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Sharing economy as an emerging global trend. The case of ofo in The People's Republic of China.

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Declaration:

I hereby declare that I am the sole author of the thesis entitled "Sharing economy as an emerging global trend. The case of ofo in The People's Republic of China.". I duly marked out all quotations. The used literature and sources are stated in the attached list of references.

In Prague on 28.04.2018

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ABSTRACT

This study is dedicated to investigating the sharing economy as a global trend in various

industries. After identification of the main general patterns of the phenomenon, the research

is narrowed to Chinese market. The choice of The Peoples Republic of China is pre-

determined by the scale and specific local characteristics of the trend, which were highlighted

in the study. Furthermore, the detailed case analysis of ofo, the Chinese leading bike-sharing

platform, was used as a tool to reveal and understand the main operational patterns of the

sharing economy players in general. The value and usefulness of the findings and lessons

drew on this particular case, lay in applicability to the other companies, involved in the

sharing economy.

Key words: Sharing Economy, Collaborative Consumption, The Peoples Republic of China,

Bike-sharing, ofo.

ANOTACE

Tato studie je věnována zkoumání sdílené ekonomiky jako globálnímu trendu v různých

odvětvích průmyslu. Po identifikaci hlavních obecných charakteristik tohoto fenoménu se

výzkum zužuje na čínský trh. Výběr Čínské lidové republiky je určen především specifickými

místními charakteristikami tohoto trendu, které byly ve studii zdůrazněny. Jako nástroj k

odhalení a pochopení hlavních provozních modelů účastníků sdílené ekonomiky byla

použita podrobná případová studie společnosti "ofo", čínské vedoucí platformy pro sdílení

kol. Hodnota a využitelnost závěrů studie spočívají v použitelnosti pro ostatní společnosti

zapojené do sdílené ekonomiky.

Klíčová slova: sdílená ekonomika, společná spotřeba, sdílená kola, ofo.

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INTRODUCTION

The sharing economy is a revolutionary new type of consumption, aimed at solving global problems, caused by a growing global demand for consumption. Conversely, it is a new type of interaction between people and a new concept that has already proved its usefulness in many spheres of human activities.

The sharing economy is a way of interaction between the two parties, one of which has resources, but does not use them, and second – needs these resources and is ready to rent them to satisfy his/her needs. This phenomenon is designed to address the current challenges facing the society, particularly, inefficient use of resources. Consequently, an act of consumption is performed in an absolutely innovative format, where the satisfaction of the needs implies much less spending than before.

Consumption has been explored by the economists of all times. The studies of the scholars, starting from H.H. Gossen and ending with J. Hicks, have been aiming at generating a new consumption model, both at individual level and at the level of society in general. However, in the beginning of 2000s economists looked at consumption from the other side and suggested to use the model of renting of idle assets. Thus, consumption has become more available for a wide variety of individuals.

The previous century experienced an abundance of items being produced. A consumer was physically unable to buy everything produced and use everything bought. Today, the sharing economy replaces overproduction and the over-consumption ruled in the 20th century.

Although, humanity has learned to share long time ago, the sharing economy appeared only recently. The reason is that in the past, the process of searching for a partner for collaborative consumption used to be difficult and stretched out in time. Development of the internet, and, particularly, of social networks made this search fast and convenient, and sharing, in turn, became mass.

The new trend is gaining momentum all over the world and has already reached such a scale that can be seen as a competitor to the traditional economic model. Active usage of smartphones and mobile payment systems simplifies cashless transactions between the users, thus, facilitates access to services. In 2011 American journal Time called collaborative consumption one of the ten ideas that will change the world (Walsh, 2011). The revolutionary character of the trend that is happening in front of our eyes has inspired the author of the thesis and has predetermined the topic of the research.

In the West, sharing has settled among Millennials who prefer spending less to great expenses. Despite popularity, the sharing economy is not supported ideologically. The governments and traditional businesses consider the emerging phenomenon to be a threat and put efforts to hinder its development.

In contrast, in China, sharing has become a trend supported by both the government and local businesses. Sharing economy appears to fit the Chinese socialistic ethos. Indeed, it has certain communistic features. In a simplified model sharing economy implies that property is owned by the society and individuals use it "according to their needs". Conversely, the sharing economy has many features which innate to a capitalist society: clients pay for the product or service only during direct usage, hence, can accumulate capital and invest it in other spheres.

The Chinese government development plan is aiming at the realization of an innovative development strategy within the programs "Made in China 2025" and "Internet Plus" (Wübbeke, Meissner, Zenglein, Ives, & Conrad, 2016) and (Hristov, 2017). Therefore, it does not only foster the introduction of new technologies, but also facilitates new industries and businesses, in particular, the sharing economy, that became the new growth factor.

Hence, China being a global leader of the sharing economy, is also a unique example of successful mixture of traditions and innovations. The scale of the trend in China and its unique implementation in China's case, as well as personal interest in the country are the reasons of narrowing the current research to this particular country.

China is often referred to as "the kingdom of bicycles". It is not a surprise that China is the country which gave birth to a revolutionary new model of station-less bike sharing. Living in the country and experiencing the new trend from inside has inspired the author to analyze the case of ofo, the leading bike sharing platform, as an example of the Chinese sharing economy representative.

Throughout the paper readers will move from the general to the specific, starting with the sharing economy at the global level, then narrowing the research to one particular country, namely China and finishing with the case of one company, ofo. The thorough research has been carried using the existing relevant literature in English, Chinese and Russian languages possible to access. With consideration of filling in the gaps of the existing knowledge, the following objectives were developed:

- 1. To understand the sharing economy through the analysis of different scholars' perspectives;
- 2. To highlight the future opportunities and threats of the sharing economy;
- 3. To distinguish the specific features in the Chinese sharing economy compared to the previous findings;
- 4. To investigate the bike-sharing as a growing sector of the sharing economy through the insight of the ofo company and drawing on lessons from the ofo case.

The objectives predetermine the structure of the research and are addressed step by step via different methods. In chapter 1, the concept of the sharing economy is analyzed through the comparison of different scholars' perspectives. The chapter starts with describing the issues regarding the definition of the trend. Next, the interchangeable terms are reviewed. After comparing the existing definitions of a number of respected scholars, the own definition to be accepted in the paper is generated. Next, the forces together with the barriers to the global sharing economy are investigated. To provide readers with a clearer and more detailed image of the trend, the areas and the sectors of the sharing economy are also highlighted. Next, follows the discussion about the future of the sharing economy, based on the opinions of the scholars and supplemented by the author's own view. The first chapter ends with a summary of advantages and disadvantages of the phenomenon.

Chapter 2 provides the specifics of the sharing economy in China in contrast to the previous findings. The chapter starts with analyzing the specific drivers, and then moves to the unique features differentiating China from the rest of the world in terms of the sharing economy.

Chapter 3, being the main part of the analysis, consists of many subchapters for readers' convenience. After introducing the history of the global bike sharing, the rest of the paper is devoted to exclusively one company, ofo. The company is analyzed step by step in the following order: business model, first mover advantages and disadvantages, innovations, Porter's five forces analysis, 4P analysis. A considerable part of analyses is devoted to the comparison of the company with its main rival, Mobike. Closer to the end, readers get an interpretation of the users' survey and insider's interview, conducted by the author. The third chapter ends with a summary in the form of SWOT analysis and recommendations on the future development of the company. Every analytical subchapter starts with the theoretical framework introducing the tool used in the section. The illustrative graphs and tables are used to simplify understanding.

Being a theoretical part of the study, the first chapter consists of the relevant literature reviews written in English language. It then initializes, compares and summarizes existing research done on the topic of the sharing economy. This part of the paper is very important for the author, as the review of the previously conducted research created an in-depth understanding of the topic and guided her towards the empirical data collection. It is also crucial for readers, as it explains the broad concept from the points of view of different scholars who worked on the topic and provides necessary knowledge of the subject before narrowing it to the size of one particular company in one particular country.

The literature used in the first chapter consists of books and articles of respected scholars in the field. They are Rachel Botsman, a recognized expert on collaboration and trust, Lawrence Lessig, ethicist and professor at Harvard, who introduced the term "sharing economy", Arun Sundararajan, an expert on the economics of digital goods and network effects, Sarah Kessler, a senior writer about the sharing economy at Fast Company, and others.

The methodology used in the second chapter is also a secondary research. However, unlike the first chapter, here the review was done on a broad range of articles, internet journals, blogs, written in both English in Chinese languages, by less known but equally competent economists and journalists, mostly of Chinese origins. A considerable amount of literature, directly or indirectly related to the topic, was reviewed and recycled in order to generate a short and comprehensive description of the main specifics of China's sharing economy. In addition, the chapter also contains the author's own observations and analysis.

The third chapter is the richest in terms of methodology. The secondary research is used in the beginning of the chapter and includes literature reviews and analysis of the company's data accessed via ofo official web-pages. Next, multiple analytical tools, learned in the process of business study, supported by the theoretical framework, are applied. The primary research helps to fill in the gaps in the secondary data and contribute to the theory. The quantitative research is conducted in a form of online survey of the real bike users, living in China. After the data collection, the results are analyzed and interpreted in order to prove or reject the hypothesis, created by the author based on the previously conducted secondary research. The qualitative research is carried out in a form of a semi-structured interview. The ofo business development manager, responsible for the expansion of ofo to Czech Republic was interviewed via phone. This tool is used as a research technique to collect the further

empirical data. The main focus of the data collection was to get the view from inside the company on its business situation.

The main motivation of the current research is the absence of an English comprehensive study on the Chinese sharing economy. This unfortunate gap should be filled in, as China is the leader of the trend. Same with scarcity of information of the new model of bike-sharing both in China and globally, limited by a number of blog posts and amateur journal articles, written mostly in Chinese. This leads to the situation that a highly popular trend in China is almost unknown outside the country, as non-Chinese speakers, interested in the topic are deprived of a way to get an in-depth information of the trend expanding to their countries.

The target and possible readers of this thesis are a broad range of managers of bike manufacturing companies, technological companies, sharing economy players, city planning and transportation departments, focused on IoT entrepreneurs, economists, researchers of the sharing economy and those who are just interested in the above topics.

Studying ofo, as a first station-less bikes start-up in China and a leading company within the new bike sharing industry can provide the researcher and readers with a better understanding of the industry in general. However, this puts certain limitations on the research, as the information provided can be quite different for the other players of the industry, let alone the players of the sharing economy in general. In addition, in this thesis, the research data is delimited to information available by May 2018. Hence, the data collected in the paper is subject to this time limit and mainly focuses on the development of ofo sharing platform by May 2018.

CHAPTER 1: SHARING ECONOMY

1.1 Forewords

Since the dawn of mankind people only worried about two simple questions: how to feed themselves and how to survive. With the development of humanity, people's requirements grew. Over time, the necessary requirements were supplemented by those that bring not psychological but moral satisfaction, such as travel, education, stylish outfit. Step by step inequality emerged: while some people possessed expensive items satisfying their spiritual wants, most of the people didn't have enough means to do so and cared about the most vital wishes such as food and clothes. Nowadays, most of people are able to satisfy much more of their requirements than they used to even in the recent past. Therefore, aggregate demand for welfare has been raising and has already reached its peak (Meadows, Randers, & Meadows, 2004). The quantity of consumption is directly influenced by availability of resources that are used. But, first, most of the resources are non-renewable and, second, the speed of consumption is higher than the speed of resources' renewing. As was noticed by Dennis Meadows, the famous American Scholar and co-author of The Limits to Growth Model in 1972, at this rate of consumption our civilization soon will not be able to maintain the same standards of living it used to have, and will face serious challenges (Meadows, Randers, & Meadows, 2004). Humanity must seriously think of the solutions to this emerging problem that will affect everyone on the planet.

1.2 THE SHARING ECONOMY: DEFINITION

The sharing economy is one possible solution. Just ten years ago none of us could possibly imagine that some of our belongings, that were used couple of times per year and gathered dust on the shelf, can actually earn income. But today the sharing economy market is gaining momentum worldwide breaking the traditional pattern. Before going into details, it would be relevant to explain what the term actually means.

Sharing economy is a comparably new term. It appeared in the beginning of the 21st century and was linked to a new business model that was aimed to solve the urgent social problems considering rapid population growth and finite resources. It became popular thanks to the professor of Law in Stanford University Lawrence Lessig, who first used the term in 2008 and later was supported by Rachel Botsman and Roo Rogers in their book "What's Mine Is

Yours: The Rise of Collaborative Consumption" published in 2010^1 (Lessig, 2008), (Botsman & Rogers, 2011).

Despite being in rotation for almost a decade, the term is embraced with confusion. According to survey conducted in the end of 2016 by the Pew research Center, 73% of adult Americans have never heard about sharing economy before. Even more interesting is a divergence between the answers of the rest 27% who claim they are familiar with the term. 40% of respondents perceive the sharing economy as charity, helping those who are in need; 19% see it as a macroeconomic concept close to socialism in its essence; 16% gave the answer the closest to the reality, describing the sharing economy as short-term services provided by individuals or companies who receive a fee for the "sharing" (Olmstead & Smith, 2016).

As it can be seen, people are confused defining the sharing economy. But they cannot be blamed for illiteracy, as even the scholars of the field are still debating about the term. The literature on the topic is still at the nascent stage, and no strict definition has been accepted yet.

There are dozens of names for the trend, used interchangeably by different scholars: peer-to-peer economy, on-demand economy, access economy, collaborative consumption, the platform economy, crowd-based capitalism and many others. Even though used as synonyms, the terms mean slightly different things, as authors use them with different connotation, focusing on the aspect which, in their opinion, is the most important in the new trend. Juliet Shor defines it as peer-to-peer or person-to-person economic activity, facilitated by digital platforms, distinguishing it from popular business-to-peer model (Schor, Walker, Lee, Parigi, & Cook, 2015). Botsman uses the term "collaborative consumption" focusing on the new way of consumer's behavior (Botsman, 2015). Sundararajan prefers the term "crowd-based capitalism," emphasizing the way in which sharing platforms draw on the resources of the crowd to serve the needs of the crowd (Sundararajan, 2016). "Access economy" underlines the needed access to a product or service, distinguishing it from the previous business model ruled by the ownership (Gobble, 2017).

Why there are so many different terms for one trend? One of the reasons is that the widelyused term "sharing economy" is frequently misinterpreted by the masses. Coming back to the survey mentioned above, the majority of respondents believe that the essence of the

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¹ However, the term "collaborative consumption" prevails in Rachel Botsman's works as an alternative to the "sharing economy".

sharing economy lies in pure altruism. They mistakenly focus on the word "sharing" totally ignoring the more important word "economy". The reality is that the companies involved into the sharing economy earn huge profit by charging their customers. The sharing economy is not the economy of cooperation and mutual support, since its participants sell their services for good money (Sundararajan, 2016). Besides, the term "sharing economy" is often wrongly referred to the models of matching supply with demand, ignoring the fact that there is zero sharing and collaboration involved (Botsman, 2015).

Indeed, it is very difficult to say which companies belong to the sharing economy and which do not, as there is a very blurred line. As a result, sharing economy today includes many firms that in their essence contradict the main sense of this term. There is a certain number of non-profit platforms that are truly about sharing, such as couch surfing, gifting sites and land sharing. But their number is limited and they are small and unknown worldwide. In contrast, the sharing economy is frequently associated with such companies as Uber and Airbnb, which have little to do with sharing.

To answer the question if this or that company is a player of the sharing economy Rachel Botsman recommends to apply the following five key criterias:

- 1)The core business idea is unlocking the value of idling capacity;
- 2)The company has a clear value-driven mission and the meaningful principles of operation, such as transparency, humanness, and authenticity;
- 3)The providers are respected and empowered and the companies are committed to making their lives economically and socially better;
- 4) The customers benefit from the ability to get what they need in more efficient way;
- 5)The business is built on distributed marketplaces (or decentralized networks) creating a sense of collective accountability and mutual benefit (Botsman, 2015).

Often being a misnomer, "the sharing economy" turns out to be the catchiest name and it is the most widely used today. It is worth gathering existing definitions of the term, in order to generate the definition to be accepted in this paper. Table 1 illustrates the definitions presented in the major sharing economy literature.

Table 1: The definitions of the Sharing Economy.

Definition of the "sharing economy"	Reference
"An economic system in which assets or services are shared between private individuals, either free or for a fee, typically by means of the Internet."	(Osztovits et al., 2015.)
An economic system based on sharing underused assets or services, for free or for a fee, directly from individuals.	(Botsman, 2015)

"A socio-economic ecosystem built around the sharing of human, physical and intellectual resources. It includes the shared creation, production, distribution, trade and consumption of goods and services by different people and organizations."	(Matofska, 2016)
"Online platforms that help people share access to assets, resources, time and skills."	(Wosskow, 2014)
"Economic activity that is Peer-to-peer, or person-to-person, facilitated by digital platforms."	(Schor et al., 2015)
"A suite of emerging software platforms acting as an intermediary between private buyers and private sellers, allowing them to share their existing resources"	(Allen, 2015)
"The growing ecosystem of providers and consumers of temporary access to products and services."	(Santana & Parigi, 2015)
"Economic model where people are creating and sharing goods, services, space and money with each other."	(Miller, 2015)
"Is a market whereby: 1) Users are individuals, businesses, or machines. 2) There is excess supply of an asset or skillset and sharing creates economic benefit for both the sharer and the user. 3) The internet provides means for communication and coordination of the sharing."	(Olson & Kemp, 2015)
"A way for individuals to succeed by sharing privately owned assets—and by sharing information about a market demanding use of those assets."	(Dual-Chand, 2015)
"An economic model where ownership and access are shared between corporations, startups, and people. This results in market efficiencies that bear new products, services, and business growth."	(Owyang, Tran, & Silva, 2013)

Source: author.

The definitions briefly presented in the table are just some examples of those reviewed more systematically by the scholars. Taking into account all of the sharing economy definitions and summarizing the common and most important features, the definition to be used in this paper is the following:

Sharing economy is a socio-economic model, enabling the providers of goods and services to "share" it with the consumers for free or for a fee, whereby the access to existing resources is facilitated by the internet-based platforms.

Having defined the sharing economy, with all the assumptions mentioned above, it is time to look at the background of sharing economy.

1.3 Forces of the sharing economy

In simple words, the sharing economy is an interaction between two parties, one of which has a valuable asset but does not use it and is ready to share it with the second party, who needs this asset to satisfy his needs. The sharing economy has a certain historical causation of its emerge. It is worth taking a look at how this phenomenon was able to grow so quickly and become so widespread in just several years.

Active and insufficient usage of resources has led to several serious problems that humanity faced in the end of the XX century. Among these problems are global warming, extermination of many species of animals, scarcity of many types of resources. More than

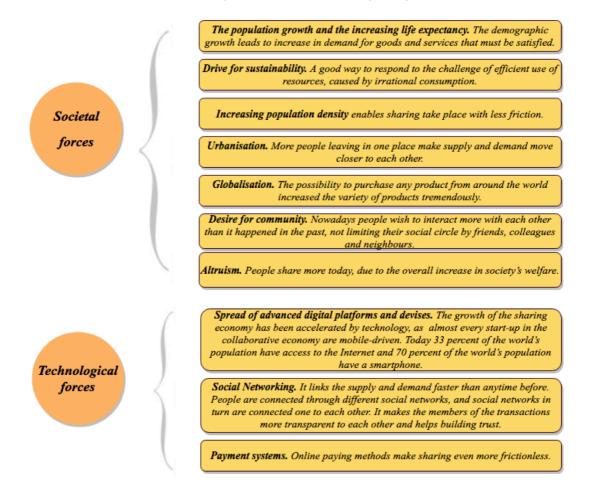
that, the rapid demographic growth, mostly in Asian region, must be considered as one of the major challenges of this time. These issues are so important today, that in the future people can face serious global problems.

However, most people still think about themselves first. This would not facilitate the development of the sharing economy, unless the fact that consumers wish to earn some profit by lending underutilized property to others. Therefore, most people are ready to change their usual consumption habits contributing to solving the human problems, but only if they benefit from it.

Consequently, a more important question occurs: what drives the sharing economy? What changes in the society and in peoples' life and mind made it possible to "share"?

The prosperity of the sharing economy is driven by numerous factors that can be combined into three main market forces, namely societal drivers, technological drivers and economic drivers. They are summarized and explained in the Figure 1.

Figure 1: The drivers of the sharing economy



Economic forces

The global recession caused the fundamental change in consumer's behaviour.

The power of idling capacity. Botsman illustrates the idling capacity using the example of the power drill: when a person buys a drill, he actually needs a hole not a drill. The unused potential of millions drills being used between six and thirteen times in their lifetime is the idling capacity.

Access over ownership is the heart of the sharing economy, that appears very logical from the economic point of view: it is cheaper to rent a luxury than to buy.

Increased financial flexibility. Today the number of freelancers and microentrepreneurs is growing considerably. Earning an extra income from sharing the idle assets is one more way to become more financially independent.

Source: (Osztovits et al., 2015), (Owyang, Tran, & Silva, 2013), (Finley, 2013), (Gorenflo, 2012), (Botsman, 2010), (Deutschkron, 2013) and author.

1.4 Barriers to the development of the sharing economy.

As in case of almost any new trend, there are certain challenges existing along with the drivers on the way of the sharing economy. The key barriers preventing the sharing economy from prospering faster are listed in the Figure 2 below in the order of importance.

Figure 2: The barriers to the sharing economy

Lack of trust between buyers and sellers. Trust is a core intangible element of all sharing transactions. It represents a certain challenge. The ways to overcome it are: a new model of rating sellers based on reviews that built them the reputation; and an insurance.

Barriers to the development of the sharing economy

Government challenges. There is a real need to regulate the sharing economy, as usual tax, regulatory and legal policies often do not apply to sharing economy business models. In some European and American cities, the government already restricts the activities of Airnbnb, Gettaxi and Uber.

Incumbent players. Sharing economy harms traditional enterprises in multiple ways:
luring customers away; not owning the assets they monetise The sharing economy
companies challenge the existing businesses, being simpler and more automated, having
unclear regulatory and legal status, as a result, paying less taxes. Consequently,
threatened incumbents put efforts to squash the new trend.

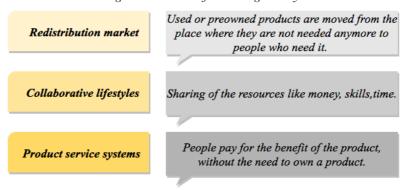
Uncertainty about which startups will stand the test of time. After the success of Uber and Airbnb, an overwhelming number of startups offering similar services have emerged, causing market confusion. But only a few will survive after venture capital funds dwindle. This is a threat first to the investors, as it is quite difficult to decide which of the start-ups have future perspectives and which will die soon; and second, for the customers.

Source: (Finley, 2013), (McLean, 2016), (The Guardian, 2016), (Benner, 2016), (Owyang et al., 2013), (EY, 2016) and author.

1.5 Areas and sectors of sharing economy.

Even though the number of start-ups considered the players of the sharing economy is enormously huge, the sharing economy can be roughly divided into three big areas illustrated in the Figure 3 below.

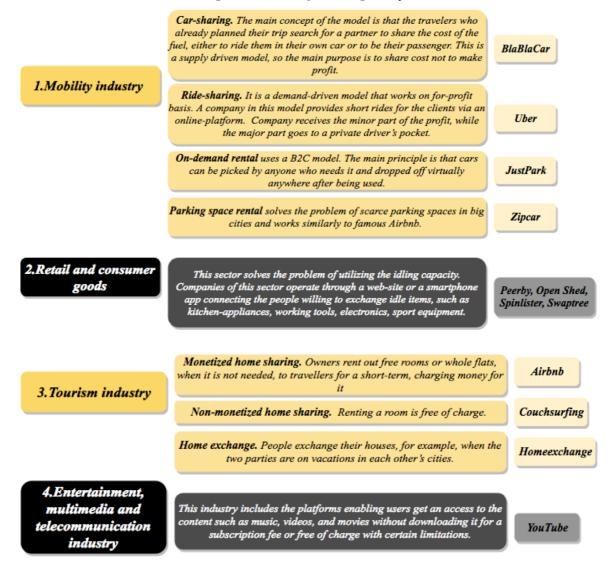
Figure 3: The areas of the sharing economy



Source: (Botsman, 2010) and author.

After defining the areas or the types of operation of the sharing economy it would be worth looking at the key sectors of the sharing economy, supported with the examples of the main players. The Figure 4 provides such information.

Figure 4: The sectors of the sharing economy





Source: (Osztovits et al., 2015), (Uber, 2017), (Justpark, 2017), (Zipcar, 2017), (Airbnb, 2017), (Couchsurfing, 2017), (Homeexchange, 2017), (Felländer, Ingram, & Teigland, 2015) and author.

It is worth mentioning that even this long list cannot embrace all the areas of the sharing economy. Tens of start-ups falling out of the listed categories are launched every day worldwide. Today people already share their dinners and luggage with strangers, rent offices, garages and boats, leave their pets in the houses of unknown people. And the number of such platforms, that look weird at the first glance is constantly growing.

1.6 SHARING ECONOMY AS A REVOLUTIONARY NEW TYPE OF CONSUMPTION

Despite being comparably new trend, according to prognosis of the PWC the sharing economy will grow on average 33 percent per year and will reach \$ 335 mlrd by 2025 (Osztovits, Kőszegi, Nagy, & Damjanovics, 2015).

Currently there are 275 resources operating in different sectors of the sharing economy in Europe. Revenues of European companies related to five key sectors of the sharing economy, according to estimates of the PwC network in 2015 was 4 billion euros, and the total volume passed through their transaction was 28 billion euros. On average, the platform receives 25% of profit, and 85% was retained by the provider of the service or product. The largest revenue sector of the European sharing economy is the transport services, including ridesharing, car sharing and services to drivers on demand. But the largest volume of transactions passes through the home-sharing platforms (Osztovits, Kőszegi, Nagy, & Damjanovics, 2015).

What has been happening around us can be seen as a real revolution, the third after the Neolithic Revolution that enabled humanity to switch from a hunter-gatherer lifestyle to fixed agriculture; and Industrial Revolution, which essence lied in division of labor and capital-intensive work that in turn boosted the wide-scale concentration of production (Lessig,

2008). The first two revolutions moved people closer to each other, making them interdependent in good sense. People rely on others in order to get things they cannot do themselves done by the others. However, consumers also rely on the ownership. We store much more items than we actually need and, as a result, pay extra costs. This is a relic of the past. Almost everything we own today is a potentially rental item, and maybe in the nearest future we will not own anything that stays in our garages today, we will just rent it from someone else when needed.

Until recent times when we needed some item or service, we were buying it from firms. This familiar model has been changing nowadays in two directions: the move from owning to renting and the move to peer to peer instead of business to consumer transactions. And these changes are, indeed, a revolution, that will eventually result in anyone having much less stuff.

Probably, it will lead to many people losing their jobs (at least the jobs in a sense how we understand them today). Nevertheless, most people will benefit from this revolution, because "although nominal wages may fall, the quality-adjusted price level will fall by more, implying an actual increase in real wages" (Munger, 2016).

More than that, the environment will definitely benefit. There will be less energy used, less resources wasted, less carbon emission will be produced by cars. Thus, in terms of sustainability, the third revolution can be seen as a positive phenomenon.

1.7 SHARING ECONOMY: DYING OR TRANSFORMING.

However, not all the scholars agree with the positive way of thinking presented above, but on the contrary, believe the sharing economy is doomed to death in short order.

At the dawn of the sharing economy it was considered that it's distinguishing feature is in clearly expressed social component. The micro-financial organizations were launched to serve the noble purpose: through them the individuals could give a loan, for example, to a craftsman to buy a sewing machine for his workshop. The services for renting private apartments and for private driving were aimed to facilitate socialization. The first promised travelers, that interaction with a host would help them to better know the country and the city; the second promised hospitable driver who will turn a boring ride into an interesting journey.

However, on practice, the consumers are more interested in the economic aspect of the sharing economy projects, they prefer services that make their life easier and allow them to save money to those that underline their social mission. So, if we go to Airbnb website in

many regions approximately two thirds of offers enable the travelers to rent the whole apartment without the host staying there. Electronic marketplace Ebay, that was emerged as an online junk-shop where people tried to sell useless stuff to others, turned into a marketplace where major producers and shops sell their products.

Instead of companies that would facilitate people's interaction and reduce waste, what emerged were the platforms that awkwardly fit into the concept of the sharing economy. As a result, today this term includes hundreds of companies that have little in common. They try to pretend that they share goods or devices with people, but in reality, they just simply sell it. Airbnb "shares" the accommodation, but similarly to traditional hotels charges the guests per night; Netflix "shares" videos receiving money from the subscribers; Uber "shares" the labor of private drivers, who are payed by the hour of mile (Kessler, 2015).

The real sharing economy is dead, argues Sarah Kessler. Everybody felt really excited about the power drill example, provided by Botsman in 2010 and supported later by others. But on practice, it has nothing to do with reality. People still buy those useless drills. They are not that expensive, and it is much more convenient to have them in your house and use when needed, than wasting time searching from where to borrow it, waiting until it is delivered to you and then deliver back after using it. Besides, you never know whether the drill is good enough, whether the drill bits are sharp. And in case you spoil it, you need to pay the owner compensation. This all is too complicated and the saved money is not worth this inconvenience (Kessler, 2015).

However, I disagree with miss Kessler. Maybe drill was actually not the best example, simply because of its cheapness. But people are willing to share expensive things as proven by success of home and car-sharing platforms.

Lawrence Lessig writes in his book "Sharing Economies", that sharing economy is "regulated not by price, but by a complex set of social relations", that sharing economy "cannot be defined in terms of money" (Lessig, 2008).

From my point of view, it can. What is happening to the sharing economy is not the death, but transformation. Today's sharing economy is "sharing made mercantile. It is goodwill with an instrumental purpose, occupying the rarest of places: where self-interest and public good happily coincide" (Osztovits, Kőszegi, Nagy, & Damjanovics, 2015).

This statement explains why the giants such as Uber and Airbnb get the most attention. At these platforms, the providers make real profit and the users save good money.

To draw the line to the discussion, today's sharing economy has little to do with actual sharing. But in terms of utilizing idling capacity and moving from owning to access, it does have future and will prosper, in my opinion.

1.8 Pros and cons of the sharing economy

A lot has been said about the positive sides of the new emerging trend, as well as some dark side have been shortly mentioned. To draw the line on the discussion of the sharing economy in general, the key advantages and disadvantages of the sharing economy will be summarized in the tables below.

Table 2: Advantages of the sharing economy

Table 2. Havanages by the sharing economy	
Pros	Explanation
Full utilization of resources.	Sharing economy solves the problem of idle capacities or wasted resources. Resources are maximized, while unnecessary waste is minimized through adding the fifth R (Reduce, Reuse, Recycle, Repair and Redistribute).
Less environmental pressure.	Full or almost full utilization of resources is able to solve the environmental problems.
Cheaper goods and services	As the main idea of the sharing economy is that it is more efficient to share goods, services, and skills than to own them, the costs for goods, services, and time will be reduced.
New and better opportunities.	Due to the sharing economy people have access to things, not practical or affordable to own. In case of cars, for example, people used to convince banks to give them a loan, then had to pay the interest and to spend money for maintenance. But today, we can access a car and get the benefits of using it when needed.
Increase in product and service diversity.	As the trend of "sharing" is prospering, there is an evident need for such platforms to remain competitive. This encourages businesses to constantly come up with new ideas and new variations on their product or service offerings.
New business ideas.	Crowdfunding and collaboration open up the opportunities for people with business ideas but without enough money.
Extra income for providers.	The sharing economy enables an owner to unlock the potential value of an unused item or underutilized talent for a fee.
Development of a culture of trust.	As trust is a core component enabling "sharing" to happen, companies now recognize that it is important to build bridges between all the players. Therefore, the further sharing economy will develop, the more people will be able to trust each other.
Stronger communities.	Co-working and task marketplaces are built on the idea of interpersonal collaboration and resource- sharing. This idea turns the users of a platform into a community, who is interacting and helping each other.
Evolution of the role of a company.	The sharing economy expands the role of a company beyond providing a service. Today a firm can also be seen as an adviser worth trusting. Sharing economy brings organizations closer to their target market, making them more than just a seller and a buyer.

Source: author.

Table 3: Disadvantages of the sharing economy.

Cons	Explanation
Issue of	Trust is a double-edged sword. If one of the parties involved violates his responsibilities, it can lead to serious
responsibility	consequences. Unfortunately, there is almost no guarantees in the sharing economy deals, thus, the
and	participants should assume certain risks and be ready for unfair payment, lower quality product or service.
accountability.	This can be solved with the deposit or insurance, but only partly.
Risk of fraud.	
	There might be a real intent to mislead and a sharing-economy transition might turn into a fraud. Online deals can be dangerous, as you mostly do not know the real name, the address or other information about the other party. Thus, it can happen, that a freelance worker will not get paid after delivery of his work with no chance to find the client.

Issue of privacy, and security.	The parties involved into a sharing economy deal are required to forfeit some privacy. Leasing your house or car to a stranger, renting items online, using task-platforms involve certain risk. Besides, using the sharing economy platforms, you share personal information: credit card information, bank details, personal identity information, which might be revealed or used for lucrative purposes.
Loss in government revenues.	First, businesses over the internet are not regulated. Second, individuals from different parts of the world can offer their services for the citizens of one particular country. As a result, not everybody who earns an income through online business, pay taxes, which should have been added to government's tax revenues.
Threat to enterprises	Sharing economy will enable us to buy and own much less stuff, as many things can be shared and reused. Therefore, a traditional economy in which entrepreneurs have always been focused on making new products or on making more old products more inexpensively will be shaken to its foundations. It means that the traditional enterprises will sooner or later have to reconsider the whole model of making business.

Source: author.

CHAPTER 2: SPECIFICS OF THE CHINESE SHARING ECONOMY

The global adoption of the sharing economy is happening worldwide nowadays, however, a country which has truly embraced the sharing economy to a far greater extent than the rest of the world is China.

According to the country's State Information Center report, China's sharing economy transactions were worth \$229 billion in 2015. This number doubled in only one year and is predicted to grow by 40% annually in the next five years and will reach 10% of China's GDP by 2020 and 20% by 2025. In 2015, 100 million Chinese were involved in the sharing economy activities, while today, the number is estimated at over 600 million (CSIC, 2016). China's market has created 12 unicorns² in the sharing space, more than any other nation (CKGSB Knowledge, 2017).

These huge numbers are the first distinguishing feature of the sharing economy in China. To get the deeper insight of the Chinese sharing economy and to understand how else it differs from the rest of the world, it appears logical to start the investigation with the main drivers of the trend in that particular country.

The first driver of the flourishing sharing economy in China is technology, as well as in the rest of the world. However, this factor appears to differ in scope and scale in China.

To start with, China has nearly 700 million smartphone users, which is more than a half of the country's population. Smartphones for them is the primary mean to access internet (Statista, 2016). It is not a secret that smartphones are a vital part of almost every sharing start-up nowadays. Phone cameras are often used as a scanning device, Bluetooth as a connection tool and GPS navigates us in search of location-based services. Thus, the robust mobile usage in China has become the primary enabler of the sharing economy.

Second, the QR codes are much more common in China than anywhere else in the world, mostly thanks to the mobile payment applications popular in China. You can find the QR code practically everywhere in that country, in a big shopping mall, on the door of a small stall and even on a plate of an individual peddler on the street. Every Chinese, irrespective of age and social status is familiar with QR code (CNNMoney, 2017). Recently it has become the main way of payment replacing the cash and leapfrogging over the card payment popular in the rest of the world. Such scale of QR code usage has become a fair ground for

² startup companies valued at over \$1 billion.

development of multiple sharing service applications, most of which use QR codes to connect users with a product to unlock it, such as in case of unlocking shared bikes, or to pay for the service, such as in case of portable phone chargers (SAMPi, 2017).

Third technological driver lies in convenient Chinese payment systems, namely Alipay and WeChat Pay. The majority, if not all of the sharing devices in China rely on them for payment and placing deposits. It is important to notice, that these two payment systems are much more successful compared to their Western equivalent PayPal, due to the simple reason of being absolutely free of charge. Today, more than 200 million people use these mobile payment technologies, compared with less than 40 million in the US (Pennington, 2017). As almost every Chinese city dweller is a user of at least one of the mentioned payment systems it was natural to integrate them into sharing service applications (SAMPi, 2017).

Therefore, such distinguishing features of technological development as proliferation of smartphones, wide usage of QR codes and cashless transactions have facilitated the process of the sharing economy adoption in the easiest and most secure way.

The second set of facilitators of the China's sharing economy has a social character. The first worth mentioning factor is general openness of people to try out new things. The survey, conducted in 2013 by Nielsen, the global information and measurement company, revealed that China shows the highest response rates for likelihood to utilize products or services from others. 94 percent of Chinese are willing to share from others, compared to 44% Europeans and 43% North Americans. The numbers demonstrate high receptiveness to the concept in China (The Nielsen Company, 2014). The probable reason of such openness is the communist past. Recently, the chief executive of the China's internet giant Baidu, Robin Li, expressed his opinion that "the idea of a sharing economy is quite similar to that of a communist society, because both focus on "distribution according to need" (Larmer, 2017). Considering this opinion, the concept is not as new in China as it is in Europe or America and thus, people embrace it more actively. "The first thing people think about consumers in China is volume. But the best thing they have is an open mind, flexibility and lack of legacy." - says Oscar Ramos, Program Director at Chinaccelerator, a startup accelerator in Shanghai (Nunlist, 2017).

However, volume plays a certain role in the spreading of the sharing economy. With a population exceeding 1.3 billion, and 94% of it willing to share, it appears logical that investors have jumped on the opportunity to support the sharing services in this country (English.news.cn, 2015). The huge population means high consumption that continues to

grow. In 2016 growth in domestic consumption accounted for some 64% of domestic GDP growth and 20% of global GDP growth (Pennington, 2017). The main cities are overpopulated, the roads are overcrowded, the prices for real estate, cars and other essential goods are extremely high. All this promotes a "spirit of frugality." The consumers are seeking for cheapness, which leads to the eagerness to share. And the extremely high population density of Chinese cities makes the sharing possible and effective, ensuring a high number and diversity of sharing service providers (Xiao & Wu, 2016). Therefore, combination of a China's communal past and embrace of social and economic change, facilitates the rapid growth of the sharing economy (CKGSB Knowledge, 2017).

The next driver is the China's governmental support. The sharing economy has been actively promoted by the authorities. The objectives of the development of the national sharing economy were first articulated by Premier Li Keqiang in the 2016 Government Work Report. They included improving the efficiency of resource usage and making more people affluent. Shortly after that, the government has established a special think tank, the Sharing Economy Research Institute, dedicated to this sector (CKGSB Knowledge, 2017).

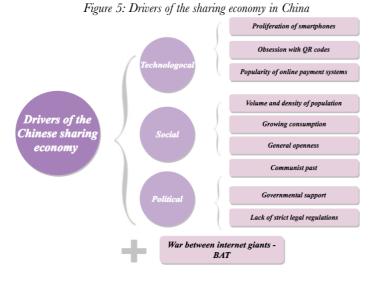
In June 2017, the State Council announced its decision to facilitate the healthy development of the sharing economy by boosting mass innovation and entrepreneurship. The development of the sharing economy has become national priority in China. The government finances start-up incubators, offers tax incentives, keeps foreign competitors away (Larmer, 2017).

There are a couple of important reasons of such active governmental support. The emergence of the sharing economy has aligned with several of the government's goals including ways to boost the economy, save recourses and reduce pollution. The sharing economy is considered the reinvigorating force in China's economic growth. According to Andrew Atkinson, Marketing Manager at brand consultancy China Skinny in Shanghai, China is hungry to stand out more like a global leader. "Any opportunity the government gets to push...something that puts China on the world map in terms of being a leader is going to receive a lot of support" (CKGSB Knowledge, 2017).

Government is not the only supporter of the sharing services. The sharing economy in China has the back of the internet giants, BAT, a widely-used abbreviation referred to Baidu, Alibaba, and Tencent (Mcbride, 2017), who see great potential in such startups and generously finance them. Tencent and Baidu has been particularly active in that endeavor, turning several startups into unicorn status within just couple of years (SAMPi, 2017).

Wei Wuhui, a popular tech business commentator and lecturer at Shanghai Jiaotong University has shared the opinion that sharing economy is blossoming in China mainly due to the competitive war between Tencent and Alibaba and more precisely between the two payment systems they own, WeChat Pay and Alipay, respectively. The war started between ride-hailing companies Didi Dache, backed by Tencent, and Kuaidi Dache, backed by Alibaba several years ago. After burning hundreds of millions dollars in this battle, Tencent won, the two companies have merged into Didi Chuxing and now the company uses only WeChat Pay. The continuation of this battle now can be observed between the leading bike-sharing companies Mobike and ofo, financed by Tencent and Alibaba, respectively (Nunlist, 2017).

The lack of strict regulations in some areas also foster the sharing economy to a certain extent, or as Atkinson puts it "it's lawlessness of China that makes it [the sharing economy] possible" (Nunlist, 2017). Good example of such lawfulness is the situation with bike sharing companies. In Europe and America, the bikes can be taken from and parked at special docs, while in China dockless sharing systems made it possible to leave the bike literally anywhere. Here lays the key innovation of China's bike sharing. On one hand, it creates real chaos on the roads, but on the other hand, it is very convenient for users, and hence popular. If the regulations of parking were stricter and better controlled, if the users were more careful parking the bikes, then the convenience factor that makes the bike sharing so popular in China would be eroded. It is not difficult to find the proofs of Atkinson's words in other service sharing providers, such as, for example, sleeping pods startup that neglected rules of fire safety.



Source: author.

The unique driving forces, repeatedly illustrated in the Figure 5, however, are not the only distinguishing features of China's sharing economy.

The essence of China's sharing economy differs sharply from how the term was originally defined: as free exchange of underutilized assets between people. Today any short-term rental of a product or service activated by a smartphone fall under the "sharing" label (Larmer, 2017). Oscar Ramos calls the established China's model "Renting 2.0" (Nunlist, 2017). The first wave of China's sharing economy followed the concept of peer-to-peer sharing, allowing owners of underused assets share them with others with or without charge. But in the past several years, the second wave of China's sharing economy gave birth to the companies that have little to do with sharing. It is rather a form of decentralized renting (CKGSB Knowledge, 2017).

According to April Rinne, the head of China's National Sharing Economy Committee, the three key elements of true sharing economy are: decentralization, utilization of under-used assets, and relationship or community building. In case of China, the last two pillars are essentially absent. We can look at the two bike-sharing platforms of and Mobile, as the representatives of the usual model of the sharing business in China. People do not buy the bikes, they rent it, thus, the companies fit the definition of the sharing economy by removing ownership from the objects you had to buy before. But there is hardly the focus on interaction. Besides, rather than increasing the utilization rate of existing assets, the companies are creating excess supply by churning out millions of brand-new bikes. The bikes are not spread between the individuals but owned by the companies. According to Zhang Pinghe, a former venture-capital investor, the Chinese sharing firms can more accurately be called rental companies instead (CKGSB Knowledge, 2017).

Continuing the discussion about the essence of China's sharing economy, it is important to understand what is the main goal of this trend in China's case. Many sharing startups, such as, mentioned above bike sharing platforms or Sharing E Umbrella company turn no profit. And the logical question arises: what they aim at if not making a profit? As discussed above, the big sharing companies backed by the two online payment systems are struggling for the market share. But it can hardly be the ultimate destination. William Chou, the head of Deloitte's telecoms, media and technology practice in China presumes, that the final goal of the sharing economy is data collection. Scanning the QR code people provide information about their locations, habits, payment history. This information is priceless for the future success of sharing services, but it is even more important for the city planners. Such

information allows them to understand where to build roads, where to locate the subway entrances, place the bridge and many other things. As Jeffrey Towson, professor of investment at Peking University says: "The fight is no longer over who has the biggest fleet, but who has the smartest fleet" (Larmer, 2017).

The fact that the profit is not the end goal of sharing services explains the extreme cheapness of these services. To rent a bike costs maximum 1RMB (16 cents) for a ride, the same price you would pay for one hour renting of basketball or umbrella. No wonder that the sharing services are so popular in this country.

Scanning QR codes and using online payment systems to access the service implies one more crucial feature of China's sharing economy: real name registration. It means that paying for the services in China you are identified by your real name, as to register in WeChat or Alipay you provide your Chinese ID or a foreign passport. First of all, this arrangement minimizes the chances of service abuse. Second, it diminishes the role of trust. Important, that trust, being a key base for development of sharing economy in the rest of the world, would be a real obstacle in China. If the sharing services here were based on trust to the same degree as in Europe or America, the concept would simply not work in China. The real name registration solves this issue effectively (SAMPi, 2017).

The scale of the sharing economy has been already discussed above, but what is also surprising is the scope as one more distinguishing feature of the sharing economy in China. While in Europe and America the main types of sharing services come in a shape of second hand goods exchange and renting platforms, China's sharing economy is really branching out, providing the services that one cannot even think of. There is no point to list the usual service providers, such as car-sharing, bicycle hire and spare rooms, they exist in China as well as in the rest of the world. It is much more interesting to look at the unusual services offered in China. Some of them were already mentioned in the previous discussion, but the following table demonstrates its full range.

Table 4: Unique sharing-service platforms in China

Service	Description	Companies
Shared portable batteries	Portable batteries in a shape of little boxes provide cables for different mobile phone brands. Can be found in shopping centers, restaurants and other public places. Users rent the batteries by scanning a QR code with a mobile payment application and costs run around 0.5 RMB (0,08 cents) for half an hour use.	The main players are: Ankebox and Laidian
Shared umbrellas	The stations with umbrellas are located in public places. Customers rent brollies by paying a refundable deposit and scanning a QR code.	E Umbrella, Gongxiang Esan, Molisan

Basketball- sharing	Basketball-sharing lockers located close to basketball courts. To rent a ball, users need to scan a QR code and pay through WeChat.	Zhulegeqiu
Napping pods renting	The sleeping capsules providing a USB port, reading light and electric fan, were aimed at office workers needing a productivity-boosting nap, and were located in office buildings in 18 cities.	Xiangshui
Folding stools renting	The shared stools with QR code on their seats, were placed near bus stops and train stations in Beijing	Unknown
Shared Electric cars	Rental services offer the shared-use of Chinese-made electric cars.	EvCard, Gofun Chuxing, TOGO
Suit-case renting	Renting suitcases for travels for deposit and a payment instead of buying one, taking space in your apartment and using it once in a while.	Rent-a-Suitcase
Shared toys	The companies provide toys for kids for several months' rent.	Wanju Zuzu, Wan Duoduo
Short-term cat rentals	A Shenzhen-based company has launched a cat rental service for people who "are unsure if they can take good care of pets or don't know if they can get along with cats." The shortest rental period is one month, and the average charge is around 40 RMB (\$6) per day.	Jixiang Cat House
Shared "Girlfriend"	The life-size silicon seductresses can be reserved through a phone application for up to a week a rent.	Shared Girlfriend

Source: (Ming, 2017), (Feng, 2017), (Tracy, 2015), (Nunlist, 2017), (Eustachewich, 2017) and author.

It is evident that some ideas presented in the table were too extreme, and the start-ups went bankrupt or were shut down very quickly. The sleeping pods were forbidden by the government for missing necessary safety licenses and permits (Millward, 2017). E Umbrella lost nearly all 300,000 of its umbrellas in the first week of operating. The founders of the start-up were inspired by success of car and bike sharing companies, but the failure demonstrated the umbrella is the wrong thing to be shared (Griswold, 2017). The folding stools business also turned out to be not sustainable due to the following reasons. First, more than half of stools were stolen in the first day as in the case with umbrellas. Second, people could simply sit on a stool without paying. And third, the start-up was accused of using the stools as space for placing illegal advertisement of other services and illegally occupying the space on the streets (Hu, 2017). The cat-sharing service is constantly receiving fierce criticism in the internet being called inhumane and cruel. A sex doll sharing service in China was shut down because it's been deemed too vulgar and had bad influence on society (Eustachewich, 2017).

The above-mentioned cases (except for the two latest where the failure has a legal and human character) can be summarized to represent one negative feature of the China's sharing start-ups: the inherent fragility of many of their business models. The problem is that relatively

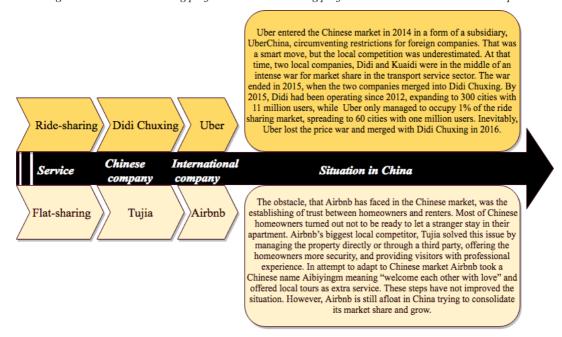
cheap items have a high rent-to-price ratio. This makes them unlikely to be sustainably attractive as shareable goods. Indeed, some of the portable chargers companies, that attracted investments and the clients in the beginning, start to disappear from the market with the clients' deposits. And thousands of stools, umbrellas and even bicycles have been stolen, since the required deposit is low enough to give it up in exchange for a useful good (CKGSB Knowledge, 2017).

However, Ramos considers these failures to be a natural part of the business of innovation. There are many inefficiencies in our world. The founders of the failed start-ups identified the real problems and were creative enough to address them. Their experience is very valuable, as it demonstrates that the problem was addressed in a wrong way or that the problem does not really exist at all (Nunlist, 2017).

Meanwhile, some ideas presented in the table that seems weird work. The companies renting toys for the children are operating successfully. The good quality toys are very expensive and children quickly outgrow them, so renting them appears to be a smart solution. Rent-a-Suitcase company was launched in 2004 in Hong Kong, famous for its lack of space and extremely small and expensive apartments. The company with its moto "Own less travel more" has been popular ever since and has branched out renting other items for travels (Tracy, 2015). We never know which idea will work until somebody tries it. Even the modern idol of the sharing economy Airbnb looked doubtful and investors did not believe in its success. As Ramos puts it "In innovation the difference between crazy and brilliant is just so fine that you can never tell the difference. You have to follow the customer" (Nunlist, 2017).

The last difference observed in China's sharing economy, lays in the fact that, unlike in other countries, popular international sharing platforms do not blossom here. We use Uber and Airbnb in almost any country in the world, but not in China. Any successful international start-up has its full Chinese equivalent more preferred in China. The Figure 6 presents the most popular shared services, providing the pairs of international and Chinese platforms, and shortly commenting on the situation in China.

Figure 6: International sharing platforms vs Chinese sharing platforms in China. The most vivid examples.



Source: (Nunlist, 2017), (China Briefing, 2017), (Colley, 2016) and author.

There are several reasons why the platforms used in the whole world fail to sustain in China. In case of Uber, the company did not take into account, that in China it would not have the first mover advantages, like in other countries, as it entered the market second after Didi Chuxing. Consequently, the company failed to conduct a Competitive analysis as a key part of pre-investment research. The local platforms, backed by internet giants are almost impossible to beat rivals (Colley, 2016). In case of Airbnb, they have failed to customize their service for the intended market base. Indeed, Chinese culture is quite different, demand is specific and Chinese customers will usually prefer a local service to a foreign one because of its familiarity and clarity (China Briefing, 2017).

To draw the line, such factors as high proliferation of smartphones, large-scale usage of QR-codes as a part of the online payment systems, high population density and growing consumption, overall frugality, general openness of people for the new social experiments and lack of strict regulations have established a fair ground for development of sharing economy in China. However, the decentralized renting character of the sharing start-ups, collection of data as their main destination, high diversity and fragility of the offered services distinguish the trend in China from the rest of the world. All this combined with governmental support and internet giants backing creates a separate China's shared economy with almost no place for foreign companies in it.

CHAPTER 3. CASE OF OFO.

3.1. BACKGROUND

After the Communist Revolution in China, the development of the bicycle industry was set as one of the priorities by the government, 1953-1957 five-year plan contained 60% growth of the industry. By 1958 the country's production reached 1 million bikes annually. At that time, it was the major transportation tool for the citizens. The streets overflowing with bikes became the iconic scene of Mao-era, and China became the kingdom of the bicycles. One decade later there was one bike for every two people in China (S. McCarthy, 2017).

At that time, private cars were considered a luxury, because of its high price and scarcity, and were only affordable by the highest class of society. According to the National Bureau of Statistics of China, in 1985 the whole nation possessed less than 20,000 private vehicles (NBSC, 2014).

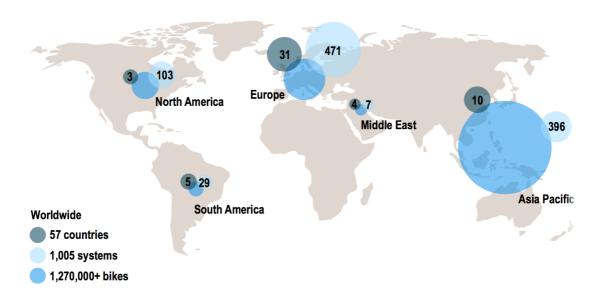
But as the country's economy grew and income of its citizens increased, the situation started to change. In 1994 the automobile industry was declared a pillar industry. The government started to actively encourage car manufacturing and private vehicles ownership. Bicycles, on the contrary, were considered vestiges from the past impending modernization. In less than 20 years' time, China overtook the United States as the world's largest auto market. The number of private cars in the country reached 125 million by 2015 (Xinhua, 2016).

When automobiles eventually stopped being an unattainable luxury and everyone could enjoy driving his own car, new problems surfaced. The price that society needs to pay includes noise and air pollution, traffic congestion and lack of parking space, gasoline and diesel price increase. When these problems became so urgent that could not be neglected any longer, the society started to search for the ways to solve them. And all of a sudden we recalled the good old bicycles.

3.2. GLOBAL BIKE-SHARING

Today we are witnessing the boom of bike-sharing. More than 1,000 bike sharing programs with around 1,270,000 bikes are operating all around the globe (Roland Berger, 2016).

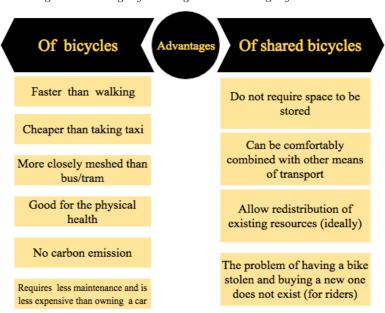
Figure 7: Global bike-sharing



Source: (Roland Berger, 2016).

The popularity of bike sharing is not a surprise. It closes the transportation niche for inexpensive short to middle distance ways and fills in the gap between other modes. The graph bellow summarizes the benefits of bikes in general on the left, along with advantages of the shared bikes over the private ones on the right.

Figure 8: Advantages of bikes in general vs advantages of shared bikes



Source: author.

The concept of bike-sharing is certainly not new. It exists since more than 50 years ago. However, it underwent multiple qualitative transformations and resulted into what we have

today. The study by Roland Berger calls the modern era "Bike-sharing 4.0" (Roland Berger, 20160. Bellow you can see the development of the concept shortly summarized in one picture.

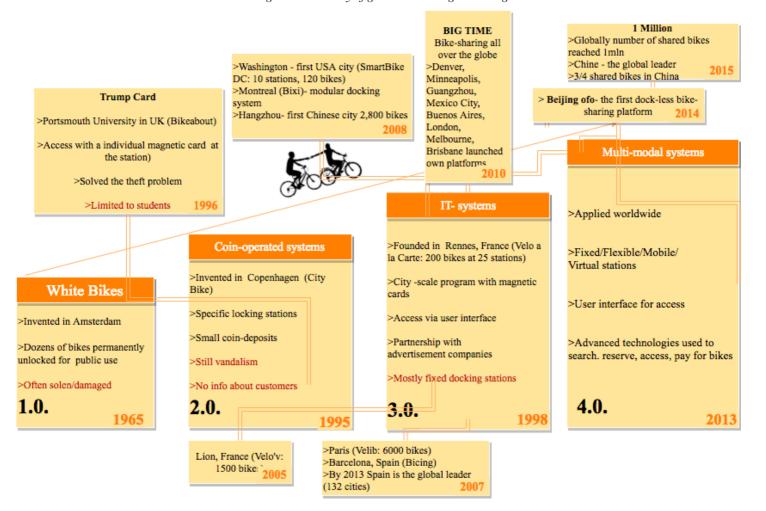


Figure 9: The history of global bike-sharing. Main stages.

Source: (Roland Berger, 2016), (Goodyear, 2018) and author

As we can see, each stage contained certain constrains that prevented the traditional bikesharing from further development. These constrains were challenged by the inventors of the first dock-less bike-sharing platform.

3.3. Introduction of ofo

Mentioned earlier issues created by proliferation of automobiles, imperfection of existing bike-sharing systems and widely popular mobile payment channels in China inspired the student of The Beijing University, Da Wei together with four of his friends from the university cycling club for the idea to combine the sharing economy and the intelligence hardware to solve the transportation difficulty of the last mile problem (Y Combinator, 2017). In 2014 they created the first non-docking bike-sharing platform in the world, combining

offline bike movements and online payments. The company was named of odue to the word's resemblance to a cyclist on a bicycle. "Three letters of look like a person riding a bicycle or just like a bicycle. This is the sign understandable for people all over the world"- said the founder in interview last year (Tai Meiti, 2017).

The founders had only 400 RMB (US\$60) on their account to accomplish their huge plan. They came up with the original idea to involve the students of the Beijing University (and later of other ones) to contribute to the platform with their own bikes. They abandoned the ownership of one bike, allowed them to be painted in the color of the company - yellow, and got the free access to all the shared ofo bikes. This, first, effectively saved the costs, as there was no need to buy new bikes for the operation of the platform. And second, allowed the redistribution of existing resources without putting extra vehicles to the streets of the city, creating more traffic and waste (Yang & Huang, 2017). The plan worked out, students willingly donated their bikes for the free use of ofo. Others used the bikes for the low price of 0,5 RMB (\$0,08) per hour. The project was launched in July, and by October the ofo bikes became the main transport for all the students and teachers of the Beijing University. It was a good sign that allowed Da Wei to successfully launch the program in other universities, number of which reached 200 after only one year of operation. In September 2016, the project attracted the first investor Didi Chuxing. After receiving US \$100 million the business was opened to the public.

In two years ofo was spread to 15 Chinese cities. Besides, in 2016 it successfully expanded outside China to the first foreign city, London. Today ofo is present in 21 countries all over the globe (LinkedIn, 2017). The table illustrating the geographical expansion of the company can be found in appendix 1.

3.4. BUSINESS MODEL OF OFO

According to Osterwalder and Pigneur (2010), business model, "describes the rationale of how an organization creates, delivers and captures value". Put it differently, it is a description of how the business is run in order to make money. A business model consists of several interconnected factors, and in order to create and deliver economic value, a company should manage to capture all of them (Osterwalder & Pigneur, 2010). If the company focuses on one particular factor, such as, for example, a product, but neglects the other factors, the model will hardly work. The perfect strategic tool to analyze the company's business model in a clear and systematic way is the Business Model Canvas or BMC model, developed by

the Swiss business theorist, practitioners and author Alexander Osterwalder and Belgian professor of Management Information Systems Yves Pigneur. The authors defined nine fundamental building blocks of the organization, each of which plays an equal role in creating value. They are: key partners, key activities, value propositions, customer relationship, customer segments, key resources, distribution channels, cost structure and revenue streams (Osterwalder & Pigneur, 2010). Due to its simplicity and visual aspect, the BMC model is good in both development of a new organization and improving the performance of already existing business. In this section, the BMC model will be used to analyze ofo's business model, in order to get a deeper insight of the company's strategy management and marketing plan.

Unlike its main rival Mobike, ofo has adopted a light model: instead of producing and developing its own bikes of used a so-called 100% sharing model in the beginning, encouraging the students in Beijing to donate their private bikes and to create a network of the shared bikes, that allowed the company to save costs. However, this model was only sustainable in the closed university environment. First, the bikes were not identical and not easily recognizable. Second, the demand was growing much faster than the supply. People were not ready to give up the possession of the bikes, but wanted to use the shared bikes. The ofo founders managed to collect around 35 bikes per day, which was not enough to meet the demand of the students and professors of 200 Beijing universities, that ofo expanded to in one year. Therefore, in order to scale the supply and be able to expand to the city, the founders had to find the suppliers among bike-manufacturers (Y Combinator, 2017). Fuji-Ta, a Tianjin based leading Chinese bicycle manufacturer, and Shanghai Phoenix, a 120year-old bicycle producer, became the main suppliers of ofo bicycles. That is how the "little yellow bike" was born. Two companies sell of 12 million and respectively 5 million bikes per year. The partnerships are beneficial for both sides, as it allows of to expand its presence and compete in both domestic and global markets, fully controlling the supply, and at the same time, increase the production capabilities of the bike manufacturers. In case of Fuji-Ta, for instance, the annual production capabilities almost doubled from 12 million units in 2016 to more than 20 million units by 2017 (Shijia, 2017).

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³The translation of the official full name of the company, 小黄车.

Quick success and growth of ofo attracted many big corporations to enter into partnership with ofo. Bellow's table includes the most significant ofo partners and short description of mutually beneficial cooperative activities is provided.

Table 5: Main partners of ofo

Partner	Activity
F uji Ta	A Tianjin based leading Chinese bicycle manufacturer agreed to sell ofo 12 million bikes annually. The partnership brought the first generation of "yellow little bike" to the market.
Alibaba's Alipay	Alipay is the online payment system used in ofo bikes
Didi Chuxing	Users of the ride-hailing platform Didi Chuxing could use the same Didi application to access ofo bikes. User registration, customer services, payment and deposit were connected and shared between the companies.
Shanghai Phoenix	Ofo and the well-known bike manufacturer agreed on research and development collaboration in manufacturing bikes. Ofo agreed to buy 5mln bikes annually. The bikes, labeled with Phoenix logo, meet the standards of different countries, enabling the company to expand globally.
South China Research and Development Centre	The partners have conducted collaborative researches in the smart-bikes creation process. Besides, a South China Quality Control Centre, was established, in order to develop a standardization system to ensure the bikes' quality.
China Telecom and Huawei	Three companies jointly developed NB-IoT and "IoT Smart Locks". China Telecom provides the NB- IoT network, Huawei - the NB-IoT chips, and ofo tries them out and popularizes.
Ant Financial Services Group	Deep strategic cooperation in payment, credit, internationalization and other fields was established.
Binhai Public Transport Group	Within the cooperation of released 20 thousand bikes to substitute the old public bikes at 30 stations in Binhai New Area, in order to improve the layout and management of public bicycles. In response, Binhai Public Transport Group provides assistance to of oin setting up parking points for its bikes and linking them with the bus stations.
The Clara Lionel Foundation (CLF)	The 5-year partnership between CLF, led by the popular singer Rihanna, and ofo called "1 KM Action" is aimed at providing funding to CLF's Global Scholarship Program and supporting educational programs in Malawi. Within this partnership ofo also donated its bikes to the secondary school for girls in Malawi. The singer readily took the role of ambassador of ofo and personally bypassed the bikes.

Source: (Roland Berger, 2016), (Podder, 2017), (Huawei, 2018), (Shijia, 2017) and author.

According to ofo's CEO, currently, the company's revenue comes from bike rental only. The company does not turn any profit yet, but is expected to in the nearest future (Shella Yu, 2017). The cost of each ofo bike is around 300 RMB. Ofo charges its customers in China 1 RMB for half an hour rent. Estimating daily usage of about five times per bike, the daily income from each Ofo bike is about RMB 5, with payback in up to two months. According to the latest statistics accessed, the number of ofo daily active users is 10 million (Borak, 2017). Thus, the average revenue ofo receives daily is approximately RMB 10 million. The number of bicycles ofo offers globally is around 10 million (Borak, 2017). It is not difficult to calculate that to purchase them the company spent about 3 billion RMB. It means that ofo should have operated 300 days receiving 10 million revenue daily to purchase that amount. But this number does not even include operating costs. The logical question arises: where ofo takes money to operate? The answer might be: from investors. Indeed, ofo is very successful in attracting investors, which was confirmed by the primary research. However, would investors be attracted by the company that makes no profit and brings in so little cash flow?

The CEO omits the essential and the most innovative part of the company's profit model, namely the deposit system. As was described above, hourly based rental income is not able to bring in large amount of cash in short term. But at the starting phase a healthy cash flow and considerable profit were the key factors in attracting investors. Thus, the deposits from the large number of users perfectly solved the issue allowing the company to realize cash flow and to expand.

According to the rules of the company, before a customer can start riding of bikes, the deposit of 199 RMB (\$32) must be prepaid.

There are several reasons why a deposit is a genius innovation, they are illustrated in the Figure 10.

Figure 10: Why deposit is a smart innovation?

2. Is not returned to a customer automatically, but after a request. Most users are reluctant to request a withdrawal, as it means that he will not be able to rent an OFO bike any time he wants in the future, while registering again takes certain time. As a result, the deposits are being accumulated in the company and can be considered gratuitous funds, as most of it will not be withdrawn any time soon.



4. Is linked to one registered user, but not one registered vehicle. So the number of deposits the company receives equals not the number of bikes, but the number of users. OFO currently has 200 million registered users and 10 million bikes. It means that the company has collected on average 20 deposits from one bike, which equals 39.800 RMB.

Source: (Ofo's Financials - Craft, 2018), (Sohu, 2017) and author.

By March 2018 the company managed to accumulate almost 40 billion RMB. This considerable sum of "safety money" has been used by the company to successfully activate other related business activities. Fast global expansion enables the company to cut costs more efficiently and soon the profit will be eventually generated.

This way of business operation is innovative and impressive, and is expected to bring huge profit to the company. However, this business strategy seems to be controversial, as the company is using the money that does not belong to it. The government already sees a threat of misusing the refundable deposits by the bike-sharing companies and thinking of the way to regulate their deposit management. It has been proposed to regulate the deposit management by putting the bike users' deposits into a bank account to prevent misuse (Yang & Huang, 2017). If the government takes real measures limiting the company's right of usage of the customers' deposits, the well-established strategy will come to an end. One more weakness of this strategy lays in the fact that it works only under the premise that no (or a very small number of) customers withdraw their deposits. Today, this is the case, as the current users are happy to use the bike-sharing service. But if situation changes and people start withdrawing money, the future profitability of the company does not look promising. Therefore, the company should search for more reliable revenue models that will guarantee the profitability. The advertising in the application and on the bikes, seems to be one of the obvious solutions. In July 2017 of ofirst tried to develop in this direction, entering into partnership with Universal Studios. The little number of yellow bikes were equipped with large goggle-eyes on the handlebars and other distinguishing features of the cartoon characters Minions to promote the Despicable Me franchise. Luckily, the color of ofo bikes perfectly fitted the campaign, so the promotion action did not harm the brand recognition. The partnership was successful and mutually beneficial. Universal Studios established a new way to promote its new movies, while ofo found a new revenue stream (Shanghaiist, 2017). This type of partnership is still in the infant stage for ofo, but it seems that the chosen direction is right. It is a matter of time before more businesses realize the potential and start taking advantage of the advertising space provided by ofo. Besides from promotion of movies, new places and products, ofo could set up partnerships with some companies, for example convenient stores and cafes that need to attract new clients, offering their riders coupons or discounts in the places that lay on the route.

The summary of ofo's business model, containing the findings of the current and the previous sections, is illustrated in the form of BMC below.

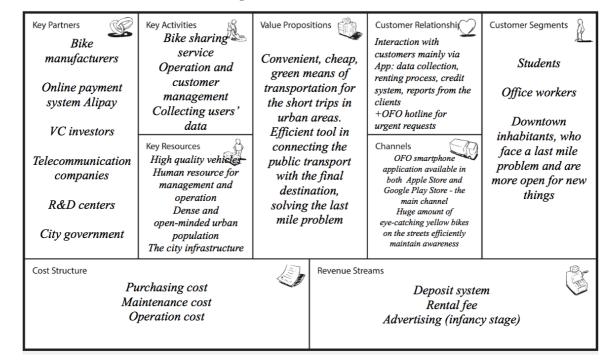


Figure 11: Business Model Canvas

Source: author.

3.5. FIRST MOVER ADVANTAGES AND DISADVANTAGES

Description of the ofo's business model above is lacking one important part, namely, the first mover advantage. However, like everything in this world, advantages come along with certain disadvantages, both of which will be analyzed in this section.

For the company that enters the market with an innovative idea, it is not only important what strategic move to make, but also when to make this move. The several following conditions bringing the advantages to the pioneer were identified in literature:

- 1.A first mover can build a strong reputation and customers' loyalty. Thus, when customers are uncertain which competitor to choose, worrying about the product's quality, they are likely to stick to the first mover in the market;
- 2. Significant switching costs tend to retain the customers and make them reluctant to switch. In this conditions late entrants have to offer customers some extra value in order to attract them, and thus, invest extra recourses;
- 3. Pioneers can gain an advantage by preempting its rivals in the acquisition of already existing scares assets, such as, physical resources or space;
- 4. The standard learning curve model assumes, that production costs fall with cumulative output. Therefore, if it is difficult to learn, the steep learning curve will generate the sustainable cost advantage for the early entrants over the late entrants;
- 5. First movers can gain advantage, if they have certain property rights protections such as patents, or copyrights. It represents the barrier for the imitation by competitors;
- 6.A pioneer can set the technical standards for the industry, which will be an advantage over competitors, who will have to invest resources in order to meet and surpass these standards (Lieberman & Montgomery, 1988), (Gamble, Peteraf, Strickland III, & Thompson, 2016).

Therefore, it is not enough to be the first in doing something. To win the market share and beat the later rivals, the first-entrant must pay enough attention to its product, to the customers need and expectations and the company's profitability.

However, the certain circumstances might lead to the disadvantages of a first-mover, at the same time benefiting the late entrants.

- 1.If imitation costs are lower than innovation costs, the learning curve does not bring benefits to a pioneer. On the contrary, it enables late entrants to "free-ride" on the first-mover ideas and investments;
- 2.If the product or service of a first-mover does not live up the customers' expectations, followers can study the customers' behavior, draw the lessons and provide a better offer, winning the market share;

3.If an industry is characterized by quick market revolution as a result of a shift in technology or customers' needs, the next-generation products of followers can surpass the products of the pioneer;

4.A first mover takes risks to make many mistakes in uncertain conditions. Followers can learn on a pioneer's experience and avoid this mistakes (Lieberman & Montgomery, 1988), (Gamble, Peteraf, Strickland III, & Thompson, 2016).

Now it is time to look which of the first-mover advantages the first dockless bike-sharing platform of managed to capture and which were acquired by its rivals.

Ofo was the first platform providing the new type of bike-sharing service. It succeeded in distributing large amount of its bikes in more cities and countries than its followers. Besides, it secured a significant amount of funding from multiple investors. The "little yellow bikes" became highly recognizable and provided ofo with strong reputation and loyalty. Regarding personal experience, when the author of the thesis just moved to Beijing and was thinking about joining a sharing-bikes platform, ofo was chosen without much hesitation, being the oldest company with the densest network of bikes in the city.

Joining the ofo platform, as well as any other bike-sharing platform, requires depositing a considerable amount of money for the average Chinese citizen. As ofo happens to be the first player in the industry, by the time the followers entered the market, the users had already deposited in ofo. Therefore, they were reluctant to switch, as the new platforms offered very similar service and it did not seem worth spending time and efforts. Increase of the deposit from 99 to 199 RMB in June 2017, has further increased the users' switching costs. Additionally, the switching costs were further increased by the established credit system, within which loyal regular users obtained certain benefits. Referring to the personal experience one more time, while living in Beijing and being an ofo user, the author faced a problem of shortage of yellow bikes in her particular neighborhood. Even though it caused certain inconveniences, it took the author considerable amount of time to start using the ofo's main rival Mobike, due to the switching cost. And even after joining the Mobike platform, the deposit was not withdrawn from ofo, thus giving the author the choice between the two platforms in her everyday's short travels.

Regarding the acquisition of already existing scarce assets, this is hardly the case of ofo. Being the station-less platforms, ofo and its competitors are able to allocate their bikes in any free space. Thus, despite the huge number of bikes unleashed by the pioneer, the followers could always find new locations for their bikes in big Chinese cities.

As for a learning curve, it does not seem to be steep in the bike-sharing, as a large number of the bike-sharing companies entered the market following ofo. Thus, ofo did not gain an advantage from this perspective.

Ofo also did not succeed in obtaining a fist-mover advantage from the property rights protection perspective either. Having only 5 intellectual property rights, ofo was surpassed by its main rival Mobike, who's number of intellectual property rights reached 28 (Sohu, 2017).

Being the first mover and a market leader, of has the right to participate in setting up the regulations of the bike-sharing industry, as a founding member of China's Sharing Bikes Specialist Committee (Zhongguo Xinwenwang, 2017). However, Mobike is more famous for establishing certain technical standards, that of and other competitors have to meet in order to stay afloat. Therefore, this first- mover advantage of managed to gain is only partially.

After analyzing the first mover advantages of ofo, it appears logical to investigate, which of the first mover disadvantages the company has fall under and which it has successfully avoided.

Ofo's business model is relatively easy to imitate, which is proved by the significant number of its competitors offering identical service. Thus, ofo has faced the situation, when the innovation costs exceed the imitation costs, leading to a number of free riders. On the contrary, Mobike's business model, appears to be more unique and more difficultly imitable, due to its ideas of artificial intelligence, big data and own independent bike-manufacturing.

The second first- mover disadvantage was also not avoided by ofo. Being the first start-up in this industry, launched by a bunch of students, the company did not have enough funding. Ofo bikes were represented by second-hand bikes of different models with a mechanic lock and a unique unchanged password. It, evidently, led to bypassing the password to the other users and using the bikes for free. The problem and its solution costed ofo a considerable amount of money. At the same time, later entrants drew a lesson from the ofo's experience and unleashed its first bikes with already improved locks. Mobike is a good example of such a follower, as its bikes had a GPS lock function from the very beginning and several other features that attracted customers away from ofo.

The fast-growing bike-sharing industry appears to be an an example of rapid market revolution. However, it was the technological advancement that gave birth to ofo and other similar platforms. The customers' expectations are growing indeed. But so far ofo is able to meet them. Therefore, ofo has not experienced the impact of this type of first-mover disadvantage.

As was partially mentioned before, ofo did not have any predecessor to learn from, and in this respect had to learn on its own trials and errors. The path of the followers was much easier from this perspective, but it seems that ofo successfully managed to draw the lessons from its own mistakes and to improve its operation.

The summary of the first mover advantages, gained by ofo, as well as disadvantages it faces, is presented in the figure below.

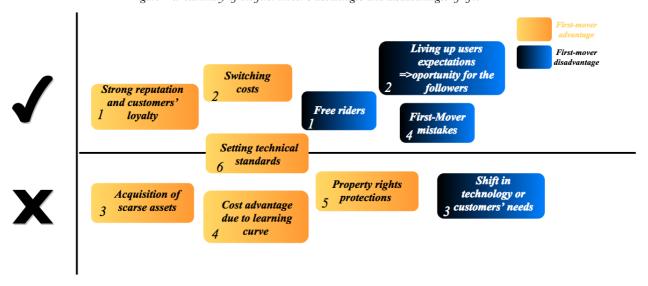


Figure 12: Summary of the first mover's advantages and disadvantages of ofo.

Source: author.

3.6. OFO INNOVATIONS

3.6.1. SOCIAL AND BUSINESS INNOVATION

The success of the company strongly depends on its innovations. Over the next few paragraphs the innovations of ofo in social, business and technological aspects will be analyzed in details.

It appears logical to start with one of the most crucial aspects of innovation namely, social innovation. In simple words, social innovation refers to "new ideas that work in meeting social needs", or speaking in a more academic way, to "innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed

and diffused through organizations whose primary purposes are social" (Mulgan et al., 2007). It is important to mention, that in case of ofo it is hard to separate the concepts of business innovation and social innovation. The large scale of the company's business is a dominant factor that allows the social innovation. But this successful innovation can be considered neither purely business innovation, main goal of which is to maximize profit, nor pure social innovation which works for the good of the society without any financial benefits. According to the several interviews of the founders, they really care about having the right balance between improving the people's life and making profit. When Da Wei was asked, who he considers himself to be: an idealist or a business man, he answered that he is definitely an idealist, whose dream is to make the world and the environment better (CNA Insider, 2017).

The big cities in China have very dense populations, thus, during the rush hours people face a short-distance transportation problem, which traditional transport cannot solve. This problem is also referred to as a last mile problem. The last mile is the distance, not covered by the public transport, which is too long to walk, but too expensive to take a taxi, for example, between the metro exit and the office building or the bus station and the university (Zellner, Massey, Shiftan, Levine, & Arquero, 2016). It was a highly potential niche, and the station-less of bikes entered the market with its innovative business idea and solved the problem. The business model, the product and the operation process were the key factors of the fast and successful expansion.

Da Wei and his colleagues came up with an innovative solution to the problem bothering most of the people who have private bikes, creating new usage scenario. At the beginning, their bike-sharing platform was fully based on the idea of reallocation of existing recourses, perfectly fitting to the sharing economy framework.

One of the social/business innovations implemented by ofo, was the establishment of a closer "product-customer" relationship compared to traditional bike-sharing systems. It was done through ofo's smartphone App. Registering, unlocking, renting, returning bikes is enabled by the application scanning function and by linkage with the Alipay online payment system. The recently added GPS navigation, on one hand, allows the customers to search for the free bikes on the map and on the other hand, allows the company to track the bikes' location, in order to solve the theft problem. However, the founders never stop deepening this "product-customer" relationship. Every step taken by them is aimed at raising the customer satisfaction from their service and is innovative from the business point of view.

From the time ofo entered the streets of Beijing, every customer was able to report a broken, misparked or misused bike, pressing a special button in the App. It allowed ofo to mark the broken bike on the online map to warn the other users first, and then quickly remove it from the street to repair.

In March 2017 of oused a promotional technique "Red Envelop" which at that time was gaining momentum in China, but was absolutely unique for the rest of the world. Ofo started offering virtual red envelopes, or hongbao, with random amount of money on specially marked bikes to entice new customers to joint their network. Of course, the company had its own incentives in this promo action. It was aimed at solving a "tidal bikes" problem. Due to lack of fixed stations of bikes can be parked anywhere. It is very convenient for riders, but, unfortunately, results in a situation, when roadsides and living districts are overcrowded with bikes, while it is impossible to find a bike near big shopping malls and metro stations. The bike-sharing companies, thus, came up with a good solution. The scattered bicycles were marked with red envelops with random and unknown amount of money, and a user could "open" the envelop and get the money after riding the bike within 10 minutes to the needed location. Riders could see the marked bikes on the online map and were very enthusiastic about the chance to win up to 5 thousand RMB if lucky (Xiabo, 2017). This promotion attracted more users, happy about getting some cash for their short rides, on the one hand, and solved the problem of reallocation of bikes, on the other hand. In Europe people are hardly offered money for using some service, this idea sounds as much weird as innovative, however it works.

What impresses, is that having 200 million users the CEO of the company is always in search of a unique approach and special treatment to every customer. In April 2017 of started cooperation with Sesame Credit, a credit rating system by Ant Financial Services Group, to remove the registration deposit for trusted and reliable users in Shanghai. Within this cooperation, sesame credit customers having above 650 points were granted the right to join of platform without deposit (Wei, 2017).

Later in June of olaunched special credit rating system for every user. In the beginning every rider has 100 points, which they gain for positive behavior such as reporting the damaged bikes or parking in special zones, and loose for breaking a bike or violation of the traffic rules. Users with high rating get certain bonuses, such as free rides or access to newer bikes, while users, whose rating fall to zero are suspended. This unique approach, on one hand, it helps

the company to cope with the issue of vandalism and breaking rules, and on the other hand, provide loyal customers with rewards (Channel NewsAsia, 2017).

3.6.2. CULTURAL AND POLITICAL ASPECT

As a bike-sharing platform of odoes not only promote its product and concept, but also advocates for improving the quality of the city through reducing traffic and carbon emission, encouraging its customers to use more green transportation method and alleviating public transport pressure.

In addition, ofo cooperates with local governments, which provides the company with certain support and infrastructure in exchange for improving the urban bicycle culture, establishing the model of government-enterprise cooperation. Since March 2017 ofo works closely with Binhai Public Transport Group, promoting its green travel strategy in urban areas. The cooperation Started in Binhai New Area, a sub-provincial district near Tianjin, with taking over 30 stationed public bikes points and replacing the old bikes with 20 thousand ofo bikes in order to improve the layout and management of public bicycles. Binhai Public Transport Group assists ofo in setting up parking points for its bikes and linking them with the bus stations. Ofo, from its side, provides the bikes and the manpower for operation to guarantee the obedience of bike-sharing norms (tjbh.com, 2017).

The cooperation with authorities is happening thorough one more channel: sharing the users' data. Using modern technology, ofo generates a huge amount of data on a daily basis and analyzes it, in order to redistribute its bicycles more efficiently. But this data could also help local governments in making city planning decisions. Several months ago, ofo announced that it would voluntarily share its data from 200 cities in China with the government. It is a good business strategy for the company. On the one hand ofo diversifies its revenue streams, gaining market share and conquers government's support. On the other hand, ofo integrates into Smart City plan, providing the authorities with the essential information on riders' movements and behavior. It helps city planners visualize commute patterns and traffic hot spots and improve the city landscape (Yuan, 2018) It is undoubtedly a win-win collaboration, from which both the company and the government will gain a lot of benefits. The CEO of ofo is a strong proponent of cooperation with government. In his opinion, authorities are supportive to innovations, as long as the company is ready to communicate and work together in order to solve the real problems (Ma, 2017).

3.6.3. TECHNOLOGICAL INNOVATION

As was explained by Frank Geels, innovations are often developed in niches (Blomkvist & Johansson, 2016) and "niches are often subsidized to support non-profitable innovations with the expectation of future societal benefits" (Schot & Geels, 2008). This is exactly what Da Wei, the founder of ofo was aimed at (CGTN America, 2017). It was verified during both secondary and primary research, that the primary goal of ofo start-up was not making profit, but rather benefiting the society through innovative approach. After analyzing the problems of existing bike-sharing companies, the founder decided to develop a system that could provide the riders with complete freedom of movement.

The technical side was more complicated. Despite the revolutionary new model of dockless platform, the very first ofo bikes were far from being perfect due to the lack of funding. There was a big threat that the followers would soon enter the market with more user-friendly bicycles and beat ofo. After receiving its first investment of RMB 9 million from Will Hunting Capital and JoinHope Capital and establishing the cooperation with a Tianjin based bicycle manufacturer Fuji-Ta the first generation of ofo was born (Y Combinator, 2017).

To use ofo, you need to download the application to your smartphone, find the closest bike and do the following steps:

4:Lock the bike by 1:Enter your bike 2:Turn the number 3:Press the round 5:Click "Trip Complete" number, and obtain lock, make sure all button to unlock. dialing a random on app when trip is the numbers are number on the lock. finished. an unlock code. aligned with the yellow line.

Figure 13: Ofo usage process

Source: (Mahendran, 2017).

All the transactions including deposits and fee payments were completed in the online payment platform. When the company just went public, the payment fee was 0,5 RMB (\$0,08) for the students and teachers and 1 RMB (\$0,16) for the rest. The refundable deposit was 99 RMB (\$16) (Meiri Toutiao, 2016).

The system created by Da Wei was so simple, that it inevitably attracted new users. After the success of the startup became evident the investments were not long in coming. After receiving US\$450 million from DST, CITIC Industrial Fubd, Atomico, Coatue Management and many other domestic and foreign institutions in March 2017, the company focused on improving the quality of the bikes. While in the beginning all 2000 bikes came from the donations, now 90% were newly bought, and only 10% were a result of donations and recycling (Yang & Huang, 2017).

However, having huge amount of identical and highly recognizable bikes did not mean that the job was done. Of owas constantly facing new challenges, and solving them the company simultaneously worked on the improvement of their bikes.

Negligence and vandalism was one of the biggest challenges for the company. The users sometimes chained the bikes to prevent others from using them, stole the bikes, stripped them for parts and just damaged them for fun. Vandalism was a common problem for all the bikesharing start-ups, but due to missing the GPS function of owas more subjected to it.

Safety was one more concern of the company. The manual platform did not provide the company with enough information about the users, and made it possible to bypass the mobile app and use the password to ride for free. After an eleven-year-old boy got killed in a car accident riding an ofo bike in March 2017, ofo realized that big changes and improvements are needed (Yicai Global, 2017).

First ofo increases the deposit from 99 to 199 RMB (\$ 32) as a first step against vandalism. Then it added an extra feature to the application, allowing the users to report a damaged, misused or wrongly parked bike. It also introduced the credit system, providing the loyal users with discount-points for a proper usage and timely reports about the problems. Next the company introduced an intelligent control system similar to what Mobike was using. Later, ofo also started adding an electronic lock to the bikes, that did not require a password. This helped to build a big database and an artificial intelligence platform (Yang & Huang, 2017).

The last improvement of ofo comes from partnership with China Telecom and Huawei in introducing and popularizing the NB-IoT locks. These innovative locks provide the strong coverage in poor-signal areas and a 100 times stronger capacity comparing to standard terminal. This allowed to shorten the payment process from 25 seconds to less than 5, and

prolonged the battery life from 2 months to more than 2 years. In addition, it allowed ofo to save costs and reduce the need for frequent maintenance (Huawei, 2018).

The graph bellow shortly illustrates the evolution of ofo bikes.

Generation 3.0.

Figure 14: Evolution of ofo bikes

Source: (Wu, 2017) and author.

Generation 1.0.

Today's ofo bikes, fashionably designed in bright yellow colors, fitted with upgraded break disks, seat and chain, equipped with the smart lock, providing fast internet connection, and GPS navigation, allowing users to search for free bikes online, is the most favorable bike sharing company in China and is aimed at becoming the one globally (CGTN America, 2017). Da Wei has successfully developed his niche product in a comparatively short period of time and today's version of ofo bike meets all users' expectations. But of course, further technical improvements are expected at the same pace due to constant technological development and shifts in customer's needs.

3.7. PORTER'S FIVE FORCES ANALYSIS

The five forces model was created by Harvard Business School professor Michael Porter in 1979, as a tool for understanding the competitiveness of the business environment, and for identifying the best strategic position of a company within the industry. Porter identified five forces that make up the competitive environment, influencing the industry attractiveness and the profitability, namely, threat of new entrants, threat of substitutes, bargaining power of customers, bargaining power of suppliers, industry rivalry (Porter & Porter, 1979).

The Porter's Five Forces model was chosen as a tool to analyze the industrial structure and the competitiveness of the bike-sharing industry in China, in order to understand the current position and the potential growth of the ofo company. Ofo is a leading bike sharing company in China and it is currently applying for the same rank globally. In just two year it expanded to 200 cities in home market and to 50 cities worldwide, Nevertheless, if faces intense competition from other bike-sharing companies offering almost identical service. From the very first glance the bike-sharing industry looks very competitive, however, analyze of the five forces separately can provide us with better understanding of the main factors of such competitiveness.

3.7.1 THREAT OF NEW ENTRANTS

Just as the pioneer ofo entered the market comparatively easily, due to the novelty and usefulness of its service, its followers, seeing the positive reaction of the customers and smelling the profit, also grabbed the opportunity and launched their own bike-sharing platforms. As a result, currently there are at least 60 bike-sharing companies, offering identical service, differentiated mostly only in colors. The current situation in bike-sharing in China is even referred to as a bike-sharing bubble (Toh, 2017) This happened due to the following reasons. First, the model set up by ofo is easily imitable. Second, the entry barriers are very low, including lack of governmental regulations, affluence of resources and still unsaturated market.

To keep a leading position in the industry of should concentrate not only on sociotechnological innovations, but also search for good marketing strategies. Recent cooperation with Universal Studio within which the ofo bikes were designed to look like funny cartoon characters and bike donations to school in Southeast Africa as a part of "1 KM Action" partnership with the singer's Rihanna Clara Lionel Foundation can be an example of a good solution.

3.7.2 THREAT OF SUBSTITUTES

Ofo is a dock-less bike sharing service aiming at solving the last mile problem. The company performs itself as a substitute to taxi, Uber, docking and private bikes and walking. Besides, ofo promotes green transportation, powered by human force, which is a key distinguishing feature of ofo bikes, comparing to the other potential substitutes, powered by energy.

So far it is the most innovative and comfortable solution of short-distance transportation problem, the substitutes to which do not exist, as any other choice of transport will lose in convenience, price or impact on the environment. Consequently, today the threat of potential substitutes in bike-sharing industry is seen to be low to moderate. Nevertheless, progress does not stand still and the rapid technological improvement might give birth to

more advances transportation method, that can challenge dock less bikes, in the nearest future.

3.7.3 BARGAINING POWER OF CUSTOMERS

Due to the huge variety of station-less bike-sharing companies in the market, the customers are free to choose whichever bike they prefer to ride. All the companies are providing the same service and the switching cost is quite low, as the deposit, users pay to the company, is refundable. So far, ofo manages to remain the most favorable bike sharing platform, due to its pioneer's reputation, red envelops, credit system and other unique incentives. However, the quantitative research conducted by the author illustrated that users are far from being fully satisfied by ofo's service. The company should find the ways to improve its service as well as constantly invent new approaches to its users.

3.7.4 BARGAINING POWER OF SUPPLIERS

The People's Republic of China is the biggest bike producer in the world. Today over 60% of the world's bicycles are produced in China (Worldometers, 2018). According to Made-in-China.com, a world leading B2B portal, aimed at connecting global buyers and quality Chinese suppliers, there are over one thousand bike manufacturers and suppliers in China (Made-in-China.com, 2018). Besides, bike-sharing boom has disrupted the bike-manufacturers supply chains. According to the managing director of Phoenix, the oldest bicycle maker in China, their domestic sales dropped considerably since the emergence of bike-sharing companies. Many bicycle shops are shutting down, as people stopped buying bikes. This, in turn, leads to bankruptcy of bicycle factories that cannot maintain sales. As a result, the bicycle-suppliers are competing to enter into partnership with bike-sharing companies and to stay afloat. Since ofo if the biggest player in the industry, its main competitor produces its own bikes and all other platforms occupy insignificant market share, it is in factories' interest to supply ofo with bikes. The company has already chosen the best possible suppliers, China's oldest and biggest bike-manufacturers, namely Phoenix and Fuji Ta, however, it would take nothing to switch to another supplier.

Therefore, it can be concluded, that the bargaining power of suppliers in bike-sharing industry is low, which allows ofo to set its own rules of cooperation.

3.7.5 Industry rivalry

Considering all mentioned above factors, it is evident that the rivalry in the bike-sharing industry is extremely fierce. Inspired by the ofo's success dozens of similar start-ups came to live in a short time. Some of the comparatively popular companies in China today are: HelloBike, 1 Step Bike, UniBike, XiaoMing Bike, Qibei, U-bicycle, DDBike (pc6, 2018).

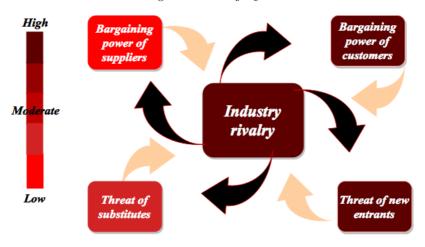
The companies are unleashing more and more bike in the pursuit of market share, attracting the users with colorful design and catchy names, as the service they provided was absolutely identical. The bike-sharing boom in China is seen as a bubble by many scholars and analysts (CGTN America, 2017). The industry grows too fast, new companies emerge every day and many of them disappear as fast as they pop up.

If you go to portal PC6, one of the most popular application download portal in China and enter word combination "shared bike", you will get a list of 281 active smartphone applications, providing shared-bikes service (pc6, 2018). More than likely, out of this list of s start-ups not more than 10 will survive in several years' time (Toh, 2017). The companies BlueGogo and Mingbike, for example, were already shut down as they failed to refund multiple deposits to their clients. Wukong Bike and 3Vbike announced business closure claiming that 90% of their bikes were lost. Time will show which of the start-ups will stay afloat (CNA Insider, 2017).

As was verified by both secondary and primary research, today there is only one real competitor that ofo should beware of. Mobike, headquartered in Beijing, was launched in Shanghai in January 2015 by Uber general manager Wang Xiaofeng and quickly became ofo's main rival. Today itis operating in many top-tier and second-tier cities in China and has already expanded to Singapore, Bangkok, Manchester, Washington, London (Borak, 2017).

It appears logical to finish with 5 forces analyzes, the schematic results of which can be found in the Figure 13, and to devote the next subchapter purely to the competition between ofo and its main and only worth considering rival, Mobike.

Figure 15: Porter's five forces



Source: author.

3.7.6 OFO VS MOBIKE

It is quite difficult to say for sure which platform has a leading position in China at the moment. First, it is not clear which indicator should be taken into account: number of bikes unleashed, number of users registered, number of daily transactions, number of downloads, number of daily active users, number of the cities covered, amount of invested money or maybe the proportion of satisfied users. Second, all the mentioned data is hidden by both companies. Third, the companies release hundreds of bicycles monthly, thousands of them go out of service daily, thus, it is impossible to track the exact numbers. Even the recently conducted reports go out of date in couple of months. Regarding the market share, different sources provide different data, due to the mentioned above reasons. A report from 7Park Data, a research company in New York City, announced that by September 2017 of obikes accounted for 65% of the market share (36kr, 2017). At the same time the Chinese evaluation institution "Speed Research Academy" provided the information, that ofo and Mobike bicycles occupied 29,77% and 56,56% of the shared bicycle market, respectively (Zhongguo Chuanye Yianjiuyuan, 2017). Xiaomi App Store report gives the numbers 44% of market share taken by ofo and 36% by Mobike (www.hbspcar.com, 2017). The results of the survey, conducted by the author, show that out of 36 respondents, 22 are the users of ofo and 10 are Mobike users. In any case the data in all the researches agrees that together the two leading platforms occupy between 80 and 90%, which means that the rest 20% or 10% is divided between other several dozen bike-sharing companies, making the market share of each of them incredibly small.

Being the leaders of and Mobike should have some significant distinctions, that allowed them to survive and stand out among others. It appears useful to analyze and compare the approaches of the two companies in solving the same concept, in order to find these distinctions.

From the very beginning, Mobike focused on the quality and design of their bikes. Being unable to find the ideal bike manufacturer for a long-term cooperation, Mobike established its own factories for carrying research, development and manufacturing its own bikes. Their bikes were unleashed designed in attractive orange and silver colors, equipped with a basket, orange rims, airless tires (S. McCarthy, 2017), (Yang & Huang, 2017). This strategy, different from all other bike sharing platforms, on the one hand, has ensured absolute bargaining power towards suppliers. Mobike has established its own supply chain, acting as an independent player in highly competitive industry. But on the other hand, own manufacturing and focus on high quality led to the high cost of bikes, which was around 5000 RMB (\$795). Ofo bikes, on the contrary, cost around 300 RMB (\$48) only. The cost of the bikes in turn led to the higher deposit, which is 299 RMB (\$47,5), the highest in the industry. In addition, high quality material made Mobike bikes very heavy. The first generation of Mobike bikes weighted 25 kg, which caused complains from the users. To solve the problem and to retain the customers Mobike had to manufacture a new 17 kg. "light" model of bikes and charge customers 0,5 (\$0,16) RMB per half an hour twice less than for the heavy ones, that were not dismissed (Mobike, 2018).

Ofo, on the contrary, was aiming not to producing high-quality bikes, but to connect already existing vehicles to its network. As were mentioned above, the first 2000 bikes came from donations. Of course, it affected the quality of the bikes. They were not as fashionable as Mobike's newly manufactured ones and were missing several extra features. However, this philosophy allowed ofo to better fit into sharing economy concept, as it focused on reallocation of existing resources. Today the situation has changed. In order to stay afloat in fierce competition, ofo established a partnership with the leading bike manufacturing companies, producing 90% of the available bikes. Besides, several extra features like Mobike's ones were added (S. McCarthy, 2017).

More than that, in the beginning, the renting procedure of the two companies was different from technological point of view. Each Mobike vehicle was equipped with GPS, so clients could see the location of bikes on the online map. First, it was much more convenient for the users, than to search for bikes on the streets on their own. Second, it was an effective anti-

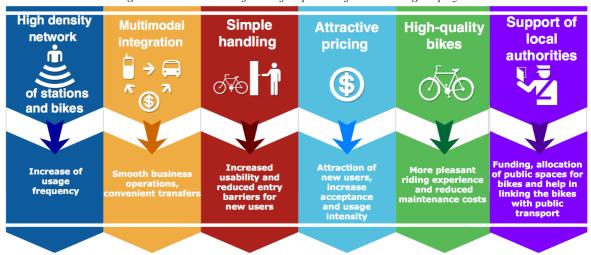
theft tool. One more extra feature Mobike provided its users was the possibility to book the bike beforehand using the same map. To rent the bike the users needed to scan the QR code attached to a bike by their phone camera, that will unlock the bike automatically. At the end of the trip the rider would lock the bike manually, the application would register the trip's end and the bike would pop back up on the map as available. At the end of the trip the user was provided with some interesting statistics, such as distance covered, the number of lost calories, the amount of carbon emission they saved (Borak, 2017). It can be seen, that Mobike pays much attention to innovative technical development. According to HFG Research conducted in the beginning of this year, Mobike owns 28 patents, which is an impressive number. For comparison, ofo only owns 5 patents (HFG, 2017).

First three generations of ofo bikes were offline and didn't have the GPS function. It, thus, deprived the users of tracking the location of the available bikes on the map and of booking them. The location of the bikes was possible to track only while used, via the riders' mobile phones. The renting process was also less automated. To unlock a bike, you would need to enter the license plate number into ofo application, receive the bike's lock combination and unlock it manually. When you reach your destination, you would need to lock a bike manually and end the ride on the application, also manually. This is the feature that caused a lot of dissatisfaction from customers, as if you do not do this, the fee for a ride would keep accruing (S. McCarthy, 2017).

In summary, ofo and Mobike had different marketing focuses in the beginning development phase. However, the both companies analyzed the customers' behavior, undertook several steps in order to polish their operation, sometimes stealing the good ideas that work from each other. As a result, today the two company' bikes have very little difference in usage process, use the similar approaches to attract customers, such as credit systems, bonus rides and red envelops, and meet the user's expectations equally well.

According to one respective study there are several key factors that allow bike-sharing companies to operate successfully. These conditions are illustrated in the Figure 15.

Figure 15: The conditions of successful operation of a bike-sharing company



Source: (Roland Berger, 2016) and author.

To draw the line to the discussion of ofo and Mobike rivalry, the illustrated above factors will be used to compare the potential sustainability of the two companies.

3.7.6.1 HIGH DENSITY NETWORK

High population density of cities in China is a good basement to meet the first requirement, and both ofo and Mobike successfully grabbed this opportunity. Currently ofo connects more than 10 million bikes to over 200 million users in 21 countries. According to an authoritative Internet data organization, iiMedia Research, ofo has 9,65 million active users, which accounts for 53.9%, ranking first in the industry (Zhenqinglan, 2017). Mobike, on the other hand, has expanded to 15 countries, has around 200 million registered users and the number of daily active users is 8,65 million (Borak, 2017). According to the online survey, conducted by the author as a primary research tool, the abundance of ofo bikes on the streets is the main motivation to choose this platform. At the same time, insufficient number of Mobike bikes in popular locations was mentioned as the main source of users' dissatisfaction. Hence, ofo leads from network perspective. However, both companies developed an impressively dense network of its bikes.

3.7.6.2 MULTIMODAL INTEGRATION

Multimodal integration is one of the strongest points of both companies, and they equally succeeded in it. Though linking their Apps to Alipay and WeChat online system, the companies developed comprehensive smart payment method, enabling the users to make all the transactions inside their smartphones on the spot. Besides, largely due to the government support, both ofo and Mobike bikes are smartly combined with traditional public transport routes, ensuring maximum convenience for the users.

3.7.6.3 SIMPLE HANDLING

It is needless to say that using ofo and Mobike bike-sharing platforms is a very simple procedure, otherwise it would not gain such huge popularity. To register in both platforms a customer needs to: 1) Download APP 2) Bind ID Card 3)Pay refundable deposit. To rent the bike the procedure is also identical: 1) Find the bike manually or using GPS 2) Scan the bike's QR code 3) Unlock the bike by the system remotely (manually for the ofo old generation bikes) 4) Lock the bike after the trip manually (and finish the trip in the application in case of using the old generation of ofo bikes).

3.7.6.4 ATTRACTIVE PRICING

The details of ofo's and Mobike's pricing were analyzed earlier in this paper. It goes without sating, that renting fee of 1 RMB per half an hour and multiple bonuses are more than attractive for the customers. However, Mobike is losing from this perspective, as it has a higher deposit of 299 RMB compared to 199 RMB ofo deposit. The results of the online survey revealed, that 44% of respondents have chosen ofo platform due to its cheapness comparing to the rivals. It confirms that ofo's pricing is more attractive than Mobike's one.

3.7.6.5 HIGH QUALITY BIKES

The quality of ofo bikes is the only arguable factor. It is known, that the main focus of the company is not the quality of its bikes, but comfortableness during riding process. Consequently, the cost of ofo bikes is only 300 RMB, much cheaper than, Mobike bikes, which cost between 2000 and 5000 RMB. On the other hand, Mobike vehicles' quality is unequivocal, as they are developed and manufactured by the company itself, with great attention to high technological standards and long duration. The difference in quality between the two companies' bikes was verified by both primarily research tools, namely online survey and interview. 57% of the ofo users among respondents mentioned that ofo bikes are often in bad conditions, due to short durability, and 31% stated that ofo bikes are not comfortable to ride. At the same time the better quality and convenience of Mobike bikes were the reasons to choose Mobike for 95% of respondents.

3.7.6.6 SUPPORT OF LOCAL AUTHORITIES

The cooperation between ofo and government was highlighted earlier in the paper. Ofo works with Binhai Public Transport Group and provides the data collected from 200 cities in China to the government in order to contribute to the smart city planning. Mobike also works closely with local governments to set up its own bike lane. For instance, In April 2017,

it entered into partnership with Wuhan transportation Bureau, and has been working cooperatively in order to improve the bicycle culture in Wuhan city (Sohu.com, 2017).

To draw the line, ofo and Mobike both have all the prerequisites for sustainable operation, as they meet almost all the above-mentioned requirements. The results of the comparison between two companies based on the six factors can be found bellow.

High density network integration of stations and bikes

OFO

OFO

Multimodal integration handling pricing

Attractive pricing

High-quality bikes

Support of local authorities

Figure 16: The conditions of successful operation of a bike-sharing company. Comparison of ofo and Mobike.

Source: author.

Today it is hard for users to choose which bike to ride in case both choices are available, due to the fact both companies equally meet the riders' expectations. Under this circumstance, both companies can be considered leaders in the bike sharing industry in China. Mobike and ofo investors have already started discussion about pushing two start-ups into a merger, as it could finish a costly competitive war (Chen, 2017). If this happens, a single dominant player in the bike-sharing industry will fully occupy the market and put an end to the bike-sharing bubble.

3.8. MARKETING MIX. 4P ANALYSIS.

The marketing mix is defined as the "set of marketing tools that the firm uses to pursue its marketing objectives in the target" (Kotler, 2000). The marketing mix is one of the most useful tools that helps to understand what a product or service can offer to the customers and what is the best way to offer it. The best-known and the most common way to execute the marketing mix created in 1960 by E. J. McCarthy, is 4Ps: place, price, product, promotion (E. J. McCarthy, 1968).

In this section the 4Ps tool will be used to analyze the ofo company's marketing strategies and to understand what factors helped the company to develop its brand image, to gain the market share and to stand out in the intense competition. In addition, some

recommendations will be offered in order to improve company's strategy from marketing perspective.

3.8.1 PLACE

In the first year of operation of bikes were placed only in the universities of Beijing without the possibility to take bikes to the city. It was a reasonable decision, since the students are the most common bicycle riders. The closed university area was serving as a perfect simple model for the founders to analyze the users' behavior and to understand how to organize operations (Y Combinator, 2017).

After entering the streets of Beijing, the ofo bikes were rationally placed near metro and bus stations, near office building and universities, basically, in the places where they are the most needed, due to constant flow of people. Starting with this phase of development ofo's place strategy was similar to any other bike-sharing platform.

Expanding to the other Chinese and later foreign cities, ofo managers were choosing the most population-dense urban areas, that in their opinions, suffer from the same last-mile problem as Beijing. The other crucial metrics in choosing the target cities included the credit card penetration, the smartphone ownership, city planning, the price of public transportation (Y Combinator, 2017).

As ofo bikes do not have fixed station, the riders can drop them anywhere, thus, disturbing the company's place strategy. To solve this issue, the company performs regular shifting and rebalancing of their bikes, using three-wheel electric vehicles, small vans and manpower (Y Combinator, 2017).

However, aiming to solve certain urban transportation problems, ofo and other bike sharing platforms, competing for the market share, created other urban problems. Hundreds of parked bikes block the entrances to metro and public buildings, occupy car parking areas, create hazards on the road. The local authorities are currently discussing in earnest the legitimacy of placing the company's bicycles in the public areas. In addition, some cities lack of designated bicycle paths and require certain infrastructure improvement before being flooded with bicycles of all possible colors.

Therefore, while planning its place strategies of should consider the above-mentioned issues, and deepen the cooperation with local governments in city planning measures.

3.8.2 PRICE

In ofo's case, the price strategies are not the most important among the other factors in marketing mix, due to the following reasons. First, the renting fee is almost nothing, compared to substitute transportation methods. Second, ofo and the other bike-sharing startups frequently offer free rides and other bonuses to retain old and attract new customer. Third, the fee for renting bikes of different platforms is very similar. ofo does not have much space for maneuver in terms of price, since charging the customers more would mean losing them, as they would easily switch to another company.

All the current players in bike-sharing industry, including ofo, offer minimum renting period of 30 minutes, meaning that, if the ride happened to be shorter, the rider would still have to pay the price of 30 minutes' ride (Sohu, 2017) Currently ofo charges its users 1 RMB for a half an hour ride. Previously, ofo rental fee was lower: 0,5 RMB for an hour for students and teachers and 1 RMB for an hour for all the rest. But, despite the price increase, the customers were not lost, as most of the companies charge the same 1 rental fee.

In addition, every customer must pay a deposit, that was increased from 99 RMB to 199 RMB as an anti-theft measure. This deposit has created several issues.

First, to reassure users, government and media ofo's, along with Mobike's CEOs have announced that the deposit is refunded in few seconds after the request (Mo, 2017) However, it is not that easy in reality. Until recently the application lacked the "refund" button, thus, the users had to contact the customer service via phone or feedback service in the App. It created certain difficulties. First, the line was often busy; second, the requests were often ignored. The author of this thesis witnessed, how her colleagues spent weeks waiting for the reply and arguing with the company representatives, until eventually getting the deposit back. More than that, frankly speaking, the author herself did not get the deposit back at all. Ofo's CEO is already informed about customer's dissatisfaction concerning this issue and claims, that the deposit returning process will become more automated soon (Sheila Yu, 2017).

In addition, the government is concerned about the safely of the customers' deposits and questions the legitimacy of storing such huge amount of money. The CEOs of ofo and Mobike in their turn claim that they do not use clients' deposits to fund daily operations and have opened separate bank accounts to ensure financial safety (Financial Times, 2018), (Mo, 2017). However, this statement is arguable.

To summarize, the price strategy cannot be a strong factor in ofo's marketing plan, as it is not able to distinguish ofo from its competitors. However, the deposit problem is important and the ofo's CEO should solve it as soon as possible to retain its loyal customers.

3.8.3 PRODUCT

In traditional bicycle industry, the business is realized by the customers purchasing the bikes. It is a one-time commercial activity, that results in concentration of ownership and usage rights in hands of a buyer. In the bike-sharing business, ownership and usage are separated. The bike-sharing companies' lease the usage of bikes to customers for a short period of time, charging them a certain amount of money, in order to make profit. In addition, the company provides all the related services, such as bike maintenance, a smartphone application, customer service. This business model is applied to both traditional bike-sharing industry, when the bikes are located at special stations, and the new dock less bike-sharing industry. However, the fact, that ofo's and his rivals' bikes do not have a fixed location make them a unique product, or even service in this case.

The key features of ofo bikes include: fashionable design, bright yellow color, conveniently adjustable seat, advanced break system, GPS function and IoT technologies. Despite the fact that the cost and the quality of the bikes is lower than the ones of Mobike bikes, all the mentioned above features together meet the users' expectations. As long as the company's management continues timely reacting to the shifts in customers' expectations and adjust its service according to the users' feedbacks, ofo will remain the most favorable bike in China and might also become a front-runner in the rest of the world.

3.8.4 PROMOTION

It goes without saying, that the visibility of ofo bicycles in real life, on the streets of the cities, is the simplest, but the most powerful promotion. This statement was verified by the results of the online survey, as 38% of the respondents chose the bike-sharing platform after seeing a lot of identical bikes on the streets or being used by other riders. The bright and attractive design and an impressive amount of ofo bikes creates a natural curiosity of people to try something innovative and popular.

Moreover, ofo promotes its product through various channels: via mass media, including the official websites (unique for each new country), Facebook page, LinkedIn profile and many Chinese media platforms; via various city campaigns and via participating in all kinds all international meeting, discussions and summits. In recent last 6 months only, the ofo

founders gave speech at APEC CEO Summit in Vietnam, "the Future of Mobility" panel in Beijing, panel discussion themed "Developing Green Economies for Cities" in Vienna and money others. Of o is aimed at cooperation with the rest of the world in solving global problems and is eagerly sharing its experience with international audience, encouraging everyone to join the "green movement" (LinkedIn, 2017).

Besides, ofo constantly initiates promo-actions to improve the experience of its loyal customers and to attract new ones. For example, the online survey results revealed that ofo provides multiple student discounts, such as not charging the deposit and proving free riding minutes. Most of these moves were already discussed in the paper, so, it appears reasonable to briefly remind them in this section.

The promotion under the name "Red Envelop" is aimed, on the one hand, to please the riders with the chance to win considerable amount of money, up to 5 thousand RMB, and, on the other hand, at solving the issue of reallocating scattered bikes.

The credit system, launched with the goal to encourage right riding behavior and discourage rules' violation, enables the loyal and fair users to get multiple bonuses and discounts.

The campaign launched in cooperation with Sesame credit has eliminated the deposit for new registered customers, who have a high credit ranking.

Partnership with Universal Studio gave birth to animated Minion looking of bikes, that attracted new customers with their funny appearance.

Within the collaboration with Rihana's Clara "Lionel Foundation", called "1 KM Action" of provided funds for scholarships and also donated its bikes for girls in Malawi to relieve transportation challenge in getting to school.

In addition, of provides free rides in almost every new foreign city it enters, gaining trust and love of international users.

The list can be continued, as of never stops to search for new ways to please its customers. All the mentioned above is a sign of a smart diversified promotion strategy that gives of all the chances to become number one bike-sharing platform in the world.

3.9. Interpretation of qualitative and Quantitative research

3.9.1. QUANTITATIVE RESEARCH

3.9.1.1. OBJECTIVES.

Quantitative research is a primary research method, aimed at establishing, confirming or validating relationships and at developing generalizations that will contribute to a theory (Leedy & Ormrod, 2000). This tool was chosen to be used in order to fill in the gaps in the previous secondary research.

Based on the information investigated in the previous parts of the thesis, the following hypothesis will be examined.

H1: Riding bicycle in China is not a fitness or leisure time activity, but mostly a transportation method.

H2: Bicycles are mostly used as a transportation method to cover short distances, namely distances under 3 km.

H3: More than 60% respondents use a bicycle daily as a way to get to work or school and back home.

H4: More than 60% respondents use bikes to cover a walking distance either between the starting point and final destination, or between the public transport and final destination.

After proving (or disapproving) the first four hypotheses, that provide us with the clear picture of bikes' usage in China in general, the situation around bike-sharing will be analyzed. The secondary research provided the reason to believe that bike-sharing is gaining in prominence recently. More and more people prefer using bike-sharing platforms, instead of owning their own bikes. However, bike-sharing is quite a recent trend, thus, some people might be hesitant about using it, and still prefer riding a private bike. Consequently, the hypothesis arises:

H5: More than 60% of the respondents use shared bikes.

Next, it appears logical to verify the way of choosing of the bike-sharing platform by the respondents. As was described previously in the thesis, visibility of the bikes on the street is the best promotion, that appeals to people's natural curiosity to try out new things. However, friends' recommendation might also play a certain role in choosing the bike-sharing platform. The hypothesis to be proven, hence, is:

H6: Majority of respondents (>50%) have chosen the bike sharing company, simply from curiosity, after seeing the bikes of the particular company on the street.

After confirming the information mentioned above, the competitive environment in the bikesharing market will be verified. The hypothesis that can prove the leading position of ofo is: H7: Majority of the respondents (above 60%) use of o. Around 30% are Mobike users. And the rest 10% accounts for the other platforms.

Next, the reasons behind respondents' preference of ofo and mobike, as well as riding experience will be analyzed.

H8: High quantity of bikes on the streets is the reason behind choosing the ofo platform in 60% of cases, while 60% of Mobike users chose Mobike due to high quality of the bikes.

H9: 50% of respondents are mostly satisfied with the service of both platforms.

Despite overall satisfaction, there are still certain issues that disturb the users and should be improved. These issues will be also investigated, besides, the recommendations on the operation of both platforms will be required from the respondents.

3.9.1.2. METHODOLOGY.

Quantitative Research will be used to quantify the problem by generating data and transforming it into statistics. The chosen data collection method is online survey. The platforms that enabled conducting the survey is a Russian online tool Testograph, providing free services, allowing limitless number of questions and answers, as well as summarizing the collected data into illustrative diagrams, thus, simplifying the data analysis process.

The chosen sample includes millennials, mostly aged between 20 and 30 years old. The main occupation of respondents is studying in the university or office work. As gender is not important for the study, it is not specified in the research. One more important criteria applied in the research is that respondents are permanent or temporal residents of big cities in China, including Beijing, Shanghai, Hangzhou, Guangzhou. There was no aim to limit the survey to any particular nationality, thus, people from multiple origins, including Chinese, Russians, Ukrainians, Germans, Austrians, Danish, French, Spanish, Portuguese, South African, Syrians and others were involved. To provide clearer data, people currently living outside China, as well as rural population of China did not participate in the survey. The total size of sample is 42 respondents.

3.9.1.3. Interpretation of results.

This section will provide the questions, that were asked during the survey, as well as the justified respondents' answers, illustratively summarized in charts and diagrams, that can be found in the appendix. Based on the results of the survey it will be possible to see if the

real situation in the Chinese bike industry matches or contradicts the theory and conclude if the hypothesis set above are right or wrong.

The first set of hypotheses stated in the objective, was aimed at understanding the perception of a bicycle by the residents of China. The responses to the first question about bikes usage frequency provided us with the information, that more than half of respondents ride a bike every day. The circle diagram summarizing the reasons of riding a bike by respondents clearly illustrates, that time saving is the main motivation of the respondents to use a bike, as it was chosen by 70% of responders. The second-popular reason, health and shape, accounts for less than 15%. Environmental harm is not of big concern for the residence of China. In the third question, the respondents were given multiple types of bike-usage scenarios in order to choose the most typical for them. The results provide us with the information, that almost 24% use a bike to compliment the public transport, and 33% use it to cover a walking distance. The little number of respondents picking the situations such as riding around campus, fitness or leisure time again confirms that in China bicycle is more than a source of fun or a fitness tool, it has become more like a necessary mean of transportation. However, it still cannot substitute the public transport, evidently because of the huge size of Chinese cities. This scenario is typical for only 12% of respondents. The last in this set of questions was focused on the length of a typical bike travel. It is clear from the diagram that an overwhelming majority of responders usually ride under 3 km. Summarizing the most popular answers to the four question and also taking into account the sample discussed earlier, it is easy to conclude that the respondents use bicycles mostly on the way to their job or school and the way back home, either together with public transport if the distance is long, or instead of walking a short distance, to save time. Therefore, the set of questions and answers discussed above fully verifies the first four hypotheses. In China, a bike is perceived as a short-distance vehicle used by the students and office workers on their everyday journeys in order to save time.

The hypothesis N95 read that the proportion of the respondents using shared bikes and private bikes is 60 to 40 respectively. The diagram summarizing the results of the question number 5 shows that the real proportion is 57 to 23. Hence, we can say that this hypothesis is also proved to be true. To understand the motivations of respondents preferring to ride their own bikes, the question number 6 about the reason was asked. From the multiple answers given it can be concluded that shared bikes did not get the full trust yet, and that own bikes are still perceived as being more reliable and convenient.

The question number seven was focused on the way how the bike-sharing platform is usually chosen. The majority of responders, accounting for 38%, have chosen the shared-bikes due to the simple visibility of the brand on the street, just like it was assumed in the hypothesis However, the real percentage is lower that it seemed to be. Friends advice and comparison with the other brands are also popular ways of making a choice, according to the polling data. It was the case of 24% and 22% of respondents, respectively. Thus, the hypothesis number 6 is proved only partially.

Setting the hypothesis number 7 the personal experience of bike-riding in Beijing was considered. The poll was conducted among people from several big cities. Hence, the results might have been different. However, the results prove to be very close to the hypothesis. 61% of responders are ofo users, while Mobike is rode by 28% of them. Surprisingly enough, among 42 participants of the survey, no one mentioned any other platform, as can be seen from the "free" answers. This clearly proves the shared-bikes industry situation discussed in the theoretical sections: Ofo and Mobike are undisputable leaders on the market.

Question 9-16 were devoted to the riding experience and satisfaction of the two leading platforms. From the charts 9 and 13 we can see that ofo is chosen due to its density network of bikes and cheap pricing in 65% and 29% respectively. Mobike's strong point is quality, which is proven by 65% of responders. This results strongly correlates with the H8, with the reservation that cheapness of ofo wasn't not expected to be a strong motivation by the author.

The results of the question 10 and 14 illustrate that 54% and 65% of respondents are mostly satisfied with the service of ofo and Mobike, respectively, while the proportion of fully satisfied users leaves much to be desired. H9, thus, is verified. However, the result is quite ambiguous. While more ofo instead of mobike, the satisfaction level by Mobike service is higher (94% of fully or mostly satisfied Mobike riders against 69% or ofo users). This logically suggests, that if the number of Mobike bikes on the street was equal to ofo bikes, people would probably choose it. Thus, it appears import for Mobike to work on producing more bikes and on reallocating them. At the same time, ofo should focus on improving the quality of their bikes and improve the maintenance process, in order to retain its users and beat the competitor, who is closing in. This were exactly the main complains and recommendations to the platforms mentioned by the respondents in the questions 11-12 and 15-16.

Almost all the hypotheses were fully verified. The reality does not contradict the information collected during the secondary research, neither it contradicts the personal experience and view of the author. At the same time, the answers provided some interesting details, that

complement the existing theoretical knowledge about the company. In the absence of possibility to analyze every particular answer, all of them are provided in the appendix, as was already mentioned above.

3.9.2. QUALITATIVE RESEARCH

Qualitative research is an exploratory approach, aimed at investigating the issue from the participants' viewpoint. The data collection method in case of qualitative research is less structured, the sample size is usually small, as the main interest is not in the number of respondents but in deep and detailed answers from them (Leedy & Ormrod, 2000). Individual semi-structured interview was chosen as the data collection method of this research. The respondents were searched among high position manages in ofo company in different countries via LinkedIn. As a result, an operations consultant, who was responsible for launching of in Prague, Jakub Ditrich agreed to be interview via phone. The interview was conducted in English, it was live, the answers were not prepared and thus appeared to be of a great value. The transcript of the full interview can be found in appendix 2.

The summary of the interview can be divided into two parts: findings that go in line with the information accessed during the secondary research and prove the theories designed before conducting it; and surprising information that could not be found in the existing literature and online, filling in the gaps of the existing knowledge.

The ofo manager once again confirmed that profit is not the main goal of the company. The global expansion is seen as number one aim of ofo. Freedom of movement due to absence of bike-stations was underlined as the main innovation. Cheapness of ofo bikes being both an advantage due to saving costs and a disadvantage due to low quality, that was discussed in details earlier, was also confirmed by Jakub. The answer to question about the ofo's main competitor once again verified that Mobike is the only company that threatens ofo's leading position.

It was curious to find out, that attracting investors is the strongest part of ofo's business in the opinion of Jakub. Even more interesting was his overall attitude to the company's operation. Admitting the initial idea of ofo is a real revolution to the bike industry, Jakub, however, does not see the company's business as a pure success. He also provided the valuable information about the challenge that ofo faced while entering Prague, namely inability to cooperate with city authorities in order to legalize the operation of the platform. In his opinion, however, it was not the company's fault. The problem is that the department of a municipally hall

responsible for bike-sharing platforms simply does not exist yet. The reason is that Prague is considered incompatible to bike-sharing. Thus, the main motivation of Jakub's work in ofo was to prove otherwise. This is an important contribution, as there is an absolute lack of the information about ofo's failure's reasons in certain locations online. Recommendation on the future development of the company in the direction of e-bikes, as well as future expansion into Central and Eastern European region, mentioned by Jakub, also appear very interesting and useful. The provided information is very important, and was used in the other sections to back up the secondary investigation.

3.10. SWOT ANALYSIS

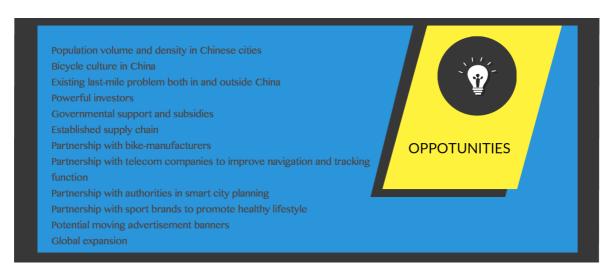
A SWOT analysis is an extremely useful planning tool, that helps an organization analyze the current business situation. The abbreviation stands for the Strengths, Weaknesses, Opportunities, and Threats involved in business, hence the method enables the analyze of both internal and external factors in order to develop full awareness of the business state. This tool was created in the 1960s by Edmund P. Learned, C. Roland Christensen, Kenneth Andrews and William D. Book in the book "Business Policy, Text and Cases" (Learned, 1969). This method will be used in this section, as a way to summaries all the information discussed previously in the most illustrative way and to provide a clear picture on ofo company's business. The completed SWOT analysis will then help to come up with propositions on necessary modifications and future development.

F Series funding type
Pioneer in the industry
Low cost of bikes (300 RMB)
Pricing (199 RMB refundable deposit; 1 RMB for half an hour ride)
Market share (approximately 65%)
Advanced smart technologies (GPS and IoT smart locks)
Credit system
Loyal customers

STRENGHTS

Figure 17: SWOT







Source: author.

3.11 RECOMMENDATIONS ON FUTURE DEVELOPMENT

The SWOT analysis conducted in the previous section provides a clear picture on the company's future strategy, that will embrace gaining more benefits of the company's strengths, capturing the opportunities, improving the weaknesses and overcoming the threats. Based on it, several recommendations aimed at optimizing and expansion of ofo business will be suggested over the next paragraphs.

First, ofo has succeeded in developing alliances with well-known bike manufacturers Fuji Ta and Shanghai Phoenix to produce ofo bikes, with Alibaba to provide the users with convenient payment system, with telecom companies China Telecom and Huawei to develop the technological side of the bikes' operations, with governmental transportation company in Binhai and South China Research and Development Centre to improve the management of public bicycles. Ofo should continue to integrate its service with the whole value chain. For example, ofo might cooperate with insurance companies to provide

insurance options for riders. It could solve the issue of safely and put the ofo business on legal tracks relieving the pressure from government and mass media.

Second, ofo should seriously consider using its bikes as an advertising space. So far, it was done once, in a form of short-term cooperation with Univeral Studio. In future, ofo can cooperate with sport companies, healthy food restaurants, sport-equipment shops and any other companies that fit into company's green and healthy life-style concept. This type of cooperation can create a strong revenue stream that will make the company highly profitable and will let it give up a risky and illegal "customer's deposits" stream.

Third, ofo should further implement technical improvements and develop more advanced artificial intelligence platform. This will help to improve the GPS accuracy, further facilitate the efficiency of big data usage, which will raise the efficiency of the company's operations. On the other hand, these steps together with improving the technical side of the bikes will help to improve the customer's riding experience and meet the users quickly growing expectations.

Forth, ofo should consider pushing for legitimacy of station less bicycles in China. This, inter alia, can be done through closer and more comprehensive collaboration with local city planning departments aimed at creating proper infrastructure for safe and effective bicycle riding.

Fifth, ofo should think about introducing customers' education in a more holistic way, aimed at reducing vandalism, reckless riding and illegal parking. One of the possible solutions is to launch obligatory short training for every new registered user, or periodic video-lectures inside the applications impossible to skip.

Sixth, ofo should think of the better way of maintenance and redistribution of bikes. Quantitative research revealed several common issues, such as huge number of broken bikes that are removed and fixed at a very slow pace and absence of bikes in dense areas. Rating system and red envelop campaign are aimed at facing these issues, but they evidently do not solve the problems completely. It appears logical, that the company should stop relying on customers' loyal behavior reallocating bikes after using it and reporting the broken bikes, and should solve the problems using its own force, simply by hiring more people to track the state of bikes on the streets.

Worldwide geographical expansion which is taking place already, requires proper comprehensive strategies: individual research, localized entering and development plan with respect to local geography, culture, users' expectations and competencies of local municipal authorities.

One interesting potentially successful idea, proposed by the interviewed insider of the ofo business, is switching to E-bikes, following the example of Uber. This might be successful strategy for certain European cities, incompatible with regular bikes. However, this might change the concept of low costs for the company and low prices for the users.

The last, worth mentioning idea, currently considering by the company's investors, is partnership with Mobike. This alliance could put an end to the bike-sharing bubble and ensure one impossible to beat player in the industry.

CONCLUSION

In recent years, the model of interaction between consumers and producers of goods and services has been changing fundamentally around the world. From the accepted model of work of one or several manufacturers for the thousands of consumers, we turn to the interaction of many with many. The society is experiencing the shift from ownership to access in many industries, creating the new usage scenario. People make profit by utilizing the idling capacity of the items they currently do not use. The consumption is performed in an innovative format, where the satisfaction of the needs implies much less spending than before. All these features refer to a revolutionary new type of economy, most frequently called the sharing economy.

The elements of this new type of economy have been present in our life for more than twenty years. The internet can be seen as the first manifestation of the sharing economy, as its main goal has always been to share. The platforms such as eBay, where people have been trying to sell useless items; Wikipedia, that can be edited and updated by anyone in real time, these are all the signs of the nascent sharing economy, that had appeared long before the term itself. The concept turns out to be not new, in fact, its penetration into our daily life was just accelerated by the internet and technologies. However, the scale that the sharing economy has reached in the recent years allows us to see the trend as the real revolution of the society. Evidence of the drastic changes in the global consumers' behavior, the interest in new social patterns and the direct involvement of the author into this process gave rise to this paper.

The present thesis contains three chapters, each aiming at fulfilling a particular goal, assigned in the beginning of the research, namely:

- 1. To understand the sharing economy through the analysis of different scholars' perspectives;
- 2. To highlight the future opportunities and threats of the sharing economy;
- 3. To distinguish the specific features in the Chinese sharing economy compared to the previous findings;
- 4. To investigate the bike-sharing as a growing sector of the sharing economy through the insight of the ofo company and drawing on lessons from the ofo case.

The first chapter of the paper provided the background information on the topic of the sharing economy. It allowed to set the stage for a more detailed research of the trend in the

Chinese market and, in particular, for analyzing the case of one of its representatives, the bike-sharing platform, ofo.

Firstly, the definitions of the sharing economy were explored. Based on the literature review it was concluded that there is no common definition accepted. The reason lays in the fact that it is still not clear what are the exact features characterizing the business activities as a part of the sharing economy. After reviewing a significant number of literature, it was decided to generate the own definition, that would embrace all the key features emphasized by the scholars. Hence, the sharing economy was defined as "a socio-economic model, enabling the providers of goods and services to "share" it with consumers for free or for a fee, whereby the access to existing resources is facilitated by the internet-based platforms".

Thereafter, the conditions that enabled the sharing economy to emerge as well as the barriers, were highlighted. For simplicity, the numerous drivers of the trend were divided into societal, economic and technological. The barriers on the way of the sharing economy prosperity, such as lack of trust between the parties, threat to government revenue and to existing business were also explained in details.

The next subchapter was devoted to the areas and sectors of the sharing economy, in order to provide a reader with a clear picture and let him later understand what place the bike-sharing platforms take in the sharing economy.

It was followed by the subchapters, looking at the trend from two different points of view. The first of them, called "Sharing economy as a revolutionary new type of consumption" contained a more positive view at the changes that are happening in the business world, and explained the changing patterns and the possible future outcomes. The second, "Sharing economy: dying or transforming", on the contrary, provided the opinion of several scholars that tend to think that the sharing economy has no future, as it has already lost its key meaning and purpose. The author of the present research is prone to support the first opinion, advocating that the sharing economy is transforming, but not dying.

The overview of advantages and disadvantages of the sharing economy at the end of the chapter provided a simplified overview of the topic.

Being a theoretical part of the research, the first chapter was fully based on the secondary research. The extensive literature, containing books and articles of respected scholars in the field, were reviewed and re-examined in order to explore the trend from every angle. The authors whose works and opinions contributed the most to the research include the experts

of collaborative consumption Rachel Botsman and Roo Rogers, the specialist of the network effect and economics of digital goods Arun Sundararajan, one of the founders of the term "sharing economy" Lawrence Lessig, the strong proponent of the idea of future inconsistency of the sharing economy Sarah Kessler.

After having looked at the trend in general, the scope of the study was narrowed to the situation in The Peoples Republic of China, which was the focus of the second chapter. This country was chosen for the analysis, due to the reason, that the present paper was started by the author while living there. The experience in China provided the author with the feeling that the new trend is particularly developed in that region, besides contains several features crucially distinguishing it from the rest of the world.

The second chapter, thus, was aimed at identifying the main specifics of the sharing economy in China's case. The chapter appeared comparatively short, and did not contain subchapters. However, it can still be divided into several logical parts.

The second chapter, thus, was aimed at identifying the main specifics of the sharing economy in China's case. Firstly, the statistical data on the China's sharing economy were shown to illustrate its scale and marking the beginning of the analyze of its specific features. Next followed the detailed description of the drivers, that were identified thorough review of the existing online literature. For simplicity, the drivers were divided by the author into three large groups, namely technological, social and political drivers. The war between Chinese internet giants were separated into a district facilitating factor. The deep analyzes of the essence and the goals of the trend in China further illustrated several important distinguishing features. In order to prove the theory about the scope of China's sharing economy, the information about the most unique sharing services was provided. At the end of the chapter, the hypothesis about the closeness of China's sharing economy to international platforms was backed up with real examples of Uber and Airbnb experience in the country.

In case of the second chapter, multiple online articles and reports written mostly in Chinese Mandarin language, or in English by Chinese journalists and scholars, were analyzed. This, first, allowed both the author and readers to get a true insight into how the trend is perceived by the representatives of the Chinese society. Second, it contributed to filling in the gap of the existing knowledge on the Chinese Sharing economy in English.

The third chapter was mostly devoted to analyzing one of the most remarkable players of the Chinese sharing economy, the bike-sharing platform of o. The personal experience of the author in using the company's service for half a year, first predetermined the choice, and second, helped to contribute to the investigation.

The chapter started with the background information on the history of China' bike-sharing. Being the "kingdom of the bicycle" for the second half of the 20th century, China then focused on the production of automobiles. It led to the situation, that by the beginning of the new century bicycles were perceived as a sign of poorness and stagnation. However, the emerged environmental issues of the recent years allowed bikes to regain their former glory.

The second subchapter provided the information on the stages of the global bike-sharing development. The experience and challenges of the past gave birth to the new era of the industry, referred to as 4.0. Distinguishing the feathers of the current stage made it possible to move to the exploration of ofo company.

Ofo, is the first dockless bike-sharing platform, that was invented by the students of the Beijing university in 2014. The history of its creation and expansion is noteworthy and, thus, was reviewed in a separate subchapter. The business of the company, including past challenges, current state and future perspectives, was analyzed.

First, the business model was examined using the BMC model, introduced by A. Osterwalder and Y. Pigneur. Much attention was dedicated to exploration of the company's revenue stream, which was proved to be not sustainable enough due to the doubtful deposit system.

Furthermore, the fist mover advantages and disadvantages, captured by ofo were estimated using the criterias, set by Lieberman & Montgomery. While capturing such advantages as strong reputation and customers' loyalty strengthened by the switching costs, ofo has faced the challenges of free-rider benefiting from the company's easily imitable business model and offering the customers the better-quality service using the pioneer's experience and mistakes.

The next subchapter was devoted to the social, cultural, political, technological and business innovations, that ofo brings to the society. The most evident social and business innovation was proved to be the effective solution of the last-mile problem, facilitated by station-less model of the platform. In the cultural perspective, ofo advocates for improving the quality of the city and the environment. Sharing big data with the government is seen as the revolutionary part of ofo's business from the political point of view. In terms of technological

innovations, the company, however, lags behind its main rival, Mobike, and requires certain improvements.

The Porter's five forces model was used to thoroughly analyze the industrial structure and the competitiveness of the bike-sharing industry in China, in order to understand the current position and the potential growth of the ofo company. The industry was proved to be highly competitive, with only the bargaining power of suppliers being considerable low. Part of this subchapter was focused on the comparison with ofo's main rival, Mobike, using the successful bike-sharing platform criterias, introduced in Roland Berger study. The main finding of this comparison lays in Mobike's leadership in terms of quality and innovative character of the service provided. This factor should be taken into account by ofo in the further development and expansion, in order to maintain the leading position in the industry.

Next, the company's marketing strategy was examined via the 4Ps tool. The price was revealed to be the least important factor in the marketing mix due to the similar pricing of the players in the industry. The promotion appeared to be a self-regulated factor, as the visibility of ofo bikes is more effective than any advertisement or campaign, which, however also take place. The place and product require much attention and improvement from the company's side being the crucial factors in the marketing mix.

The secondary data and the findings of the above-mentioned analyses were backed up by the author's primary research in both qualitative and quantitative form. The online survey of the Millennials currently living in the big cities of China was chosen as a quantitative research method. The results of the survey almost fully verified all the hypotheses, set up prior to research, namely:

H1: Riding bicycle in China is not a fitness or leisure time activity, but mostly a transportation method;

H2: Bicycles are mostly used as a transportation method to cover short distances, namely distances under 3 km;

H3: More than 60% respondents use a bicycle daily as a way to get to work or school and back home;

H4: More than 60% respondents use bikes to cover a walking distance either between the starting point and final destination, or between the public transport and final destination;

H5: More than 60% of the respondents use shared bikes;

H6: Majority of respondents (>50%) have chosen the bike sharing company, simply from curiosity, after seeing the bikes of the particular company on the street;

H7: Majority of the respondents (above 60%) use of o. Around 30% are Mobike users. And the rest 10% accounts for the other platforms;

H8: High quantity of bikes on the streets is the reason behind choosing the ofo platform in 60% of cases, while 60% of Mobike users chose Mobike due to high quality of the bikes;

H9: 50% of respondents are mostly satisfied with the service of both platforms.

The results of the quantitative research provided the statistical data about the bike-sharing usage in Chinese urban areas and illustrated the level of satisfaction with the service of ofo and Mobike. Besides, the main problems and possible recommendations on the company's operations were mentioned.

The qualitative research was carried in a form of a semi-structured phone interview with the company's insider, responsible for the launch of the platform in Prague. The results mostly went in line with the previous findings. However, the answers also complemented with several details about the company's expansion to Prague, that are not available in any of the existing online literature.

The third chapter ended with the SWOT analyses, summarizing all the findings gathered during the study, as well as the author's recommendation on the future development of the company. The information for the analyses was gathered by accessing the statistical data from the company's official web-pages and reviews of the company in multiple online sources. Besides, findings of the primary research and the personal experience also played a remarkable role in the investigation. The main strength identified during the research is believed to be the competitive pricing of the ofo bikes. However, this is a double-edge sword as it leads to the main weakness: the low quality of the bikes affecting the users' riding experience. Other worth mentioning weaknesses include ineffective maintenance and redistribution of bikes, little number of property rights compared to the main competitor, incomplete revenue streams. The external threats are mostly represented by incompatibility of certain locations for the company's operation and the fierce competition. The list of opportunities looks very promising. Thus, timely response to customer's feedbacks and shifts in requirements, improvement of service in terms of technology to be ahead of competitors, maintenance of close cooperation with the government and the global expansion implementing the comprehensive strategies can guarantee the company's long-term success.

Though the analyzes of ofo, this paper provided readers with the clear understanding of the patterns of the staring economy at different levels, namely, the level of one particular company, the level of one particular country and the global level. However, this inductive approach did have certain limitations, as the information provided can differ for the other players of the industries and the players of the sharing economy in general. Besides, the research data was delimited to information available by May 2018. Considering the pace with which the trend is developing and the frequency of the emergence of the new players, the data provided might be outdated comparatively soon. Hence, the present thesis can serve as a sound background for the further investigation of the sharing economy, of the Chinese sharing platforms, of the bike-sharing industry and of the ofo company dynamics.

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APPENDIXES

APPENDIX 1: CHRONOLOGY OF GEOGRAPHICAL EXPANSION OF OFO

Yeas, month	City ⁴	Country
2015	Beijing	
2016 April	Shanghai	*)
September	Hangzhou	*>
November	Shenzhen	*)
December	Guangzhou; Chengdu, Xiamen, Kunming,	*3
December	Silicon Valley, San Francisco	
2017 January	Tianjin, Wuhan, Nanjing, Hefei, Suzhou	•3
February	Singapore	0
February	Nanning	*3
March	Wuxi, Qingdao, Zhuhai	*3
March	Cambridge	<u> </u>
April	Stanford University	
April	Guilin	*3
June	Dalian	•
July	Bangkok	
August	Malacca, Kuala Lumpur, Putrajaya, Cyberjaya, Penang, Melacca, Bangi	KG
August	Seattle	
August	Oxford	316
September	Chennai, Pune, Ahmedabad, Bangalore, Coimbatore, Delhi	•
September	Lisbon	(8)
September	Vienna	=

⁴ Not all the Chinese cities are mentioned

September	Tokyo	•
September	London	
September	Almaty	
September	Ramat Gan	*
September	Phuket	=
September	Prague	
September	Budapest	
September	Milan, Varese	П
September	Moscow	
September	Rotterdam, Amsterdam	=
September	Groningen	
October	Washington, DC	
October	Sydney	***
October	Madrid	**
November	Granada	19
December	Hong Kong	索
December	Paris	11
2018 January	Busan	:• :
March	San Diego	

Source: (LinkedIn 2017) and author

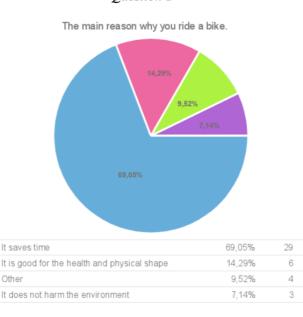
APPENDIX 2: RESULTS OF QUANTITATIVE RESEARCH

Question 1



Total number of answers: 42

Question 2

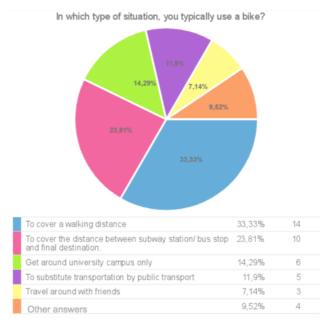


Other answers



Total number of answers: 42

Question 3

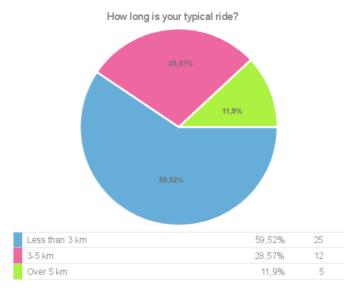


Other answers



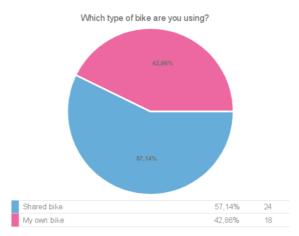
Total number of answers: 42

Question 4



Total number of answers:42



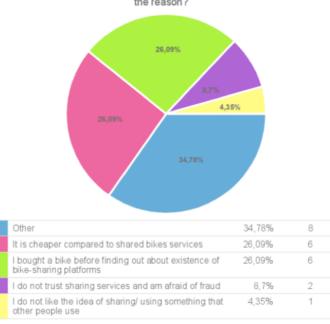


5

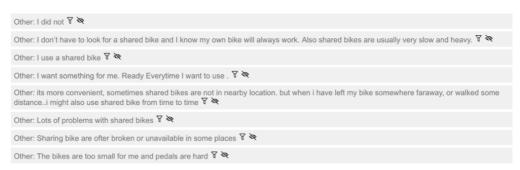
Total number of answers:42

Question 6

If in the previous question, you have chosen "My own bike", what is the reason?



Other answers

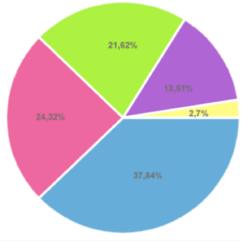


Total number of answers: 23

⁵ Q6: Respondents using the shared bikes were warned not to answer this question. However, 2/8 "other" answers belong to those who use shared bikes, creating statistical error.

Question 7

How did you choose a bike sharing company?



I saw the bikes of the company on the street/ being used by others and felt curious about trying it as well	37,84%	14
I was choosing between several platforms, and after collecting information about them and comparing it, I made my choice	24,32%	9
Due to friends' advice	21,62%	8
Other	13,51%	5
Due to mass media/advertisement campaign/promotion	2,7%	1

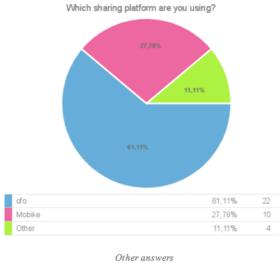
Other answers

Other: Choose one which is closer to me $ \overline{} $
Other: I don't ₹ 🎕
Other: N/A ₹ 🌣
Other: Student discount ₹ 🌣
Other: Switched after using another platform 🔻 💘

Total number of answers: 37

⁶ Q5 shows that 24/42 respondents use shared bikes, while the total number of answers in Q7 and Q8 are 37 and 36, respectively. The discrepancy happened due to the following reasons. 1)Lack of attention (respondents were warned not to answer Q8 in case they use a private bike. However, 2 respondents ignored the warning, creating a statistical error.) 2) Several respondents answered Q7 and Q8 based on their past experience, being currently private bike riders.

Question 8

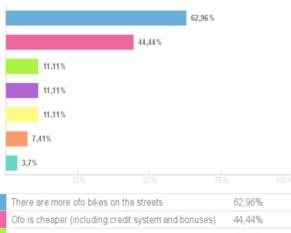


other who herb

Other: Both 🖁 🎘

Question 9

If you are using ofo, what is the reason you prefer it to its competitors? (Several answers are possible)



There are more ofo bikes on the streets	62,96%	17
Ofo is cheaper (including credit system and bonuses)	44,44%	12
Other	11,11%	3
The quality of the bikes is better (Bikes are more resistible and durable)	11,11%	3
I like the design	11,11%	3
I had started using ofo before other platforms appeared in my city	7,41%	2
The bikes are more comfortable to ride	3,7%	1

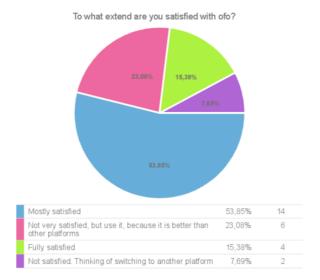
Other answers

Other: I don't $\overline{\forall}$ $\overline{\otimes}$ Other: No need to pay the deposit if you are a student, just need provide student ID picture $\overline{\forall}$ $\overline{\otimes}$ Other: Recommended by a friend $\overline{\forall}$ $\overline{\otimes}$

Total amount of answers: 41

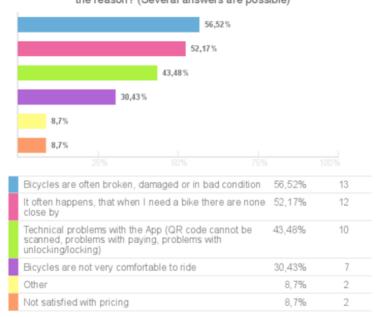
 $^{^7}$ Q8: 11,11% of "other" platforms is a statistical error. Out of 4 respondents, who answered "other", 2 use both platforms and 2 use a private bike.

Question 10



Total number of answers:26
Question 11

If you did not choose "fully satisfied" in the previous question, what is the reason? (Several answers are possible)



Other answers

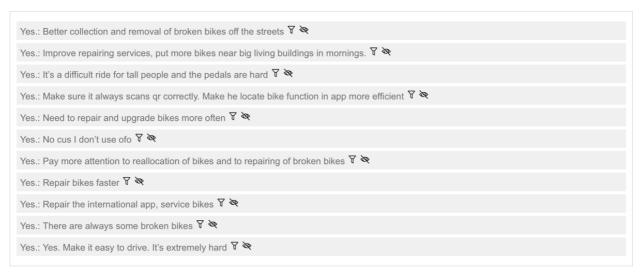
Other: I don't use	ofo 🕈	₩
Other: It became	very	hard 🕈 🗞

Total amount of answers: 46

⁸ Q8 shows that 22 respondents use ofo, while the total number of answers in Q10 is 26. The discrepancy happened due to the reason, that several respondents answered Q10 based on their past experience, being currently either a private bike riders, either a Mobike riders, either being users of both platforms.

Question 12

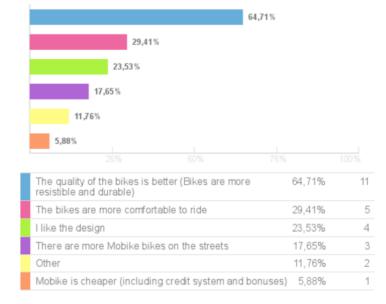
Do you have any recomendations how to improve ofo service? If yes, please, write you answer.



Total number of answers:11

Question 13

If you are using Mobike, what is the reason you prefer it to its competitors? (Several answers are possible)

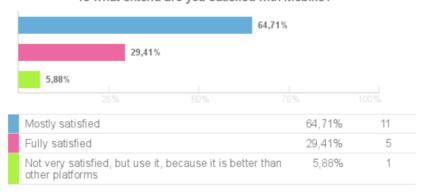


Other answers

Total amount of answers: 26

Question 14

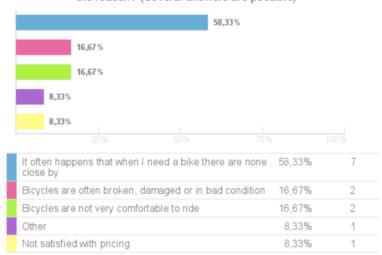
To what extend are you satisfied with Mobike?



Total number of answers:17

Question 15

If you did not choose "fully satisfied" in the previous question, what is the reason? (Several answers are possible)



Total number of answers:13

Question 16

Do you have any recomendations how to improve Mobike service? If yes, please, write you answer.



Total number of answers: 4

APPENDIX 3: INTERVIEW WITH JAKUB DITRICH

Jakub Ditrich is the managing director of a Prague based company AGOGS, designing and producing electric bikes and CEO of ecolo.cz, shared e-bike platform operating in Prague 7 using its own AGOGS brand bikes.

1)Please, shortly describe your responsibilities at ofo company.

A year ago of set Prague as its next target in Europe. The company was searching for a production base in Prague and contacted me. I was responsible for the of pilot campaign in Prague that started in September 2017.

2) In your opinion, what is the main goal of ofo?

It is definitely not to make money, but to expand its business worldwide. In particular case of Prague, the main motivation was, that, unlike other European cities, there is no bike-sharing at all here. There are only couple of companies too little to count, compared to of or Mobike scale in China. There were recently two bike-sharing tenders, but they were cancelled. So, it was a great opportunity for ofo, on the one hand.

On the other hand, it has been always believed, that Prague is incompatible with bike-sharing, mostly because of city planning and well-developed transportation system. But I strongly disagree. Every city is compatible with bike-sharing, in my opinion. And the challenge was to show that bike-sharing works in Prague. You just need to know how to make it work. Of has a good experience in entering European cities, so it new how to make it work. The pilot was very successful.

3)Do you know, what were the main challenges of ofo in past, what are they currently and in the future? And how ofo has solved/is going to solve them?

I cannot say anything about of oin other countries, as the pilot is over and I am not working for the company anymore.

The main challenge in Prague was to make a contract with a city hall, to be able to operate legally and successfully. Unfortunately, this challenge wasn't overcome. Of failed to reach the municipal department responsible for bike sharing. That is why of odecided not to develop in Prague but to merge this destination with several other countries into a regional department, the center of which is now is Warsaw. At the moment, there are no of o bikes in Prague.

4) What is the main innovation of o is bringing to society?

It is clearly a freedom of station less bike-sharing. It is something that didn't exist in the world so far, and I personally was impressed when first heard about ofo. Besides, this model enables of to take down the costs for deployment, both for users and the company.

5) In your opinion, what are the main strengths and weaknesses of ofo?

The cheapness of of obikes is a double-edged sword. It can be seen as both strength and weakness, depending from what side you look at it. On the one hand, cheap bikes are evidently good for the company's operation, as it saves cots. It is clear if you compare it to Mobike for example, whose bikes are 5 times more expensive in European cities. On the other hand, the result is that in half of a year of obike is so used that it is impossible to ride it anymore. That's how bikes cemeteries are created, because it is just impossible to track all the old bikes and to renew them timely. Mobike bikes on the contrary are more durable.

6) As far as I know, Mobike is currently the main competitor of ofo in China. Is the situation the same in the other counties? If no, please name the main competitor in your county.

Yes, exactly. Mobike is the main and only competitor of ofo, as they are the only platforms at the moment who are successfully attracting investors and aiming at global expansion.

7) Why do you think ofo is better than the its competitors?

Of o is the best at rising money from investors. It rarely happens, that a cheap start up attracts so many investors and collect billions in such a short period of time. This is it. I personally doubt that service that of provides is better in in case of its competitors.

8) Do you know, what are ofo's plans for 2018? What countries is it going to expand to? What improvements and new activities ofo is planning?

I personally do not know about the company's future plans. Probably it will initiate new steps in the region under the Warsaw leadership. But in my opinion, ofo should seriously think about switching to E-bikes. I believe this is the model that will succeed in Prague and other similar cities without any difficulties and doubts. Will ofo do this? This is a question.