schule, findet Elektroverkehr genauso böse.

Findet in ganz Europe in ähnlicher Weise statt.

**2. Wie wichtig schätzen Sie Innovation in der Personenmobilität heutzutage ein? Warum?**

Innovationen sind wichtig. Aber ich muss den Innovationen Zeit geben. Zu erwarten, dass wir in 5 Jahren das nachholen, was wir in 100 Jahren versäumt haben, das ist nicht. Wenn nicht der Mobilfunkbereich 30 Jahre lang Batteriezellen schon hinter sich hätte, dann wäre Elektromobilitätsbereich bei weitem noch nicht so weit. Tesla war auch irgendwelche Handyzellen, in die der Mobilfunkbereich Zeit hineingesteckt hat.

### **3. Welche Faktoren führen Ihrer Meinung nach zur vermehrten Gründung von Mobility Startups?**

Wo kann ein Startup tätig werden. Im Mobilitätsbereich kann ein Startup tätig werden im Informationsbereich. Der kann Mobilitätsinformationen liefern. Da gibt es einige Apps.

Er kann tätig werden im Mobility Service, Anbieter und Nachfrager der unterschiedlichen Mobilitätsdienstleister zusammenbringt. Er kann als Service Provider tätig werden. Oder, da tun sie sich am schwersten, im Bereich der eigentlichen Ortsveränderungsdienstleistung. Warum am schwersten? Weil da die größten Eintrittsbarrieren in die Märkte sind. Das sind auch Barrieren die künstlich aufgebaut sind.

Startup ist kein Spinoff (Car2Go von Daimler = Spinoff) – extrem kapitalisiert, extrem professionell Für ein echtes Startup ist die Investitionsgebundenheit einer Ortsveränderungsdienstleistung eine Eintrittsbarriere. Er muss viel Geld aufstellen, um irgendwo Fahrzeuge zu bringen oder Menschen davon zu überzeugen Fahrzeuge zu teilen. UND die bestehenden Systeme haben sich den Markt wunderschön aufgeteilt. Das fängt bei irgendeinem Unternehmen an, dass Auto verkauft. Hört auf bei irgendeinem Unternehmen, das ÖV-Dienstleistungen anbietet. Die haben sich den Markt aufgeteilt und da gibt keiner was gerne vom Kuchen ab. Daher auch Angst vor Uber. Er unterläuft mich preislich und er macht etwas anders und ich versuche zu verhindern. Da tun sich Startups unglaublich schwer.

Im Bereich der Vernetzung (Sharing) tun sie sich leichter, weil sie auf bestehendes zugreifen und die geteilte Information ist sowieso naheliegend.

### **4. Als wie wichtig erachten Sie die Gründung von neuen Mobility Startups? Wie wichtig sind Mobility Startups Ihrer Meinung nach? Warum?**

Spannend sind die Geschichten, weil sie ein bisschen Bewegung in den Markt bringen. Weil sie teilweise ganz andere Ansätze haben, weil sie von einer sehr hohen Kundenorientierung ausgehen. z.B. Uber, man weiß wer kommt, sieht Bild, hat Bewertung. Wenn man sich daran gewöhnt hat, und nicht weiß da kommt irgendeiner. Über diese Weise setzen sie Standards, die ihnen dann in anderen Angeboten von Nicht-Startups abgehen. Relativ viele Startups setzen solche Beispiele, die dann wenn man es nicht hat, abgehen. Das sind kleine nette Anwendungen, die wenn man sie nicht hat, einem abgehen.

### **5. Wie beeinflussen Mobility Startups die Personenmobilität von heute? Können Sie den aktuellen Herausforderungen entgegenwirken?**

Das ist eine räumliche Geschichte. Diese Fahrzeugteilgeschichten funktionieren im Westen von Österreich sehr gut. Weil man dort sozialisiert ist, dass man das Auto sauberer verlässt, als man es vorgefunden hat. Alle in Wien tun sich sehr schwer. Das ist nicht nur eine Geschichte urban vs. Rural, sondern auch eine Mentalitätsgeschichte. Die Sharinggeschichten funktionieren im Westen in der Mitte von Österreich alle besser, als im Osten. Ist eine Mentalitätssache. Es wird im Westen mehr genutzt und auch gewissenhafter. Und deswegen nochmal mehr genutzt, weil weniger Leute schlechte Erfahrungen haben.

### **6. Denken Sie, dass Mobility Startups den gegenwärtigen Herausforderungen in der Mobilität besser entgegenwirken können als der ÖPNV? Warum?**

Der ÖPNV hat den Vorteil der Massenleistungsfähigkeit. Der muss nicht kostendeckend betrieben werden. Das Startup hat das Problem der Kapitalisierung und Finanzierung und Refinanzierung.

### **7. Denken Sie, dass Mobility Startups erfolgreich sind? Welche Faktoren machen ein Mobility Startup erfolgreich?**

Wie kann ein Startup zu Geld kommen. A: als entgeltliche Dienstleistung anbieten. Im Bereich der Mobilitätsdienstleistung, die informationsbasiert ist, ist die Bereitschaft in Österreich für diese Dienstleistung Geld zu zahlen, genauso wie in Deutschland und ganz Europa, genau Null. Dann hat er die Möglichkeit, er kann das Ganze für irgendjemand machen, als Vermittler. Das lässt aber niemand zu, weil das machen die Leute selber, oder kaufen ihn auf. Was einigermaßen funktioniert sind werbebasierte. Überall wo man in die Ortsveränderungsdienstleistung reinkommen, sind wir im gewerblichen und dann braucht man Gewerbeschein und dann ist man nichts anderes als ein Taxi.

### **8. Welchen Hindernissen stehen Mobility Startups derzeit gegenüber und welchen werden sie in Zukunft gegenüberstehen? (z.B. Rechtliche/gesetzliche Hürden, etc) Warum?**

Das Hauptproblem der Startups ist das Geschäftsmodell. Womit verdient ein Startup in diesen Bereichen. Wenn das Startup das Geschäft mit der Ortsveränderung verdient, kann man davon ausgehen, das WK und AK in Grund und Boden klagen werden, wenn er nicht die entsprechenden Gewerbescheine hat und zeigen sie an. Das ist den Mitfahrbörsen passiert. Wenn man wen mitnimmt und man kriegt Geld dafür, ist es eine Leistungsbeziehung, weil es einen Leistungsaustausch gegeben hat. Der Leistungsaustausch ist gewerblich, da haken die WK ein, und wollen das unterbinden.

Informationstechnisch laufen im Hintergrund die Maschinen, die machen das. Da habe ich alles drinnen, Park and Ride, usw. schlägt mir alles vor, den ÖV und IV und alle Modalverbindungen. Diese Auskunft muss dem Endkunden kostenfrei zur Verfügung gestellt werden. Daher ist das kein Business Case. Das ist den ÖV und IV unterstützende Information. Da gibt es keine Zahlungsbereitschaft. Die ÖVs zerstören jeden Business Case. Jede Gemeinde hat ein Fahrradverleihsystem um sehr wenig Geld, oder gratis, oder mit Tourismuskarte. Da ist für Dritte sehr wenig Platz.

Was im Endeffekt noch fehlt, sind die Plattformen, die das Ganze schön verknüpfen, und nichts anderes sind als Mobilitätsvermittler. Problem in Österreich ist, dass wie in Wien, wo die Jahreskarte nichts elektronisches kann und 365 Euro kostet. Damit schießen sie alle tragfähigen Business Cases ab. In London kostet das pro Monat. Top Jugendticket ist noch billiger. Hier noch eine Mobility Service Plattform aufzubauen, warum sollte man das tun. Um 60 Euro hat man als Jugendlicher Zugang zu jedem Mobilitätsangebot. Jetzt ist für andere relative wenig Platz mehr.

### **9. Warum entstehen Innovationen im ÖPNV-Bereich verspätet, oder bleiben gar aus? Welche Gründe führen dazu? Betrachten Sie diese Einrichtungen als rigide und wenig innovativ?**

Der ÖPNV hat das Problem, dass er sehr anlagengebunden ist, mit sehr langer Behaltdauer. S-Bahn in Wien ist Technologie der 70er Jahre noch. Zum anderen diese ganzen Unternehmen sind alle sehr groß und daher haben sie eine sehr mächtige Arbeitnehmervertretung. Diese Arbeitnehmervertretung hat ein Beharrungsvermögen. Sie wehren sich. Sind auch als Lohnkutscher degradiert geworden. Freiheitsgrade sind Null, da Haltestellen ausgeschrieben werden, Sauberheit der Gesäße usw., alles in Ausschreibung drinnen. Und man muss nur das bringen, was drinnen steht.

### **10. Denken Sie das öffentliche Einrichtungen Mobility Startups als Konkurrenz sehen? Nehmen Mobility Startups Ihrer Meinung nach dem ÖPNV die Kunden weg? Oder ergänzen sie sich (Verbindung verschiedener Fortbewegungsoptionen)?**

Nein, im ländlichem Raum, lange Wegstrecke zum Zurücklegen, um zum Sharingangebot überhaupt zu kommen. Da steht das Gemeindemobil. Kommerziellen Anbieter gehen über den inneren urbanen Raum nicht heraus. Andere Städte außer Graz und Klagenfurt noch, kann man in Österreich auch vergessen. Die Sharingsachen decken daher nur die Sachen ab, wo es sich einigermaßen finanziell tragfähig gestalten lässt. Gemeindemobile werden bestimmt kommen, früher oder später, die man sich ausleihen kann. Da steckt auch wenig Aufwand dahinter, mit Reservierungssystemen (App).

Investitionslastigkeit.

### **11. Warum denken Sie, dass Mobility Startups eher eigenständig gegründet werden, als in Kooperation mit dem ÖPNV? Denken Sie, dass es in Zukunft zu mehr Kooperationen kommen wird?**

Die ÖBB hat sich immer schwer getan mit ihrer Kundenschnittstelle. Der Ticketshop ist eine Zumutung. Man muss nicht alle Produkte abbilden.

Startups sind besser, weil sie sagen, sie bieten mal nur einen Teil der Produkte an, oder so, dass es schnell geht, dass man in 2 bis 3 Klicks zu kaufen kommt. ÖV tut sich mit dem Mut zur Lücke unglaublich schwer, weil sie alle ihre Produkte abbilden müssen. Lassen keine Produkte zu, die einen betonten Kreativitätsschwerpunkt haben. Sind sehr starr in den Strukturen eingefahren. Sie lassen Innovation auch nicht zu.

DB z.B. ist es egal wer ihre Fahrkarten verkauft und in welcher Community, gibt nur Spielregeln vor. Das sind dann Startups, die bewusst nach Kundensegmenten differenzieren, eher jugendliches oder älteres Publikum, und sind nach einem Jahr wieder vom Markt und dann wieder mit was anderem. Im Hintergrund stehen überall dieselben Maschinen, nur Außenauftritte sind immer komplett andere.

Diesen Wechsel hat die ÖBB noch nicht geschafft.

### **12. Wie sehen Sie die Zukunft der Personenmobilität?**

Die ÖBB wird das ganze verschlafen, wie das was von DB gemacht wird. Startups werden es auch nicht sein.

Das Große werden Kapitalisierungen werden. Unternehmen werden gekauft. Man ist nicht mehr Teil der Innovation, sondern man kauft sich die Innovativen vom Markt weg.

### **13. Wie sehen Sie die Zukunft von Mobility Startups? Wie werden diese die Zukunft der Personenmobilität beeinflussen?**

Die Amadeuse der Welt brauchen neue Geschäftsfelder. Die müssen aus dem Flugbereich hinauskommen. Es werden die sein, die diese Angebote dann anbieten werden. Sie werden sich mit anderen Angeboten verschneiden. Man bekommt dann interessante Packages, wo auch der Regionalverkehr dabei ist, Hotel usw.

Große Unternehmen werden Startups aufkaufen in dem Bereich.

### **14. Mobility Startups führen zur zunehmenden Individualisierung von Transporten. Wie sehen Sie die Auswirkungen auf die Transportbranche?**

Marktkonzentrationen und Monopole, die sich im Preis und Qualität für Mitbewerber niederschlagen.

### **15. Wie kann bzw. soll der Staat auf die Entwicklungen rund um die vermehrte Verbreitung von Mobility Startups reagieren? Ist eine staatliche Lenkung wünschenswert bzw. notwendig?**

Die Nachfrage im Startup-Bereich Mobilität hält sich in Grenzen. Gründung ist leicht für Mobilität, den Eintritt, aber durchsetzen ist schwer. Wird in Zukunft so bleiben. Weil der, der die Ortsveränderung vornimmt immer versuchen wird seine Fahrkarten zu verkaufen. Ändern kann das ein Amadeus oder ein Google in dem er ein Konto an Fahrkarten abkauft. Aber das ist kein Startupthema. Das ist ein Thema wo bekannte Anbieter, ihre Märkte ausweiten. Die Startups werden sich da immer schwer tun. Die haben maximal den Mobility Service Bereich als Möglichkeit, wegen der Preisgestaltung, (356€) wo sich Österreich zusammengeschlossen hat.

Staatliche Lenkung: Mobilität der Zukunft hat immer Ausschreibungen, wo man versucht die Startups zu unterstützen. So richtig in den Markt gekommen, ist aber noch keiner, welche einer dieser Entwicklungen gewesen ist.

In Österreich ist man verwöhnt, nicht teuer, wollen nicht auf die Innovation umsteigen. In anderen Ländern, wo keine Buszeiten in Brasilien zB stehen, sind diese Startups erfolgreich.

Verkauf von Kundendaten ist gefährlich. Amerikanische Startups arbeiten mit dieser Geschichte. Ich hol mir eine Community, dass sie statistisch belastbar ist, im Sinne von validen Aussagen für mein Geschäftsfeld und gleichzeitig hat man so viele Kunden, dass man beginnen kann, die Kundendaten zu verkaufen. Aggregierte Kundendaten zur Verkehrssteuerung verwendet.

## 8.2. Mobility startup interviews

Wunder: Lukas Loers (Manager – Strategy & Partnerships)

### Mission des Startups

1. **Warum besteht Ihr Startup? Was ist Ihr Hauptleistungsversprechen/Kundennutzen (main value proposition)? Was hat Sie dazu motiviert das Startup zu gründen?**

Personen transportieren andere Personen von A nach B. Die Fahrer hatten keine Lizenz, und das wurde verboten in Deutschland das Konzept. Dann sind sie nach Osteuropa gegangen, nach Budapest, Prag und Warschau und dort erfolgreich betrieben.

Welches Produkt macht am meisten Sinn für die Leute, wo ist der Bedarf am höchsten? Dann sind sie auf Mitfahrgelegenheit gestoßen. Und wie teuer ist eine Werbung, Add in Nairobi oder in Sao Paulo oder in Manila. Und das konnte aus der Ferne gelauncht werden, wegen Englisch. Und ganz ganz wichtig, wo ist der Bedarf am höchsten.

2. **Wer sind die idealen Kunden des Startup's und wie sprechen Sie diese derzeit an?**  
Megastädte, keine Alternativen, arme Leute.

3. **Wie wurde das Startup zu dem, was es heute ist? Betrachten Sie Ihr Startup als erfolgreich? Warum? Welche Faktoren führen dazu, Ihrer Meinung nach?**

Wenn man ein Mobility Angebot macht, muss man auch einen großen Bedarf abdecken können. Und da ist der Bedarf auch sehr groß, weil die Leute sonst keine andere Möglichkeiten haben. ZB in Manila gibt es nur eine öffentliche Zuglinie, Straßenbahn ist überfüllt, und auch total viele Leute fahren auch jeden Tag mit dem Auto und daher brauchen sie lange zur Arbeit, Leute sind auch sehr arm. Deswegen sind sie auch bereit um zu teilen, und deswegen funktioniert es auch sehr gut.

Wunder ist erfolgreich, weil es in Städten operiert, wo die Nachfrage herrscht und Faktoren wie hohes Verkehrsaufkommen Wunder halt entgegenwirken kann. Und weil Alternativen am Markt nicht da sind.

### Startup-Gründer



**4. Wann wussten Sie, dass Sie Unternehmer werden wollen? Warum wollten Sie Unternehmer werden? Was motiviert Sie?**

Er hat gegründet wegen Unabhängigkeit, will sein eigener Boss sein. Wird wahrscheinlich nicht mehr zurückgehen, um für ein anderes Unternehmen zu arbeiten.

**5. Erzählen Sie mir bitte ein bisschen über Ihren Hintergrund. (Was haben Sie studiert?, etc.)**

Studium ist zweitrangig. Gründer war an der WHU, Top-Uni, dann hat er Bachelor gemacht und ist zu McKinsey gegangen. Hat dort 2 Jahre gearbeitet. Wollte an der WHU promovieren, hat es dann aber nicht gemacht und hat 3 Startups gegründet. Eins wurde gekauft von Airbnb. Dann hat er Airbnb Deutschland Export geleitet 3 Jahre und hat Deutschland aufgebaut. War einer der ersten Angestellten für Airbnb, hat das Unternehmen gesehen von 20 Mitarbeitern bis es dann auf 1000 gewachsen ist.

**6. Können Sie mir bitte ein paar Merkmale auflisten, die Sie am besten beschreiben? Was zeichnet Sie als Gründer aus, könnten Sie mir Ihre Stärken und Schwächen nennen?**

Sehr motiviert wegen hohen Arbeitsaufwands, sehr viele Stunden nötig. Sehr hohes Verhandlungsgeschick, sehr intelligent. Ein bisschen verrückt. Nimmt das Risiko an. Alle Mitarbeiter wissen, dass das Unternehmen vielleicht in einem Jahr kein Geld mehr haben könnte.

**7. Welche Faktoren bezeichnen Sie als kritisch für den Erfolg eines Startups? Was ist Ihre Definition von Erfolg?**

Geld, Finanzierung ist extrem wichtig, Team ist extrem wichtig. Leadership, dass wir ein Produkt haben, das Marktfitt hat.

**8. Was waren bis jetzt die größten Probleme, die Sie bei Ihrer Gründung hatten? Was ist das schwierigste daran ein Startup zu führen? (klügste Entscheidung / größter Fehler)**

Ganze Zeit. Man lernt aus allen Fehlern, man glaubt immer man hätte manche Sachen anders machen können. Es sollte mehr steuerliche Vorteile geben für Gründer. Für kleinere Unternehmen die in Arbeitskräfte investieren, sollte es auch Steuervorteile geben, um noch mehr Anreize für Risikokapital zu schaffen. In Hamburg gibt es kein Startup-Hub, ist ein kleiner Nachteil für deren Standort.

## Unternehmenskultur

**9. Was sind die Kernwerte Ihre Startups? Warum? Wie beschreiben Sie Ihre Unternehmenskultur? Welchen Idealen entstammt diese?**

Begeisterung für Produkt, und Motivation für das Produkt, auch etwas Mehrarbeit ist manchmal wichtig, kein Nein dazu.

**10. Wie groß ist Ihr Team? Was sind Ihre Erwartungen an das Team?**

Sehr schnell arbeiten, aber mit Qualität im Hintergrund, ist sehr wichtig. Ownership brauchen wir, sich der Sache wirklich annehmen. Jede Person ist wichtig

**11. Wer sind die idealen Kandidaten/Bewerber für Ihr Startup? Welche Persönlichkeitsmerkmale suchen Sie in einem Kandidaten?**

Idealer Kandidat: Schauen, ob es Leute sind, die eher was machen, oder nur zuhören. Eventuell Startup-Background, weil sie dann mit irgendwelchen unvorhersehbaren Problemen schnell umgehen können und eine Lösung finden und selbst überlegen und unabhängiger sind. Mehr projektmäßige Arbeit, Strukturen werden sehr oft geändert

**12. Warum haben Sie sich für Ihren Standort entschieden? Was finden Sie besonders gut daran?**

Zufall, dass es Hamburg ist, weil Gründer daheim im Hamburg, für Airbnb gearbeitet, auch Familie ist hier, und daher ist es hier gewachsen.

## Vision des Startups

**13. Was sind die Hauptziele des Startup's für die kommenden Jahre? Was sind die nächsten Schritte?**

Irgendwann mal Geld verdienen, auch in andere Städte gehen (Webseite), und wollen sich stabilisieren und Marktführer werden für ihr Produkt weltweit, in allen Megacities.

**14. Wie sehen Sie die Zukunft der Personenmobilität und inwieweit denken Sie wird Ihr Startup diese beeinflussen?**

Dass Wunder in der Lage sein wird viel mehr geteilte Autos zu haben. Dass Leute nicht mehr alleine fahren in ihren Autos zur Arbeit und abends wieder zurück. Dass sie Autos von den Straßen nehmen können und dadurch halt CO2 verringern und damit Städte halt auch zu entlasten. Und nur so werden die Städte nicht explodieren, weil die werden ja größer und größer, es werden immer mehr Kinder geboren. In Manila haben die eine riesen Geburtsrate. Und wenn die Leute nicht anfangen zu carpoolen, weiß ich nicht wie die zur Arbeit kommen wollen.

Dass wir mehr Leuten jeden Tag einen ökologischen günstigen Weg in dem Auto zu Arbeit vermitteln, das per App und das jeden Tag.

### **15. Was werden die größten Hindernisse für Ihr Startup in den nächsten Jahren sein?**

#### **Wie planen Sie diese zu überwinden?**

Regulations, Safety & Security, Technologie macht Wunder kaput, falls keine Apps mehr genutzt werden, und dass kein Geld mehr eingesammelt werden kann.

Überwinden: Schnelligkeit, direkt entscheiden, schauen wie man das Risiko managen kann, as passiert wo

### **16. Wie gehen Sie mit Wettbewerb im Geschäftsfeld um? Wer sind Ihre größten Konkurrenten und wie unterscheiden Sie sich von diesen?**

Schnelles und direktes Entscheiden, man schnell reagieren, kein gestandenes Unternehmen, dass 10 Meetings braucht, kann das machen, Schnelligkeit ist auf deren Seite, wenn sie die Schnelligkeit verlieren, ist das ein Nachteil

Manche extrem politische Unternehmen können einfach keine Entscheidungen treffen. Ein riesen Automobilkonzern kann nicht in ein Startup investieren, weil die die Struktur dafür nicht haben, und die werden die auch nicht morgen schaffen, und Wunder ist eben sehr sehr schnell.

## Match Rider: Frank Anders (Co-founder)

### Mission des Startups

- 1. Warum besteht Ihr Startup? Was ist Ihr Hauptleistungsversprechen/Kundennutzen (main value proposition)? Was hat Sie dazu motiviert das Startup zu gründen?**

Der Hintergrundgedanke ging davon aus, dass wir eigentlich alle leidenschaftliche Fahrradfahrer sind. Uns hat einfach der Autoverkehr gestört, der Individualverkehr. Entsprechend wollten wir einfach dafür etwas tun, dass sich das Problem löst und weniger Leute mit dem eigenen Auto fahren und es entsprechend weniger Verkehr gibt. Damit sich die Fahrradfahrer auch auf der Strecke besser bewegen können.

- 2. Wer sind die idealen Kunden des Startup's und wie sprechen Sie diese derzeit an?**

Wir haben ja mehrere Produkte. Beim aktuellsten und am meisten vertriebenen Produkt Match Rider Go ist der ideale Kunde ein Händler der Mobilitätsbedürfnisse hat.

- 3. Wie wurde das Startup zu dem, was es heute ist? Betrachten Sie Ihr Startup als erfolgreich? Warum? Welche Faktoren führen dazu, Ihrer Meinung nach?**

Ich würde schon sagen, ja. Wir bekommen sehr viele positive Rückmeldung. Also würd ich auch sagen, dass wir erfolgreich sind. Aus der Sicht ganz sicher.

### Startup-Gründer

- 4. Wann wussten Sie, dass Sie Unternehmer werden wollen? Warum wollten Sie Unternehmer werden? Was motiviert Sie?**

Also ich komme aus einer Unternehmerfamilie und von daher wusste ich glaub ich schon mit 16, dass ich eigentlich gerne mal selbständig werden möchte. Der konkrete Fall war während des Studiums, dass dann einfach der Gedanke da war, dass ich mich gerne in der Mobilitätsszene weiterentwickeln möchte.

- 5. Erzählen Sie mir bitte ein bisschen über Ihren Hintergrund. (Was haben Sie studiert?, etc.)**

Habe VWL studiert.

- 6. Können Sie mir bitte ein paar Merkmale auflisten, die Sie am besten beschreiben? Was zeichnet Sie als Gründer aus, könnten Sie mir Ihre Stärken und Schwächen nennen?**

Ich glaub ich bin ein sehr analytischer Mensch. Was auch heißt, dass ich sowas allein nicht machen könnte. Ich habe ein starkes Team, die andere Stärken mitreinbringen. Man braucht Programmierer, und jemanden der sich mir Marketing auskennt. Ich glaube diese Heterogenität ist auch wichtig.

- 7. Welche Faktoren bezeichnen Sie als kritisch für den Erfolg eines Startups? Was ist Ihre Definition von Erfolg?**

Ich glaube in der Branche braucht man einen recht langen Atem. Man muss den Markt verstehen. Und man muss glaub ich in dem Markt, gerade im europäischen Sektor auch die rechtlichen Rahmenbedingungen kennen, ansonsten eckt man an. Man sollte sich auch nicht mit allen anlegen im Markt.

- 8. Was waren bis jetzt die größten Probleme, die Sie bei Ihrer Gründung hatten? Was ist das schwierigste daran ein Startup zu führen? (klügste Entscheidung / größter Fehler)**

Das ist schwierig zu sagen. Alle Entscheidungen, die wir bis jetzt getroffen haben, haben uns hierher gebracht, wo wir jetzt stehen. Da waren auch ganz viele Dinge dabei, die wir lernen mussten. Das war natürlich teils negative Erfahrungen auch, aber die haben uns stärker gemacht. Ich kann jetzt nicht sagen, dass wir keine Fehler gemacht haben, aber ich kann sagen, dass wir trotzdem alles richtig gemacht haben, dass wir jetzt hier sind.

## Unternehmenskultur

- 9. Was sind die Kernwerte Ihre Startups? Warum? Wie beschreiben Sie Ihre Unternehmenskultur? Welchen Idealen entstammt diese?**

Ich hab die Erwartung, dass jeder mit vollem Einsatz dabei ist und sein allerbestes gibt. Darüber hinaus, bei Praktikanten und Minijobbern, von denen würd ich auch vollen Einsatz erwarten. Was die Kultur bei uns angeht, ist es so, dass wir sehr offen sind. Wir möchten jedem einzelnen die größtmöglichen Freiheiten geben in seinem Arbeitsbereich. Da gab es so ein anderes Startup, die haben uns ein bisschen beeinflusst. So hat jeder einen ganz klaren Sorgenkreis. Es kann sich nicht jeder um alles kümmern, sondern dass jeder seinen Bereich abdeckt und auch sehr konsequent und da auch sehr eigenverantwortlich ist. Das gilt für die Gründe und reicht auch bis zu den Praktikanten hinaus.

**10. Wie groß ist Ihr Team? Was sind Ihre Erwartungen an das Team?**

Also wir sind 4 Gründer insgesamt.

**11. Warum haben Sie sich für Ihren Standort entschieden? Was finden Sie besonders gut daran?**

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## **Vision des Startups**

**12. Was sind die Hauptziele des Startup's für die kommenden Jahre? Was sind die nächsten Schritte?**

Wir haben ein paar Produkte in der Pipeline, die auch auf geteilte Mobilität basieren, aber es gibt noch keinen konkreten Plan.

**13. Wie sehen Sie die Zukunft der Personenmobilität und inwieweit denken Sie wird Ihr Startup diese beeinflussen?**

Der Markt ist natürlich extrem dynamisch momentan. Von da her ist es schwer zu sagen. Aber wovon ich überzeugt bin, ist, dass wir die Awareness für geteilte Mobilität erhöhen. Das sind aber nicht wir alleine, da gehören auch andere geteilte Mobilität Anbieter dazu. Auch um die ländliche Mobilität zu beeinflussen. Das ist glaub ich der Punkt, wo wir unsere Mission entdeckt haben, selbst wenn wir am Ende vielleicht nicht erfolgreich sein werden.

**14. Was werden die größten Hindernisse für Ihr Startup in den nächsten Jahren sein? Wie planen Sie diese zu überwinden?**

Also ich denke für jedes Startup, dass es immer Finanzierungsengpässe gibt. Und die muss man halt bewältigen nach wie vor. Also ich glaub, das ist die Herausforderung für jedes Startup.

**15. Wie gehen Sie mit Wettbewerb im Geschäftsfeld um? Wer sind Ihre größten Konkurrenten und wie unterscheiden Sie sich von diesen?**

Ich glaub, dass unser Geschäftsmodell ein bisschen anders ist, als alle anderen Ridesharing-Konzepte. Wir bieten ja streckenbasierte Mitfahrgelegenheiten an, aber verlässlich und machen kein Free-Floating Ridesharing. Was da dabei der entscheidende Unterschied von uns zu allen anderen ist, ist das Geschäftsmodell.

**Wegfinder/(Nextstop): Gregor Fischer (CEO)**

## **Mission des Startups**

**1. Warum besteht Ihr Startup? Was ist Ihr Hauptleistungsversprechen/Kundennutzen (main value proposition)? Was hat Sie dazu motiviert das Startup zu gründen?**

Bei uns steht das Thema Intermodalität im Vordergrund. Das heißt Wegfinder wurde gegründet um eine österreichweite Plattform zu haben um Reiseplanung intermodal zu machen. Und gerade hier die klassischen öffentlichen Angebote, ÖBB, Bahn, verbündelt zu kombinieren mit individuellen Angeboten, wie z.B. Carsharing, Scooter Sharing, Mitfahrbörsen, all das was in diesen Bereich hineinfällt. Und insofern Ziel 1 ist es Information zu bieten. Ziel 2 dann hier natürlich auch Tickets zu verkaufen, beziehungsweise Karten zu vermitteln an Kunden und das ist der Businessplan hinter dem Unternehmen.

**2. Wer sind die idealen Kunden des Startup's und wie sprechen Sie diese derzeit an?**

Prinzipiell sind wir natürlich offen für alle. Was wir schon merken, ist, dass wir generell eher eine jüngere Zielgruppe ansprechen. Das heißt wir sind in so einem Bereich von 15-40 und dann noch einmal genau in der Mitte drinnen, ist eigentlich so der Hauptkern den wir ansprechen, weil es ist schon eigentlich eine neue Generation. Das heißt, dass Mobility, also Service eigentlich viel mehr in den Köpfen dieser jungen Leute vorherrscht. Man besitzt kein Auto mehr zwingend, man macht teilweise nicht mal mehr den Führerschein, insofern ist es sicherlich eine urbane jüngere Zielgruppe, die jetzt primär unser Service nutzt. Das ist auch, dass intermodale Mobilität gerade in Wien am meisten ausgeprägt ist und am Land leider weniger. Wir richten uns aber prinzipiell, wie gesagt auch an ganz Österreich und wollen auch gerade andere Zielgruppen jetzt auch zum Beispiel Bahnfahrer genauso abholen und sagen na wir bieten euch noch ergänzend eine Mitfahrbörse als Last Mile an, die ihr heute bei der ÖBB oder wo anders nicht habt. Das heißt insofern auch Weiterfahrbereich etc. Und dritte Zielgruppe sind schon auch so nennen wir es mal smarte Umsteiger, die recht sonst so sehr oft mit Auto und öffentlichen Verkehr und Auto unterwegs sind aber eher adhoc eine Nutzung brauchen und grad für die ist es gerade spannend was gibt es denn alles für alle Möglichkeiten die ich habe und die zu vergleichen.

**3. Wie wurde das Startup zu dem, was es heute ist? Betrachten Sie Ihr Startup als erfolgreich? Warum? Welche Faktoren führen dazu, Ihrer Meinung nach?**

Also definitiv Ja. Dafür gibt es mehrere Verfahren wie man das bewerten kann. Das eine ist vielleicht mal eine intern gesprochen die Ziele unserer Eigentümer, die geplant sind, die erreichen wir, oder haben wir bis jetzt auch immer erreicht. Insofern die gesteckten Ziele, die sind da. Was sind die externen Faktoren, die da das ganze noch einfach schön zeigen, das ist eines teils die generierten Downloads. Wegfinder hat ja schon einen Vorgänger Nextstop. Da haben wir schon 100.000 Downloads kumuliert erreicht gehabt, noch bevor wir auf Wegfinder gewechselt haben. Jetzt Wegfinder, ich glaub heute, elfter Download des Rankings im Apple Store. (Da müssen wir jetzt nur noch Facebook und Whatsapp überholen, und ein paar andere kleine Konkurrenten).

Insofern, Kundenfeedback ist uns wichtig. Auch hier gute Bewertung in den Stores und einfach generell freshen Nahts am Markt, das heißt wie gut kommt der Journalist an, wie gut kommt der Mobilitätsverhandler an, wie gut bei Kunden. Und das ist für uns im Moment eigentlich sehr wichtig.

## Startup-Gründer

### 4. Wann wussten Sie, dass Sie Unternehmer werden wollen? Warum wollten Sie Unternehmer werden? Was motiviert Sie?

Die Gründer sind die Eigentümer. Fischer ist der angestellte Geschäftsführer des Unternehmens. Gründung hat die ÖBB gemeinsam mit speedinvest (investieren in mehrere Startups). Das deckt sich eigentlich ganz gut so mit warum es gegründet wurde und warum ich eingestiegen bin. Der Hauptinitiator war die ÖBB, die aber erkannt hat, dass in einem sehr großen Unternehmen, nicht immer die Strukturen optimal sind, um innovative Dinge sehr nachschauend und agil umzusetzen. Und das war meiner Meinung nach ein sehr weiser Entschluss. Sozusagen, man muss, wenn man etwas ausprobieren möchte, an das man auch glaubt, dem eher Freiraum geben und regeln und eine Welt schaffen, in der man eben wie gesagt sehr startup like agieren kann. Das funktioniert nicht, wenn man eine Abteilung oder ein Team von einem großen Konzern ist und somit der erste Schritt war, dass wir es außerhalb planen. Und der zweite Schritt war, auch ein sehr reflektierter, sozusagen, wir dürfen das nicht mit unserer Denke machen, die wir sonst immer haben, wir brauchen jemanden, der uns unterstützt, um wirklich wie ein Startup zu denken. Und deshalb ist das Unternehmen so gegründet worden. Das ist auch was auch mich motiviert hat, weil ich kommen aus einem Corporate. Also ich habe generell 20 Jahre Corporate Vergangenheit. Und es reicht mir auch, und es hat mir auch gereicht dieser Zugang in großen



Unternehmen. Sehr viel Overhead und sehr viel nicht so produktiv sein zu können wie in einem Startup.

**5. Erzählen Sie mir bitte ein bisschen über Ihren Hintergrund. (Was haben Sie studiert?, etc.)**

Mein Hintergrund von der Ausbildung eigentlich eher technisch, so IT und Telekommunikation. Hab aber eigentlich nie was technisches gemacht, sondern bin immer bei Telcos im Business-Bereich gewesen. Bin eingestiegen im Onlinebereich. Hab dann bei A1 mobile Portale, Produktentwicklung bei anderen TelCos. Also immer sehr stark im Bereich digitale Produkte und eben mobil genutzte Produkte. Und das hat mich motiviert daher zu kommen ist, da im Moment, es kommen so viele Megatrends. Megatrend der Mobilität, wie sie sich entwickelt, die Individualisierung, die Urbanisierung. Das natürlich die Digitalisierung und das ist so jetzt mein Hintergrund von vorher, der natürlich stark hineinspielt. Und ich glaub das einfach das Thema Mobilität und gerade intermodale Mobilität ein extremes Zukunftsthema wo sich jetzt gerade viel tut und wo man gut gestalten kann. Und wo es einfach aktuell noch zu wenig Lösungen gibt oder gab. Jetzt kommt Bedarf zum Nachholen. Wenn sie heute Mobilität wollen, haben sie bei jedem Betreiber eine App oder eine Webseite, wo man selbst schauen muss. Und es ist eben genau wo wir ansetzen, das man besser findet.

**6. Können Sie mir bitte ein paar Merkmale auflisten, die Sie am besten beschreiben? Was zeichnet Sie als Gründer aus, könnten Sie mir Ihre Stärken und Schwächen nennen?**

Das wichtigste ist Flexibilität. Das man auch sehr unterschiedliche Systeme gleichzeitig oder wechseln kann. Überspitzt: Meeting mit CEO der ÖBB und später darum kümmern, dass der Hausmeister kommt. Das Department ist sehr groß. Insofern natürlich, hier ist es auch ein Balanceakt zwischen Kooperation im Team aber trotzdem seine eigene Expertise einbringen. Man muss sehr starke Kundenorientierung haben, sehr starke Produktorientierung und man tut es für die Sache für das Produkt. Man arbeitet nicht für sich hier. Es geht da nicht um eine Karriere, es geht hier nicht um eine soziale Stellung im Unternehmen, es geht nicht um Politik im Unternehmen, sondern es ist für die Sache für das Ziel für den Kunden. Das ist meiner Meinung nach wesentlich deutlicher ausgeprägt beim Startup als in anderen Unternehmen.

### **7. Welche Faktoren bezeichnen Sie als kritisch für den Erfolg eines Startups? Was ist Ihre Definition von Erfolg?**

Für mich ist es dann erfolgreich, wenn es die Kunden annehmen und nutzen. Das hab ich vorher noch vergessen, natürlich die Nutzung als Kennzahl ist eine wichtige. Und sie es in der Form nutzen, wie wir es uns auch wünschen, nämlich, dass sie auch Tickets über uns kaufen. Das ist quasi so der Net Measure, dass man natürlich auch die Indikatoren, über die wir vorher schon gesprochen haben, (die wir vorher schon besprechen), wie viele Downloads gibt's, wie aktiv sind die Kunden, wie ist das Kundenfeedback, das sind alles ganz wichtige Indikatoren. Aber das Hauptziel ist natürlich das schwierig hier, einerseits Downloads verkaufen aber dass wir auch einen wichtigen Beitrag in Österreich leisten Mobilität wieder, also noch besser nutzbar zu machen.

### **8. Was waren bis jetzt die größten Probleme, die Sie bei Ihrer Gründung hatten? Was ist das schwierigste daran ein Startup zu führen? (klügste Entscheidung / größter Fehler)**

Die größte Herausforderung, die wir im Moment weiterhin haben, sind ganz besonders die, dass es zu wenige gute Ressourcen gibt. Gerade Developer gibt es zu wenige in Österreich. Das macht es schwer, das ist jetzt kein Fehler, keine wirkliche Herausforderung. Und vielleicht auch hier, das ist vielleicht auch ein Grund, warum eine meiner Vorgängerinnen glaub ich auch das Handtuch geworfen hat, weil man muss sich wirklich auch trauen das Corporate Denke zu verwerfen und man muss auch bereit sein ein Risiko einzugehen, persönliches Risiko. Gerade in der Entscheidungsgründung muss man sich nicht 3mal absichern und hundert Anwälte fragen, sondern ein wenig mehr startup liker durchzugehen.

## **Unternehmenskultur**

### **9. Was sind die Kernwerte Ihre Startups? Warum? Wie beschreiben Sie Ihre Unternehmenskultur? Welchen Idealen entstammt diese?**

Das wichtigste ist offene Kommunikation., sehr flache Struktur. Das gibt es auch unabhängig der Funktion, dass jeder Kundenbewertung mitbekommt und liest. Es ist auch wichtig, dass sich jeder identifiziert mit dem Thema, sich identifiziert mit dem Produkt und damit auch mit dem Unternehmen. Auch dass man bereit ist manchmal, wenn es sein muss, länger und mehr Zeit zu investieren in Spitzenzeiten. Die Art des Kommunizierens, dass es sehr persönlich ist, das ist schneller. Außer wenn man extern kommuniziert. Wir leben halt sehr stark auch das Thema Digitalisierung selbst. Das heißt, alle Produkte, die wir

nutzen, sind in der Cloud. Das merkt man bei einem Startup. Neuer Einsatz von Tools, neuer Einsatz der Kommunikation.

### **10. Wie groß ist Ihr Team? Was sind Ihre Erwartungen an das Team?**

Wir sind gerade 14 Personen. Erwartung ist Innovationen einzubringen ist wichtig auch. Das jeder auch ein bisschen außerhalb gut researcht. Und somit auch aktiv mitzugestalten. Das ist ganz wichtig Wir leben davon, dass jeder was einbringt, aber nicht dass es einen Masterplan gibt. Außer mir sind da alle schon fast Natives, das heißt der Sprung ist da nicht so schwer, weil einfach es die meisten auch altersmäßig die Historie nie anders kennengelernt haben.

### **11. Warum haben Sie sich für Ihren Standort entschieden? Was finden Sie besonders gut daran?**

Das ist eigentlich gar nicht so wichtig wo unser Office ist. Unser Geschäftsmodell ist, weil wir halt auch digital agieren und auch eigentlich über die App Tickets verkaufen, brauchen wir eigentlich kein Office für Kunden oder Partner. Sei es jetzt einen oder mehrere Orte, wo wir halt die Mitarbeiter sitzen haben. Wien ist relativ einfach, weil beide Eigentümer in Wien sind. Und hier natürlich auch die Nähe zu vielen Mobilitätspartnern am einfachsten ist. Was ich mir schon vorstellen kann, dass wir mit den Richtung IT-Ressourcen, was ich so vorher angesprochen habe, notwendig ist, dass man vielleicht Office wär jetzt übertrieben, aber sehr wohl auch Arbeitskräfte außerhalb von Wien anspricht.

## **Vision des Startups**

### **12. Was sind die Hauptziele des Startup's für die kommenden Jahre? Was sind die nächsten Schritte?**

Das ist ganz einfach. Wir werden, wenn Sie und jeder andere Österreicher in der Früh aufsteht und sagt, wie komm ich wo hin, dann gibt es genau auch eine APP, die sie auch brauchen, und das muss Wegfinder sein und insofern gehen ich auch davon aus, dass einfach eine Konsolidierung der Angebote am Markt stattfinden wird. Und es somit auch einen klaren österreichischen Player gibt für das Thema Mobilität B2C und dass das Wegfinder wird.

**13. Wie sehen Sie die Zukunft der Personenmobilität und inwieweit denken Sie wird Ihr Startup diese beeinflussen?**

Wie ich vorher gesagt habe, der Trend findet statt, Mobilität wird sich sehr stark entwickeln.

**14. Was werden die größten Hindernisse für Ihr Startup in den nächsten Jahren sein? Wie planen Sie diese zu überwinden?**

Die Herausforderung liegt eher dabei, wie kann man diese Idee auch beschleunigen und dann auch vielleicht die etwas ältere Zielgruppe noch schneller an das Thema heranführen. Man könnte es auch so sehen, jeder der jetzt nachkommt, der ist schon in dem Zeitalter herinnen, aber das wär jetzt natürlich zu langsam. Und ich jetzt auch als Quereinsteiger in die Branche, da ich es einfach schon mitbekomme, ist die sehr starke Akzeptierung und Regionalisierung, das eine Herausforderung ist, weil es einfach sehr viele kleine Player gibt, wo dann Gemeinden aktiv werden mit einem Mietauto. Wo jeder Verkehrsverbund, jede Stadt ihren eigenen Verkehrsbetrieb hat, die alle im Moment noch ein bisschen zu wenig über den Tellerrand hinausschauen und jeder auf sich selber achtet. Ich glaub, was noch fehlt, und das ist ein politisches Ziel, dass Mobilität etwas Österreich überspannendes ist. Ja, dass es so wie es die Wiener gemacht haben, mit einer Jahreskarte in Wien alles nützen zu können. Hier müsste das auch österreichweit fortgesetzt werden. Und das hier viel mehr in eine Verknüpfung und in eine gemeinsame Vermarktung der Dienstleistungen stattfinden kann. Wo sehe ich die Herausforderung, das ist der Föderalismus in Österreich. Weil wir in Wirklichkeit hier halt Landes- und Stadtinteressen teilweise sehr stark auch an die Politik geknüpft sind.

**15. Wie gehen Sie mit Wettbewerb im Geschäftsfeld um? Wer sind Ihre größten Konkurrenten und wie unterscheiden Sie sich von diesen?**

Da gibt es mehrere Möglichkeiten. Natürlich Kooperation ist eines, Konsolidierung ist das andere. Unser aktuell gewählter Ansatz das ist ganz klar der Kunde entscheidet. Insofern, wenn der Kunde ein gute Produkt hat, dann bietet es Nutzen und damit ergeben sich auch einfach andere Wettbewerbsverhältnisse. Und ich glaub dass das generell der richtige Ansatz ist, und darum haben wir ihn auch gewählt. Nur so baut man ein Produkt für den Kunden.

**Taxi.de: Alexander von Brandenstein (Founder)**

## **Mission des Startups**

**16. Warum besteht Ihr Startup? Was ist Ihr Hauptleistungsversprechen/Kundennutzen (main value proposition)? Was hat Sie dazu motiviert das Startup zu gründen?**

Unsere Motivation war es den Kunden höchstmögliche Freiheitsgrade in jeder Hinsicht zu geben. Der Kunde hat den Vorteil durch die technischen Möglichkeiten, dass es halt schlanker ist. Er hat Kosteneinsparungsmöglichkeiten und Möglichkeiten seine Kunden zu binden. Wir statten unsere Kunden aus in einer Art und Weise mit den technischen Möglichkeiten, dass sie mit unserer Dienstleistung auch ihr Geschäft verbessern. Der Hintergrundgedanke ist die Ineffizienz zu bereinigen und die Firmen auf ein zeitgemäßes Niveau heben.

**17. Wer sind die idealen Kunden des Startup's und wie sprechen Sie diese derzeit an?**

Zwischen 300- 1000 Fahrzeuge/Flotten.

**18. Wie wurde das Startup zu dem, was es heute ist? Betrachten Sie Ihr Startup als erfolgreich? Warum? Welche Faktoren führen dazu, Ihrer Meinung nach?**

Das ist immer relativ, gemessen an was erfolgreich. Unser Erfolg ist, wenn man dadurch Geld macht und die Firma nicht pleitegeht, dann ja. Wenn man sich an Zuckerberg misst, dann klares Nein. Keiner ist zufrieden, niemals, egal wie viel Erfolg er hat.

## **Startup-Gründer**

**19. Wann wussten Sie, dass Sie Unternehmer werden wollen? Warum wollten Sie Unternehmer werden? Was motiviert Sie?**

Geträumt davon habe ich schon lange. Es hat aber etwas länger gedauert und ich musste tatsächlich 37 Jahre alt werden bis ich mit getraut habe. Das ist spät. Wenn man mit dem Modell mit 20 angefangen hätten, hätten wir keine Sorgen mehr.

**20. Erzählen Sie mir bitte ein bisschen über Ihren Hintergrund. (Was haben Sie studiert?, etc.)**

Ich bin BWLer, umso schlimmer und beschämender, dass ich mich nicht früher getraut habe. Ich habe den Job, die Selbständigkeit, durch Ausschussverfahren gefunden. Ich war abhängig angestellt, habe den Job gewechselt, und dann war noch diese Option da.

**21. Können Sie mir bitte ein paar Merkmale auflisten, die Sie am besten beschreiben? Was zeichnet Sie als Gründer aus, könnten Sie mir Ihre Stärken und Schwächen nennen?**

Ich glaube, was den Unterschied macht ist Kreativität und Durchhaltevermögen. Umgekehrt ist der größte Fehler, dass es sozusagen wenn man in einem halben Jahr etwas fertig haben muss und man sonst versagt, nicht durchhält. Loyalität auch bei der Idee ist das allerwichtigste.

**22. Welche Faktoren bezeichnen Sie als kritisch für den Erfolg eines Startups? Was ist Ihre Definition von Erfolg?**

Durchhaltevermögen und Loyalität zur Idee sind Faktoren die erfolgskritisch für das Startup sind. Wenn man an einer Sache festhält, dann wird das auch was.

**23. Was waren bis jetzt die größten Probleme, die Sie bei Ihrer Gründung hatten? Was ist das schwierigste daran ein Startup zu führen? (klügste Entscheidung / größter Fehler)**

Wir haben Fehler gemacht, dass wir unsere Lösung nicht vorher vorgetestet und dann groß rausgeholt haben, sondern gleich groß rausgeholt haben. Das ist schon mal ein zentrale Fehler. Der Weg wie man Fehler das aus dem Weg räumt muss Selbständigkeit sein. Also eigentlich ist es eher so, dass man einmal mehr aufsteht und dadurch zum Erfolg kommt, als dass es sozusagen Siegesstories gibt.

## Unternehmenskultur

**24. Was sind die Kernwerte Ihre Startups? Warum? Wie beschreiben Sie Ihre Unternehmenskultur? Welchen Idealen entstammt diese?**

Der Zusammenhalt und klare Hierarchie.

**25. Wie groß ist Ihr Team? Was sind Ihre Erwartungen an das Team?**

Dass jeder sein Ding macht und eben auch durchhält. Es gibt zwei Richtungen. Einmal Sales und Marketing und einmal Technik. Entweder ist man Techniker und ist technikaffin,

oder im Salesbereich und kann das Produkt erklären auch nicht kundenscheu, sondern proaktiv. In dem Segment ist mir sowieso egal, was derjenige studiert hat und ob er studiert hat. Hier ist mir die Person wichtig. Ausbildungshintergrund ist in diesem Bereich keine große Rolle spielt. Auf der anderen Seite, im Technikbereich ist es schon wichtig, wenn die Leute wissen, was sie tun.

**26. Warum haben Sie sich für Ihren Standort entschieden? Was finden Sie besonders gut daran?**

Nein, weil es einfach Lebensmittelpunkt war. Hamburg ist keine Gründungsstadt. Man braucht nochmal eine Grundausrüstung, um das Netz zu nutzen, und das zweite ist, dass es zu viel Dokumentationsaufwand und buchhalterische Pflichten gibt. Daher hat man eine große Last von Anfang an. In diesen Bereich ist politisch auf jeden Fall viel zu tun.

### **Vision des Startups**

**27. Was sind die Hauptziele des Startup's für die kommenden Jahre? Was sind die nächsten Schritte?**

Wir sind B2B-Anbieter und Wachstum ist natürlich was. Also die Marktpräsenz stärken und dass wir auch in anderen Märkten auch wachsen.

**28. Wie sehen Sie die Zukunft der Personenmobilität und inwieweit denken Sie wird Ihr Startup diese beeinflussen?**

Drei Säulen werden immer kritisch sein. Das eine ist Sharing in der Mobilität, das zweite die Community, die Zusammenlegung von Fahrten und das dritte ist Bestellung auf Knopfdruck. Das wird in den nächsten Jahren noch vermehrt vorkommen.

**29. Was werden die größten Hindernisse für Ihr Startup in den nächsten Jahren sein? Wie planen Sie diese zu überwinden?**

Wir schlagen ja genau in diese Richtung. Das ist sozusagen der Markt in dem wir herankommen und haben daher wenig Bedenken. Weil wir mit der Domäne auch eine Stärke haben, wo wir die Unternehmen mit den Endkunden direkt verbinden können.

**30. Wie gehen Sie mit Wettbewerb im Geschäftsfeld um? Wer sind Ihre größten Konkurrenten und wie unterscheiden Sie sich von diesen?**

Wir statten ja die Unternehmen mit Software aus, sodass sie intern einen Mehrwert haben. Die Kunden können mit ihren Kunden selber Geld verdienen, ihre Flotten so optimal zu managen, zu steuern, zu planen und abzurechnen. Bei den aktuellen Modellen, wie Uber

zum Beispiel, ist es ja so, dass das nächste Fahrzeug genommen wird und nicht im Schwarm gedacht wird., das tun wir aber.



## SCO2T: Balázs Bárány (Co-founder)

### Mission des Startups

**1. Warum besteht Ihr Startup? Was ist Ihr Hauptleistungsversprechen/Kundennutzen (main value proposition)? Was hat Sie dazu motiviert das Startup zu gründen?**

Die Idee von uns war halt, dass man in der Großstadt, mit den komplexen Parkverboten, wie in Wien und dem ganzen Stau, etc. einfach aus Erfahrung viel schneller mit dem Scooter vorankommt. Wir haben gesehen Carsharing gibt es, haben wir auch selbst genutzt, aber damit hat man letztendlich nur ein Problem des eigenen Autos gelöst, nämlich, ja man zahlt halt einfach nicht mehr fix für sein eigenes Auto, aber man hat immer noch die Parkthemen, also keine Parkplätze, kompliziertes Parken in Wien, Stau, etc. Mit dem Scooter ist man halt doch schneller unterwegs, gerade in der Großstadt.

**2. Wer sind die idealen Kunden des Startup's und wie sprechen Sie diese derzeit an?**

Einen der viel fährt.

**3. Wie wurde das Startup zu dem, was es heute ist? Betrachten Sie Ihr Startup als erfolgreich? Warum? Welche Faktoren führen dazu, Ihrer Meinung nach?**

Ja, Konzentration auf den Kundennutzen, Eingehen auf Kundenwünsche, soweit halt möglich. Aber natürlich im Ausgleich mit betrieblichen Überlegungen. Also es ist zum Beispiel das Thema Gebietserweiterung. Und es kommen immer wieder die Anfragen....Wir haben eine Kapazität an Scootern und wir schauen, dass sie nicht zu sehr auseinander gerissen werden, weil die bestehenden User finden dann keinen. Deswegen, haben wir halt geschaut, dass wir einfach organisch wachsen und nicht zu viel versprechen, nicht zu viel versuchen auf einmal, sondern so wie die Anzahl der Nutzer und die Nutzung steigen, stellen wir halt neue Scooter in den Dienst und erweitern Schritt für Schritt.

### Startup-Gründer

**4. Wann wussten Sie, dass Sie Unternehmer werden wollen? Warum wollten Sie Unternehmer werden? Was motiviert Sie?**

Also Unternehmer bin ich schon seit etwa vier Jahren, also selbstständig, aber halt Einzelunternehmer im Beratungsbereich. Also ich bin ein Data Scientist, so IT-Datenanalytik-

Berater und die anderen Kollegen sind auf mich zugekommen. Die beiden anderen Mitgründer waren damals noch angestellt, aber ihnen war klar, dass sie damit aufhören möchten. Und dann haben wir zu dritt eben diese Unternehmen gegründet. Das heißt ich arbeite nach wie vor natürlich an meinen eigenen Projekten auch komplett unabhängig von SCO2T weiter und ein Teil meiner Aufmerksamkeit geht halt in SCO2T.

**5. Erzählen Sie mir bitte ein bisschen über Ihren Hintergrund. (Was haben Sie studiert?, etc.)**

Eine spezielle Ausbildung dafür habe ich nicht (Mobilität). Ich habe eine Fächerkombination gemacht mit Wirtschaftsinformatik, Statistik und Medien. Und habe dann in verschiedenen Funktionen in der IT gearbeitet, Softwareentwicklung, Administration und so in den letzten 10-12 Jahren habe ich mich Richtung Analytik, Business Intelligence, und Data Mining orientiert. Das heißt, ich habe sehr viel Erfahrung mit Systemadministration und Systemarchitektur und etwas Programmiererfahrung. Und die anderen beiden haben mich genau deswegen angesprochen. Dass von den drei auch wirklich einer aus der IT dabei ist.

**6. Können Sie mir bitte ein paar Merkmale auflisten, die Sie am besten beschreiben? Was zeichnet Sie als Gründer aus, könnten Sie mir Ihre Stärken und Schwächen nennen?**

Führungsposition bin ich bei SCO2T nicht. Ich bin natürlich Mitgründer und die anderen führen mich natürlich an. Und in meinem Bereich falle ich auch Entscheidungen, aber ich würde mich jetzt nicht als Führungsposition bezeichnen innerhalb von SCO2T. Generell, Unternehmer, man muss sich halt sicher sein, was man macht. Man muss Risiken eingehen. Man muss damit rechnen, dass es auch nicht klappt, dass es Faktoren gibt, die man selber nicht beeinflussen kann, die aber darüber entscheiden, ob es klappt oder nicht. Es hätte auch bei uns sein können, dass irgendwelche technischen Schwierigkeiten unüberwindbar sind, oder dass der Markt das dann doch nicht so annimmt, wie es am Ende dann doch passiert, etc. Also es gibt immer wieder Leute, die denken, ich habe die super Idee, das werden alle kaufen, und dann kaufen es halt nicht alle.

**7. Welche Faktoren bezeichnen Sie als kritisch für den Erfolg eines Startups? Was ist Ihre Definition von Erfolg?**

Akzeptanz bei den Kunden. Man muss die Abläufe im Griff haben. Also wenn etwas unerwartetes passiert, sollte man sie überlegen, ist das jetzt was einmaliges, oder wird das

übermorgen und in 3 Tagen und in 7 Tagen auch passieren? Und wenn es öfter passieren wird, dann sollte man einen Standardprozess dafür entwickeln, idealerweise mit IT-Unterstützung, weil man sonst, einfach wiederholt dafür Zeit verplempern wird, mit wiederholten Tätigkeiten.

**8. Was waren bis jetzt die größten Probleme, die Sie bei Ihrer Gründung hatten? Was ist das schwierigste daran ein Startup zu führen? (klügste Entscheidung / größter Fehler)**

Schwer zu sagen. Also man wird schon recht gut unterstützt in Österreich bei der Gründung. Vielleicht das größte Thema, was wir bis jetzt hatten, war eben das Parken in Wien und das Abschleppen von Scootern. Also wenn so ein Scooter von den Kunden falsch geparkt wird, dann wird er schon mal abgeschleppt. Und für einen Scooter kostet die Abholung €260,-- oder so was. Da muss dann halt der Geschäftsführer, oder halt jemand mit Prokura hinfahren und besten mit dem Taxi, weil irgendwie muss man den Scooter dann auch zurückbringen, etc. Also es ist dann locker ein halber Tag Aufwand für jemanden und verursacht Kosten. Und der End User, dachte vielleicht, na ich fahre für €5,-- und wenn er dann diese Kosten aufgesetzt bekommt, dann gibt es erstmal Diskussionen und zweitens der fährt dann auch nicht mehr. Also, das Parken in Wien war wirklich so ein größeres Thema, was wir am Anfang unterschätzt haben. Wir haben es jetzt halbwegs im Griff. Weil wir in der Webapplikation halt einblenden, wo man parkt, Achtung, da ist eine Ladezone, oder so was. Und bitte nochmal checken, ob du richtig stehst, und damit ist die Anzahl der Abschleppungen deutlich zurückgegangen.

## Unternehmenskultur

**9. Was sind die Kernwerte Ihre Startups? Warum? Wie beschreiben Sie Ihre Unternehmenskultur? Welchen Idealen entstammt diese?**

Wir drei Gründer haben sehr große Autonomie, wie wir halt eben 3 verschiedene Felder bearbeiten, sprich bei der IT akzeptieren die beiden anderen meine Entscheidungen und stellen sie nicht in Frage. Und genauso, wenn ich was im Marketingbereich vorschlage, dann diskutieren wir das, aber es wird dann meistens sowieso im Konsens entschieden. Ich denke die Autonomie von den anderen gegenseitig zu akzeptieren, das ist wichtig. Offene Kommunikation, wenn irgendwas falsch läuft, oder wenn man wo Hilfe braucht, wenn man Probleme sieht, dass man die vielleicht gemeinsam lösen kann. Akzeptieren, dass die anderen auch Menschen sind und nicht perfekt.

**10. Wie groß ist Ihr Team? Was sind Ihre Erwartungen an das Team?**

**11. Warum haben Sie sich für Ihren Standort entschieden? Was finden Sie besonders gut daran?**

Wir wohnen alle in Wien und wir haben gesehen, dass das etwas ist, was großen persönlichen Einsatz erfordert. Gerade in der Anfangszeit, wo wir keine zusätzliche Hilfe von außen hatten, also keine Beschäftigten, kam was anderes einfach nicht in Frage. Erstens das. Zweitens, auch wenn Wien schwierig ist, weil halt sehr guter öffentlicher Verkehr und Car Sharer usw, wir haben uns gesagt, ok, wenn wir es in Wien schaffen, dann schaffen wir es überall. Und Wien hat halt eine Masse, eine gewisse kritische Masse. Deswegen war halt unsere Annahme, ok, wir probieren es auf jeden Fall hier. Und wenn es gut läuft, dann können wir immer noch sagen, Expansion in eine andere Stadt.

**Vision des Startups**

**12. Was sind die Hauptziele des Startup's für die kommenden Jahre? Was sind die nächsten Schritte?**

Wachstum in erster Linie. Also wir sind der Meinung, dass wir in Wien noch nicht so viele Fahrzeuge haben, wie wir haben könnten, oder wie der Markt annehmen würde. Es ist natürlich die Herausforderung in nächster Zeit, ein Konkurrent hat ja aufgemacht vor 6-8 Wochen, und ein zweiter steht in den Startlöchern, beide in Wien. Also momentan müssen wir uns in Wien gut behaupten und gut anziehen. Das heißt Expansion in eine andere Stadt ist jetzt keine Priorität.

**13. Wie sehen Sie die Zukunft der Personenmobilität und inwieweit denken Sie wird Ihr Startup diese beeinflussen?**

Ich glaube, dass diese, also dieses Car Sharing und Fahrzeugsharing eine Zwischenstufe ist. Und in 10 Jahren wird wahrscheinlich Car Sharing ein bisschen zurückgehen, durch das Selbstfahren, also durch die selbstfahrenden Fahrzeuge. Weil, es ist dann schon ein Unterschied, ob man einfach in eine App klickt und dann kommt ein Fahrzeug vorbei, dann setzt man sich rein, liest eine Zeitung und kommt an, wo man will. Das ist dann doch auch ein deutlich besseres Argument, als jetzt mit dem Car Sharing, ich gehe zu dem Car2go, ich mache es auf, ich fahre dorthin, suche einen Parkplatz, schau, ob der legal ist, steige aus, dann latsch ich noch 150 m zu meinem eigentlichen Ziel, weil der Parkplatz halt nicht dort in der Nähe ist. Also meiner Meinung nach, sind selbstfahrende Autos eine wesentlich

bessere Alternative, als Car Sharing und sie werden letztendlich nicht mehr kosten. Es wird halt Leute geben, die natürlich selbst fahren wollen, die Gruppe wird es immer geben, aber meiner Meinung nach, wird das nicht die größte Gruppe sein und es wird auch immer Leute geben, die sagen naja ich will jetzt doch noch mit dem Zweirad fahren. Deswegen wird es uns dann wahrscheinlich noch lange geben.

**14. Was werden die größten Hindernisse für Ihr Startup in den nächsten Jahren sein? Wie planen Sie diese zu überwinden?**

Ja, es könnte einfach so gesellschaftliche Prozesse geben, die das Sharing wieder unbeliebter machen. Das könnte ich mir vorstellen, das ist halt einfach momentan Hype. Aber, letztendlich leben wir von den intensiveren Nutzern, und wenn so ein Nutzer mit dem €100,-- im Jahr ausgibt, wird er sich auch irgendwann überlegen, warum kaufe ich mir nicht meinen eigenen Scooter, und dann hört er von einem Tag auf den anderen einfach auf. Letztendlich, wenn es in Österreich wieder günstiger wäre, Fahrzeuge zu halten, und Benzin günstiger wird und Versicherungen günstiger werden, und so was, könnte für viele Leute die Gleichung wieder anders aussehen. Also Besitzen versus Sharing. Und irgendwelche Fahrzeugtrends, auf die wir nicht rechtzeitig reagieren im Fun-Bereich, irgendwelche Dreiräder, statt Zweiräder, oder keine Ahnung, Elektromobilität, solche Dinge. Also das wäre eine mögliche Gefahr, wo wir halt einfach up-to-date bleiben müssen, um wirklich ein besseres Angebot zu bieten, als ein Fahrzeug selbst zu benützen. Andererseits gibt es auch Trends, die natürlich für uns sprechen. Die zwei Konkurrenten, das ist halt jetzt etwas, worauf man aufpassen muss. Wobei ich der Meinung bin, dass Wien noch deutlich mehr Fahrzeuge verträgt, als wir jetzt schon haben und ich denke zu einem gewissen Grad, belebt die Konkurrenz auch wirklich das Geschäft. Weil einfach viele Leute noch nicht wissen, dass es diese Kategorie überhaupt gibt, und wenn sie es dann wissen, dann können sie uns exklusiv, oder gleichberechtigt mit den anderen nutzen, aber das steigert letztendlich auch die Nutzung.

**15. Wie gehen Sie mit Wettbewerb im Geschäftsfeld um? Wer sind Ihre größten Konkurrenten und wie unterscheiden Sie sich von diesen?**

Die gibt es, aber die werde ich nicht öffentlich diskutieren.

## Parkbob: Christian Adelsberger (Founder)

### Mission des Startups

**1. Warum besteht Ihr Startup? Was ist Ihr Hauptleistungsversprechen/Kundennutzen (main value proposition)? Was hat Sie dazu motiviert das Startup zu gründen?**

Was hat mich dazu bewogen, das Startup zu gründen, war wirklich eine persönliche Erfahrung. Alltäglich der Parkwahnsinn, das war also, man ärgert sich so oft und irgendwann hat man sich zu viel geärgert und dann war der Punkt da, ok das muss man dringend besser machen können. Es kann doch nicht sein, dass heutzutage mit so vielen Technologien nicht möglich ist, Zeit, Geld und Nerven zu sparen. So geht es nicht nur mir, sondern es gibt ja hunderte Millionen von Menschen.

Unser Hauptversprechen, unsere Vision, die dahintersteckt ist, wir machen es möglich die ultimative, also auf Englisch so schön, enabling the ultimate street parking experience. Das bedeutet, dass wir einfach das Erlebnis der Menschen in der Parksituation wesentlich verbessern wollen, mit dem Impact, dass die Autofahrer dementsprechend Geld, Zeit und Nerven sparen.

**2. Wer sind die idealen Kunden des Startup's und wie sprechen Sie diese derzeit an?**

Also unsere Kunden, das sind Automobilhersteller, Mobilitätsdienstleister, und Navigationsdienstleister, das sind unsere Kunden des Unternehmens. Die Nutzer des Service, sind wirklich die Autofahrer, die da dranhängen. Aber unsere Kunden sind genau die genannten Unternehmensbereiche.

**3. Wie wurde das Startup zu dem, was es heute ist? Betrachten Sie Ihr Startup als erfolgreich? Warum? Welche Faktoren führen dazu, Ihrer Meinung nach?**

Ja, ich denke, dass wir sehr erfolgreich sind, in was wir tun. Uns gibt es seit bisschen mehr als zwei Jahren. Wir haben uns einerseits vom Team her sehr verbreitet. Wir sind jetzt 16 Mitarbeiter bei Parkbob, die an dem Thema arbeiten. Ein wesentlicher Faktor ist, denke ich, dass wir ein gutes Timing erwisch haben für dieses Thema. Vor 3-4 Jahren war es wesentlich schwieriger dort anzudocken, weil die, einerseits die Durchdringung von mobilen Dienstleistungen noch nicht so gegeben war, und andererseits die Bereitschaft von Großunternehmen, die unsere Kunden sind, mit Startups zu arbeiten, auch noch nicht so gegeben war. Das heißt, ich glaube, wir haben, den richtigen Zeitpunkt erwisch. Auch weil

zum Beispiel Player wie Google Maps Parkinformationen einfließen lassen. Google treibt den Markt auch sehr stark an. Also ein Faktor, sprich Timing. Zweiter Faktor ist, ich glaube wir haben relativ früh begonnen mit den richtigen Unternehmen in diesem Bereich zusammenzuarbeiten, in diesem Ökosystem. Wir haben recht früh strategische Partnerschaften mit Car2gom sind wir eingegangen. Wir haben uns für den österreichischen Markt sehr früh die Telekom Austria als Partner gesichert, die uns da auch sehr unterstützt hat, indem wir das Service in Wien gemeinsam eben gelauncht haben. Das hat uns auch Erfolg gegeben. Das sind sicher sehr starke Faktoren, die da mitreingehen. Was vielleicht auch noch mitreinspielt, ist der Fokus, generell. Nicht nur inhaltlicher Natur, sondern auch vom Geschäftsmodell her. Also wir verstehen uns als ganz klassisches B2B Unternehmen. Im B2B Bereich aus Österreich heraus, was großes zu launchen, ist eine sehr große Herausforderung. Also war der Fokus dann doch sehr entscheidend.

### Startup-Gründer

#### **4. Wann wussten Sie, dass Sie Unternehmer werden wollen? Warum wollten Sie Unternehmer werden? Was motiviert Sie?**

Es ist immer schon im Hinterkopf rumgeschwebt. Ich komme aus einer Unternehmensfamilie. Das heißt, bisschen in die Wiege gelegt auch. Es war kein klarer Entschluss als solcher vorhanden. Es war eher, ich war hineingestolpert irgendwie. Man hat begonnen am Thema zu arbeiten, man probiert aus, aha das funktioniert, wie schaut es im Business weiter aus. Das hat sich schrittweise so entwickelt, und dann steht man da und sag ok, gründen wir jetzt das Unternehmen.

#### **5. Erzählen Sie mir bitte ein bisschen über Ihren Hintergrund. (Was haben Sie studiert?, etc.)**

Mobilität ist jetzt reiner Zufall. Also ich habe BWL und Jus studiert, als auch dann in den Tätigkeiten später, keinerlei Bezugspunkte zur Mobilität gehabt. Es hätte auch ein anderer Bereich sein können. Der Treiber ist eher der Fachbereich der Digitalisierung, der uns antreibt und jetzt ist es passend. Ich finde den Mobilitätsbereich unabhängig davon, aber sehr spannend, weil er sehr im Umbruch steht. Daraus ergeben sich dann auch die umfassenden Möglichkeiten.

- 6. Können Sie mir bitte ein paar Merkmale auflisten, die Sie am besten beschreiben? Was zeichnet Sie als Gründer aus, könnten Sie mir Ihre Stärken und Schwächen nennen?**

Ich glaube Zielstrebigkeit, Beharrungsvermögen, ist glaube ich ganz entscheidend, und ein bisschen Wahnsinn, im Sinne von risikofreudig. Ein bisschen Neugier und Interesse an Neuem.

- 7. Welche Faktoren bezeichnen Sie als kritisch für den Erfolg eines Startups? Was ist Ihre Definition von Erfolg?**

Für den Erfolg des Startups spielen natürlich viele Faktoren eine Rolle. Der Gründer ist ein Faktor, ein wesentlicher, aber der Erfolg des Startups wird durch das Team maßgeblich erzeugt. Der Gründer ist das eine, das Team ja, wenn man kein starkes Team hat, dann wird man nicht weit kommen. Die zweite Seite sind natürlich auch die Investoren. Diejenigen, die einem ermöglichen, mit dem Kapital zu arbeiten, ein Team aufzubauen und daraus was zu machen. Das ist aus meiner Sicht auch ein ganz wesentlicher Faktor.

- 8. Was waren bis jetzt die größten Probleme, die Sie bei Ihrer Gründung hatten? Was ist das schwierigste daran ein Startup zu führen? (klügste Entscheidung / größter Fehler)**

Es ist so, dass wir zu zweit waren und ich einen Mitgründer hatte, einen Techniker. Wir haben eine Förderung beantragt. Die Förderung hätten wir auch bekommen. In einem Tag vor der Vertragsunterzeichnung ist dann der potenzielle Mitgründer abgesprungen. Es war ihm zu viel Risiko. .... Infolge haben wir die Förderung nicht bekommen, weil wenn das Gründerteam auseinanderbricht, dann wird das nichts mit der Förderung. Das war schon ein extremer Schlag. Da hat es mich schon umgehauen, wo ich mir die Frage gestellt habe, soll ich das jetzt überhaupt machen, wenn ja wie. Da hat es dann schon größere Zweifel gegeben. Im Nachhinein betrachtet, bin ich aber froh, dass mir das passiert ist, weil besser früh, weil es wird nicht leichter. Vor der Gründung ist alles noch ziemlich easy.

## Unternehmenskultur

- 9. Was sind die Kernwerte Ihre Startups? Warum? Wie beschreiben Sie Ihre Unternehmenskultur? Welchen Idealen entstammt diese?**

Wir haben bei uns intern schon eine company culture evaluation gehabt. Was da herausgekommen ist, die Values, sind einerseits atmosphere und team spirit, klassischer value,



Integrität und Ehrlichkeit, respect and equality, appreciation, und believe in product und passion.

### **10. Wie groß ist Ihr Team? Was sind Ihre Erwartungen an das Team?**

Das deckt sich auch ziemlich mit meinen Erwartungen. Es war auch schön herauszufinden, dass was aus dem Team rauskommt, sich sehr gut auch widerspiegelt mit meinen persönlichen Values, die ich als sehr wichtig empfinde.

### **11. Warum haben Sie sich für Ihren Standort entschieden? Was finden Sie besonders gut daran?**

Wien ist einfach der Lebensmittelpunkt. Keine spezifischen Überlegungen.

## **Vision des Startups**

### **12. Was sind die Hauptziele des Startup's für die kommenden Jahre? Was sind die nächsten Schritte?**

Die nächsten Schritte sind bei uns zum Thema Internationalisierung. Unsere Vision ist es, ein globaler Player zu werden und Millionen von Menschen jeden Tag den Alltag zu erleichtern. Das heißt, dass wir global tätig sein müssen. Wir haben da jetzt in den letzten sechs Monaten stark aufgeholt in den europäischen Märkten und decken jetzt 25 Städte in Europa ab. Ab Herbst geht es dann in Richtung Nordamerika. Das ist die eine Seite, die andere Seite ist um eben diese Millionen und Millionen von Autofahrer überhaupt unterstützen zu können, setzten wir nicht auf einen consumer service, sondern setzten wir darauf, andere Unternehmen zu unterstützen, dass sie ihren Kunden den Service anbieten (TOMTOM, Google, etc.) Das heißt diese Unternehmen, mit denen wir jetzt sprechen, ganz konkret auch die Partner auch zum Kunden zu machen, ist eine weitere wichtige Zielsetzung, auch der Weg dorthin.

### **13. Wie sehen Sie die Zukunft der Personenmobilität und inwieweit denken Sie wird Ihr Startup diese beeinflussen?**

Also was vollkommen klar ist, ist, dass das Thema an sich, sich verändern wird. Das Problem ist momentan, dass beim Parken schlechte Entscheidungen getroffen werden, weil die Leute dazu keine verlässliche Information haben. Dann kreist man sinnlos rum, weil man nicht weiß, dass links drüben, ein Parkplatz frei ist. Darum, weil man nicht weiß, dass da gerade wirklich nichts frei ist, und wenn man das aber weiß, dann kann man bessere Entscheidungen treffen, und kann gleich in die Parklücke fahren. Oder kann gleich weiter

wegfahren. Das sind alles fehlende Informationen momentan, die das Problem überhaupt erzeugen. In dem Kontext, ja sind wir überzeugt davon, dass wir einen großen Anteil davon entwickeln können.

### **14. Was werden die größten Hindernisse für Ihr Startup in den nächsten Jahren sein?**

#### **Wie planen Sie diese zu überwinden?**

Ich glaube da gibt es sehr viele. Das offensichtliche ist, dass dem Startup zufälligerweise das Geld ausgeht und man keine Anschlussfinanzierung findet. Dann war es das. Das ist so ziemlich ein großes Hindernis. Generell, wir kämpfen teilweise gegen sehr große Player an. Das ist eine absolute Herausforderung. Rein rechtlich ist man verwundbar über Patente, die andere haben, Markenrechte, die andere haben, wo man schneller mal in rechtliche Streite landet. Das Team aufzubauen und zu skalieren ist eine riesen Herausforderung, eine riesen Hürde. Von einem Team von 12-15 Leuten auf ein Team von 25 zu gehen, ist ein riesiger Schritt, wenn man sich von bisher einer sehr chaotischen hin zu einer strukturierten Organisation entwickeln muss. Dann die richtigen Leute für diesen Weg zu finden, den man gemeinsam geht, ist immer eine Hürde. Das sind so die großen Dinge, die mir spontan einfallen.

### **15. Wie gehen Sie mit Wettbewerb im Geschäftsfeld um? Wer sind Ihre größten Konkurrenten und wie unterscheiden Sie sich von diesen?**

Wir fokussieren uns zum Beispiel nicht auf das Parken generell, sondern wirklich auf das Straßenparken, das öffentliche Parken, also street parking. Punkt zwei, wir setzen extrem stark auf Qualität und hier gibt es andere Player, die zum Beispiel eine große geografische Abdeckung vorweisen können, aber wo es mit der Qualität hapert. Uns gibt es darum, Menschen zu helfen, bessere Entscheidungen zu treffen, und diese Entscheidungen brauchen auch gute Qualität von Information für unsere Nutzer ist entscheidend. Wir sind auch sehr technologiegetrieben. Das bedeutet, dass wir versuchen Tätigkeiten, die wir tun, technologisch auch effizient abzuwickeln und größtmöglich auch zu automatisieren, damit wir eben es schaffen, zu skalieren und eben auch verschiedene Kontinente auch abzudecken und global Player zu werden.