

# The Sharing Economy Platforms

Managerial perspective for peer-to-peer services

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Aalto University, P.O. BOX 11000, 00076 AALTO

www.aalto.fi

Abstract of bachelor's thesis

Author Pasi Issakainen

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#### **Abstract**

The increased usage of mobile devices and constant online presence as well as the changes in consumer values have helped the sharing economy platforms to grow significantly. The sharing economy platforms are not only competitors to one another but also to the incumbent companies.

The sharing economy platforms benefit from the idle resources owned by the individuals willing to contribute to the platform, which means that value creation differs from traditional business models. This thesis presents the key differences between managing incumbent companies and managing the sharing economy platforms.

This thesis provides a managerial perspective for peer-to-peer services by using two research methods: a literature review and an online study. The literature review focuses on academical studies and frameworks presented by researchers and the online study clarifies the current practices the sharing economy platforms are using to tackle some managerial issues relevant for sharing economy businesses. Moreover, some criticism the sharing economy has confronted is presented in the thesis.

In addition to addressing the key differences and challenges in managing sharing economy platforms, this thesis provides suggestions on how to avoid common pitfalls and how to tackle common challenges.

**Keywords** sharing economy platforms, sharing economy, platform, management

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#### 1 Introduction

During the last decade a few companies such as Airbnb and Uber have raised sharing as a business to a new scale. Traditional companies who are selling and therefore giving the ownership of items are no longer the only option for consumption.

Sharing is nothing new, but the sharing economy in which companies are building networks for sharing idle resources among participants, has raised its head recently (Täuscher and Kietzmann 2017). These networks are nowadays used via digital platforms. Also, the era of these digital platforms where value creation differs from other business models is emerging (Kenney and Zysman 2016). Sharing economy businesses offer an alternative for buying items. Moreover, they offer an alternative for owning by giving access to the resource. Whether this access is in form of renting or lending, the characteristics of ownership differ crucially from traditional way of consumption.

This thesis provides a managerial approach to the sharing economy platforms. Key differences in managing sharing economy platforms compared with traditional firms are addressed in this thesis. These differences include 1) building the network and initializing the business, 2) the control the platform owner has over the participants and the ways how to exert the control, 3) engaging the participants in the platform and the benefits offered to them, 4) the pricing models used and 5) the currently used ways to maintain and improve the quality of the service in sharing economy platforms.

In addition to changes in business models, the role of trust within sharing economy platforms is covered in this thesis. The reason is that in peer-to-peer systems the trust plays a significant role (Hawlitschek et al. 2016a). Also, some reasons behind the rapid growth of sharing economy platforms are discussed.

Theoretical analysis is accompanied with an online study of the current practices used in the sharing economy platforms. To provide a more complete picture of the sharing economy, this thesis also presents some critics the sharing economy has faced, such as unequal risk distribution between platform owner and platform contributor. The ways how to lighten those dark sides are also discussed.

As the sharing economy is a relatively new phenomena, at least at this scale, there are many characteristics of the sharing economy that research has not yet covered. Therefore, combining sharing economy market mechanisms with the management of platforms creates a topic that is valuable in the field of Information and Service Management.

## 1.1 Research objectives and research questions

The objective of this research is to define the key differences between managing sharing economy platform businesses and traditional businesses. The research also provides insights into currently used management practices in sharing economy platforms.

#### **Research Question 1:**

How does the sharing economy platforms differ from traditional businesses?

### **Research Question 2:**

What are the key challenges in managing sharing economy platforms?

### **Research Question 3:**

How do the participants benefit from the sharing economy platforms?

## 1.2 Scope of research

This research focuses on the managerial perspective of sharing economy platforms. The wide and varying definition of the sharing economy and related phenomena leave room for interpretation. Therefore, it is essential to narrow the scope of the research. In this research I will mainly focus on peer-to-peer systems where the company or in this case the platform owner has the role of building and managing the network between the other participants of the network. Hence, the access-based consumption or collaborative consumption where the platform owner may have own possessions it is sharing, are not thoroughly discussed. By doing this, the research can highlight the key differences between the traditional business models and the sharing economy platform business models.

Platforms are a key factor of sharing economy businesses. In this research the platforms and their key characteristics are discussed in order to create a foundation on which the sharing economy businesses can build their business models. The technical aspects and

possibilities of platforms are not discussed in this research as the focus in on the managing the value creation at large.

However, the different areas to manage the sharing economy platforms are examined, they do not cover all the differences between traditional business models and sharing economy business models. The aspects examined in this research are selected for further discussion due to their broad recognition found in the literature.

### 1.3 Structure of the research

The rest of the thesis is structured as follows. Chapter 2 provides a theoretical background for the topic based on previous literature. Chapter 3 focuses on the methodology used in this thesis. In Chapter 4 the results found in the research will be presented. These results will be first discussed from managerial viewpoint. After that the results from the literature review and the online study will be summarized. Chapter 5 presents some criticism the sharing economy has faced. Finally, Chapter 6 discusses the possibilities of the sharing economy and presents a few suggestions for developing businesses within sharing economy.

## 2 Theoretical background

## 2.1 Sharing economy

In order to fully understand how to manage platforms in the sharing economy, it is crucial to know its components. The sharing economy and the collaborative consumption phenomena are born in the Internet age, but sharing as a phenomenon is nothing new (Belk, 2014).

Terms used in the literature are somewhat confusing as the same phenomena with only minor changes can be defined with a different term. The following terms can be found in the literature to describe the different forms of the sharing economy: "collaborative consumption", "sharing economy", "access-based consumption", "the mesh", "commercial sharing systems", "co-production", "co-creation" and "consumer participation". In the context of Information Systems research the term is used as an umbrella that covers different peer-to-peer exchange forms and related phenomena (Hawlitschek et al. 2016a).

Constantion et al. (2017) define sharing economy as a combination of its key attributes: access over ownership, peer-to-peer and allocation of idle resources. Through these three attributes it is easier to picture the core of sharing economy. Despite the varying definitions found in the literature, these attributes seem to be more or less present in every form of sharing economy.

While ownership has historically, at least in western culture, been seen as a normative and ideal way of consumption and access has been stigmatized as an inferior consumption mode, Bardhi and Eckhardt (2012) update that in a modern liquid society access and its flexibility may be a more suitable option. Constantiou et al. (2017) also recognize that the attitudes are shifting away from the hyper-consumerism.

Hamari et al. (2016) remind that even though peer-to-peer is often associated with file sharing, it is also connected to a larger phenomenon where consumers are acting through collaborative activities online. Hence, peer-to-peer actions refer to interactions and transactions among participants increasingly mediated by internet-based networks and platforms (Constantiou et al. 2017).

Constantion et al. (2016) name efficiency gains in resource allocation, better work-life balance and lower barriers to market entry as examples of expected benefits of sharing

economy. Hamari et al. (2016) sum up the core essence of sharing economy as "the peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services." These community-based online services are often called platforms and they will be examined next.

## 2.2 Platform economy

Platforms are sets of stable components and other components in which the stable components are linked to the other components therefore supporting variety and evolvability in the system (Baldwin and Woodard 2009). At the core of platform economy are the digital platforms used via the Internet and nowadays via different cloud solutions (Kenney and Zysman 2016) to be precise.

These platforms are multisided, which means that they enable direct interaction between multiple customers or participant groups and create value through that direct interaction (Hagiu 2014). However, in the context of sharing economy platforms Constantiou et al. (2016) specify that in most cases the platforms are two-sided, even though Staykova and Damsgaard (2015) claim that it is not always easy to clarify the amount of sides involved in the platform.

Kenney and Zysman (2016) estimate that in the reorganization generated by the platform economy the platform owners may have even greater power than the factory owners had in the early industrial revolution. To manage businesses during this transformation it is crucial to understand the underlying forces and the differences the platform economy has compared with traditional business models. Kenney and Zysman (2016) also describe the rise of the platform economy by comparing it with the industrial revolution, where the factories are replaced by platforms.

Constantion et al. (2017) crystallize that the sharing economy platforms are not revolutionary themselves, but the innovativeness lies that the old businesses are "platformed". This platforming affects e.g. work arrangements and the whole value creation of businesses (Kenney and Zysman 2016).

## 2.3 The changes enabling the trends

The role of technology in the rise of sharing economy platforms is crucial. Constantiou et al. (2017) emphasize how especially the Internet and smart phones have fueled up the

development and enabled the popularity of the platforms that is needed in order to be successful. This is also acknowledged by Hawlitschek et al. (2016a). Belk (2014), Bardhi and Eckhardt (2012) also recognize the impact of the Internet in the change as they mention the Web 2.0 phenomenon. Furthermore, Kenney and Zysman (2016) highlight how cloud computing and the algorithmic revolution have backed up the rise of the platform economy.

However, the technology is not enough to solely explain the drastic change. Global economic crisis is a part of the transformation as consumers are rethinking their values as well as re-examining their spending habits (Bardhi and Eckhardt 2012). In addition to global economic concerns, Hamari et al. (2016) add that also societal and developmental impacts are to be taken into account. Belk (2007) identifies materialism, possessive individualism and developing self-identity by extensions into possessions as obstacles to sharing.

Both the technological advances and the changes in the way we think, have powered each other and therefore they cannot be separated from each other. It has to be remembered that platforms don't only exist in the context of sharing economy. Many platforms including social media platforms have risen due to the Internet becoming more popular and therefore all of the platforms may have mutual technological forces fueling up the development. However, platforms in sharing economy are not always about creating something new. In essence, it is more about transforming the current businesses towards development that breaks the traditional boundaries of the companies.

#### 2.4 Effects on business models

Sharing economy businesses are nowadays run through platforms and therefore it is important to discuss how both, the sharing economy and the platform economy, affect business models.

At the core of a typical sharing economy business model, businesses are, usually for a fee, acting as matchmakers, gatekeepers or intermediaries, which in addition to lowering the transaction costs for their user bases, also mitigates risks and builds trust among their participants (Constantiou et al. 2017). As the selling of items changes into giving access to the items, the companies are no longer offering products, but services. This "servitization" happens across sharing economy platforms and it leads to sharing economy platforms not taking apart in traditional product sales (Constantiou et al. 2017). However, Kenney and Zysman (2016) question the "sharing" part of the equation by

reasoning that the companies like Airbnb, Facebook and Uber are not based on sharing but monetizing human effort and consumer assets.

Widely used terms such as "uberization" or "uber-effect" can also be found in the literature. Although it is used to roughly define the scenario of sharing economy, it siloes the sharing economy and covers only a part of the phenomenon. Constantiou et al. (2017) claim that "Uberization" may even harm the firm's own business as it is suitable only for similar business models and strategic scenarios as in Uber, which thrive for increasing effectiveness and lowering costs.

All platforms have one thing in common. They create value by getting people to contribute and by digitizing human activities (Kenney and Zysman 2016). Constantiou et al. (2017) also highlight that in order to have a successful sharing economy platform, it is crucial to engage the participants to create value.

#### 2.5 The role of trust

As mentioned the business models and the boundaries of the companies have changed. Due to these changes, the consumers have changed their perspective in terms of trust. Instead of solely trusting the company providing the service or transaction, as in the traditional exchange, the consumer side of the platform has to assess the individual on the other side of the platform. However, this is not the only change. Mittendorf (2016) in his exploratory research studies how significant role trust has in sharing economy as he reports how trust both towards the provider and mutually towards the consumer influence the possible outcome. Also, the effects of trust in the platform itself are included in his study (ibid.).

Hawlitschek et al. (2016a) focus more on the individuals in their framework (see Figure 1). The framework is based on the trust game originally designed by Berg et al. (1995) and the framework provides a tool for studying experimentally how trust is involved during the process of renting an apartment through Airbnb (Hawlitschek et al. 2016a). The motivation for the study of Hawlitschek et al. (2016a) is to provide a framework for future studies but the researchers also offer a use case with which trust can be generated as they discuss the trust aspect of user representation in sharing economy platforms.

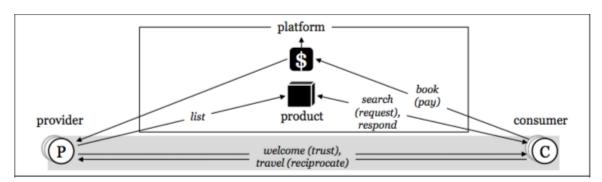
Mittendorf's (2016) study suggests that trust in sharing economy platforms like Airbnb differs from other e-commerce platforms, as in sharing economy trust is not only limited

to the platform itself but also to the individuals on both sides of the platform. This claim supports the analysis of Hawlitschek et al. (2016a).

However, businesses operating the platforms have a crucial role to e.g. mitigate the risk and build trust among the participants (Constantiou et al. 2017). Therefore, the businesses should not underestimate their role as intermediaries. In addition to the mutual perceptions between platform users, and the trustworthiness of the platform itself, Hawlitschek et al. (2016b) add that trust is created through platforms managing the perceptions of the resources exchanged on the platform.

Constantion et al. (2017) mention that Uber has made its standards and rules for drivers public so that the consumers know what to expect and therefore increase trust among participants. This can be seen as an example of Hawlitschek et al. (2016b) suggestions of managing the perceptions of the resource exchanged.

However, the practical solutions how this trust should be generated vary across different platforms. For example, the procedures used in Uber are not always applicable to Airbnb since they operate on different markets for instance.



**Figure 1.** The basic mechanism of Sharing Economy Platforms in travel industry. Source: Hawlitschek et al. (2016a)

## 3 Methodology

Two research methods were used to gather the data for this research. In addition to literature review, I decided to construct an online study on the platforms. The theoretical and practice-oriented approaches create a combination that covers the possibilities of the sharing economy platforms, issues to consider when managing sharing economy platforms as well as theories that support these decisions.

The literature review enabled the theoretical examination of the sharing economy platforms and the underlying changes in the business environment. By studying the literature, I was able to more precisely frame the questions that are not thoroughly answered. Also, the literature review laid the foundation for the online study. In the literature review, I used Scopus database and Google Scholar. Although the sharing economy and related phenomena have recently been studied, the context varies significantly. Therefore, finding the relevant data within the scope of this thesis was highlighted. Furthermore, because some of the researches were fairly new and not having too many citations, I was forced to thoroughly assess the quality of the research. Mainly, the resources in this thesis are articles but also selected conference papers were approved due to their credibility.

The online study aimed to find practical solutions and current ways of managing sharing economy platforms. It was essential to find diverse platforms. There were multiple options to choose from, but the goal was to find companies that are on different markets, have different business models and have already survived the crucial first steps as a sharing economy platform. Not selecting the firms taking their first steps was a conscious decision as the policies in the selected companies are proven successful. In practice, the online study was conducted by examining the websites of the companies. Especially instructions for participants, safety policies, joining practices as well as terms and conditions were thoroughly examined.

The platforms chosen for the online study were Airbnb, Couchsurfing, TaskRabbit and Uber. Airbnb is a platform where individuals can offer their idle spaces for other individuals to use as an accommodation. Couchsurfing also offers an accommodation alternative, but instead of offering entire houses or rooms, individuals offer their own couches for free. In TaskRabbit the taskers can be hired for example for handyman services, moving help or yard work. Uber is a platform where anyone can be a taxi driver with their own car.

## 4 Results

In this chapter the results of the research will be presented. First the results are presented from the managerial perspective. This structured analysis covers the results from the literature review as well as the results from the online study. After this the results are summarized.

## 4.1 Managerial perspective

As the boundaries of the platform organization are not as strict as in traditional companies, managers have to approach management issues from a different perspective. Managing platforms forces to make new decisions about governance, platform design, pricing and number of sides (Hagiu 2014). Also, in the context of sharing economy, the challenges such as quality control and network engagement have to be addressed.

## 4.1.1 Igniting the network

With examples like Uber and Airbnb it is easy to get imaginative and start to plan a sharing economy business of one's own. The reasons behind the high expectations and profitability of sharing economy businesses lie in scalability and network effects (Täuscher and Kietzmann 2017).

In order to compete with traditional companies, the sharing economy firms have to create a wide network that has a sufficient amount of both providers and consumers. Creating this "self-reinforcing cycle" (Constantiou et al. 2016) and as a result a strong network is crucial but may also be extremely challenging. At first the sharing economy platforms have only little or no providers at all. This means that they are not very luring for the consumers in the context of peer-to-peer markets. The same "chicken-and-egg problem" applies also to other multisided platform build-ups (Hagiu 2014). Evans (2009) emphasizes that getting participants to involve is not enough as they must also be in the right proportions on both sides of the multi-sided platform.

Constantiou et al. (2016) identify two phases in the evolution of the sharing economy platform that are "creating the user base" and "augmenting the platform" where in the first phase they showcase how Airbnb first built the supply side of the platform immediately followed by "zig-zag" tactic introduced by Evans (2009). However, there are multiple tactics to create the critical mass of users and producers in the platform. Evans (2009) sees that this tactic has to be chosen in respect of the nature of the platform and

highlights that those platforms that are able to choose the right tactic and ignite the process are the only ones who can reach the level where the organic growth starts.

Despite the differences between sharing economy platforms, they all have in common the sharing idle resources. As the supply side of the platform is monetizing these idle resources in order to earn some extra money, they can withstand the build-up where the supply side is first on focus. Naturally the platform has to be luring for the possible future suppliers, which means that some demand side participants have to be engaged early on.

In addition to difficulties that both sharing economy and other startups face during the early stages, Täuscher and Kietzmann (2017) recognize challenges highly relevant to sharing economy business models: "low customer lock-in, low control over service quality, high competition for idle resources, low transaction frequency, high cost of developing both market sides and unexpected changes in the legal environment". Although these challenges have to be faced throughout the lifecycle of businesses, it is crucial to proactively think about these when initializing the business.

## 4.1.2 Controllability

The sharing economy platforms get their competitive advantage by breaking the organizational boundaries (Constantiou et al. 2017). Traditionally, organizations have had the working force inside the organization processing input into an output. In the sharing economy, the companies running the platforms have to get people outside the formal organizational boundaries to participate in the value creation.

Constantion et al. (2017) identify four different sharing economy models (see Figure 2) as they examine the models with two dimensions: rivalry between the participants of the platform and the level of control the platform owner has over the participants. However, one company does not have to lock itself in a singular model as the model may differ inside the same organization if the company has many different services (Constantion et al. 2017).

The online study showed that the platform owners have some commonalities in how they exert control, but many differences were also found. All of the sharing economy platforms examined emphasized the importance of using the platform throughout the sharing process. In other words, networking, communication, possible payments, reviews and other aspects of the sharing process were encouraged to be executed through the platform. In fact, many platforms are using Payment Service Providers ("PSPs", see

Table 1). Acting accordingly enables the platform owner to fully access the data sent and received during the transaction.

Considering Uber, the security and other instructions were mainly written for the drivers, whereas Airbnb focused more on the demand side, the guest side. TaskRabbit as well as Couchsurfing were somewhere in between these two. The focus on instructions is naturally dependent of the service provided as the participants have different roles and risks between the platforms.

As Figure 2 suggests the control dimension determines how standardized the platform participation must be. While Airbnb sets the standards that the hosts can build on, Uber strictly guides every move of the participation.

	Control		
Rivalry	Loose  Minimum standards or guiding principles for platform participation are set by the platform owner	<b>Tight</b> Platform participation is specified, standardized and monitored by the platform owner	
<b>High</b> Pricing scheme based on real- time changes in supply and demand	Chaperones Prototypical Example: Airbnb  • Value proposition: Service differentiation  • Other examples: Homeaway, Rentomo, Apprentus	Franchisers Prototypical Example: Uber Value proposition: Low costs and efficiency gains Other examples: Lyft, Postmates, Caviar	
Low Pricing scheme based on compensation of the suppliers' costs	Gardeners Prototypical Example: Couchsurfing Value proposition: Selforganization and community building Other examples: BeWelcome, BlaBlaCar, Peerby	Principals Prototypical Example: Handy Value proposition: Low costs and risk mitigation Other examples: TaskRabbit, Zeel, Deliveroo	

**Figure 2.** Typology of Sharing Economy Platforms by Control and Rivalry. Source: Constantiou et al. (2017)

## 4.1.3 Workforce

Sharing economy platforms often offer services with lower prices than traditional companies. They may also offer more customized services than the traditional firms. The consumers using the platforms benefit from this, but in multisided platforms there is more than that to consider as the provider side attractiveness must also be met.

The sharing economy has been criticized for how the platforms handle the supply side, or the contributors. More about the criticism of the sharing economy will be discussed in Chapter 5.

One of the online study questions (presented in Section 4.3) aimed to find answers to the attractiveness the platform has to offer its supplier side. The results were somewhat homogeneous. Every platform in the research highlighted how easy it is to join the network. Also, the platforms, excluding Couchsurfing, clearly stated the effortless way to earn some extra money, in fact Airbnb had even a calculator in order to calculate how much the consumer could profit from an idle apartment. Couchsurfing, where contributors have no monetary incentives, the platform highlighted the social impact and widening your own network as a result of participating.

In sharing economy platforms, participants have to risk their possessions to the hands of others. The platforms examined in the online study highlighted their damage compensation programs that may cover up to 1 million dollars. These programs and insurances are to ensure that the risk is not on the contributors, which makes contributing more comfortable and the joining decision a lot easier.

The online study also showed that one way to lure people to participate by contributing is to offer them control over their schedules and offerings. Many may find it crucial that you can be your own manager in terms of availability and in the context of Airbnb, TaskRabbit and Couchsurfing, to list what kind of specialties you may have to offer the customer.

One of the key questions managing sharing economy platforms is how to engage both sides, customers and contributors to the platform. The online study showed that the contributors are often motivated by some sort of super status to thrive for. In fact, in Airbnb, Couchsurfing and TaskRabbit, these are called "Superhost", "Ambassador", "TaskRabbit Elite" respectively. These social statuses require great reviews and accept only a few or no cancellations. To achieve these, contributors have to have high enough activity in contributing, which means that it serves as an incentive to engage with the system. In fact, Liang et al. (2017) argue that the use of these gamification-related badges or higher statuses differ from previous studies since they are engaging the provider side of the platform instead of the consumer side. These super statuses will be discussed also in Section 4.1.5.

Kenney and Zysman (2016) vision that the amount of work may not necessarily decrease, but more and more of the relationship between the organization and the employer will decrease in quality. Therefore, it is crucial to consider what kind of benefits to offer the contributors. The findings of the online study include that the benefits the sharing economy platform owners are currently offering are mainly designed to support the engagement with the platform by giving more visibility in search results, giving and showing badges in the profile in order to stand out and to get recognition, offer vouchers to use on the platform for instance. This way of offering the benefits clearly aims for increasing the activity on the platform as well as diminishes the risk of the contributor to change to the other platform.

As sharing economy evolves and more platforms emerge it becomes crucial to engage the supply side participants in the platform. Täuscher and Kietzmann (2017) identify this "high competition for idle resources" as one of the failures many sharing economy platforms have suffered from, as the supply side participants have changed to other platforms. Therefore, it is not enough to control the rivalry inside the platform, also the rivalry between the suppliers of other platforms must be concerned.

## 4.1.4 Pricing

Pricing mechanisms vary on different platforms and the pricing should always be considered when creating business models. Constantiou et al. (2017) link together the amount of rivalry and pricing scheme as they connect pricing in high rivalry to the real time changes in the supply and demand and pricing in low rivalry to mainly cover the costs of the supplier. Also, the business model, market outside the platform and the amount of control by the platform owner may have an impact on the pricing.

As a platform owner there are two decisions to be made in terms of pricing. First, how to control pricing among participants, i.e. who decides the price of the service. Second, how to and from who to collect the fees that belong to the platform owner.

The online study showed that the pricing models vary between the platforms. In Uber, the price of the service is totally controlled by the platform owner. In Uber's model, the algorithms take into account the current situation of supply and demand and determine the price for the service. Airbnb and TaskRabbit let the supplier decide on the price of the service, whereas Couchsurfing only recommends bringing a gift, prepare a meal or show some other sort of gratitude to the host. To be more specific, the prices on Airbnb

are determined by the host, but the platform owners may give information about the current level of supply and demand (Constantiou et al. 2017).

In contrast to expectations in reality most Multisided Platforms have to, at least to one side of the platform, offer their services for free or at subsidized price (Eisenmann et al. 2006), which leads to one side being a loss-leader and the other side being a profit-making side (Hagiu 2014). Although in most cases it is free to join the sharing economy platforms, the pricing mechanisms may differ from other multisided platforms. Eisenmann et al. (2006) suggest that users that are more quality- and price sensitive should be subsidized. However, the claims by Hagiu (2014) or Eisenmann et al. (2006) cannot be fully examined with the conducted online study as the study lacks the crucial data of price elasticity on both sides of the platform. Therefore, the loss-leaders and profit-making sides are not further discussed in this research.

The online study revealed that the sharing economy platforms may offer services in different categories, which often affects the price of the service. Uber categorizes their rides into four categories: economy, premium, accessibility, and carpool. These ride categories may include sub classes such as uber X or uberBLACK. Naturally these different ride categories mean different prices as Uber crystallizes: "There's a ride for every price-and every occasion". The same phenomenon of sorting applies in Airbnb that separates different types of apartments from each other. Moreover, the categorization has an impact on the quality of the service, which will be covered in the next section.

Instead of creating only a new pricing category, the sharing economy platform can create a whole new business model. Täuscher and Kietzmann (2017) identify low transaction frequency as one of the failure causes in the sharing economy. They suggest creating a hybrid business model where pricing scheme differs from peer-to-peer model as it relies on contractual model in which the services are offered to businesses therefore creating steadier income (ibid.). The online study showed that in fact Uber already has this kind of service: Uber for business.

# 4.1.5 Quality

Managing quality is one of the keys in successful sharing economy platforms. Low control of service quality is identified as one of the key problems the sharing economy platform business models are facing (Täuscher and Kietzmann 2017). While sharing economy platforms gain advantage against incumbent companies by engaging people outside the company to contribute, in the context of quality management the platforms are suffering

the downsides of new organizational boundaries as they cannot control the quality of the service in a similar manner than in incumbent companies.

Both dimensions, rivalry and control, introduced by Constantiou et al. (2017) have an effect on the quality of the service. As mentioned Uber strictly guides the actions on the platform and the output is highly standardized. When the standards of what to expect of the ride are made clear to both sides of the platform, the perceived quality is much more measurable and trust towards the platform may increase as discussed in Section 2.5. Hence, the quality of more customized services, such as in Airbnb, may suffer from more subjective opinions in comparison with the standardized services, such as Uber. To balance the quality of the service, also Airbnb released rules for their hosts (Constantiou et al. 2016).

To increase trust and to improve the quality of the services on the sharing economy platform, reviewing and rating systems are widely used (Malhotra and Van Alstyne 2014). The online study supports this claim as every company examined had a rating and reviewing system. However, the usage of these systems varied between the platforms. In many platforms it is possible to mutually review the participants, but some platform reviews are more focused on reviewing the other side of the platform rather than having equal reviews on both participants. For instance, in Uber and TaskRabbit the reviews and ratings are possible mutually, but because of the nature of the service the ratings of a driver or tasker have greater importance. In contrast, in Airbnb and Couchsurfing platforms the ratings are somewhat more equally divided.

As mentioned, many platforms have a super status to thrive for. Liang et al. (2017) found out that in case of Airbnb the "Superhosts" get better reviews than the others and consumers are willing to pay more for their services. This indicates that the Superhosts improve the quality of the service. Although Superhosts are the tip of the iceberg, as only 2,9 % of the hosts have the Superhost badge (Liang et al. 2017), there are many participants that thrive for the badge, which again means that they have to keep the satisfaction of the consumers high enough.

Constantion et al. (2017) add that high rivalry either increases the service quality or encourages the participants to differentiate the service. In Uber, where the price is predetermined, the driver's ability to influence the satisfaction of the rider is limited to offering a standardized service.

However, the rating and reviewing systems are not the only way to influence the quality of the service. Before using any reviewing or rating systems, the platform should have actions that improve the quality of the service. In Airbnb, terms of conduct enable to systematically carry out quality checks to ensure the user identification for instance (Mittendorf 2016). The online study backed up the importance of the terms of the service. In addition to user verification, well designed terms can affect the service by allowing to remove users acting against the terms and therefore weakening the quality. As the terms are the embodiment of the control the platform owner wants to use in maintaining and improving their system quality, their significance should not be undermined.

#### 4.2 Literature review results

In this thesis the literature review provided insight from academical studies of sharing economy platforms. This section presents a summary of the literature review results by answering the research questions.

#### **Research Question 1:**

How does the sharing economy platforms differ from traditional businesses?

The first main difference is that in sharing economy platforms, organizational boundaries are liquid and the ones creating value and contributing to the platforms, are the individuals participating rather than employees of the company. The second difference that also separates the sharing economy from other platform-based companies, is that in sharing economy platforms the platform owner's main task is to create a network for individuals who want to utilize the idle resources owned by the peers from the supply side of the platform.

#### **Research Question 2:**

What are the key challenges in managing sharing economy platforms?

Engaging and locking-in both sides of the platform is one of the key challenges in sharing economy platforms. Another key challenge is the amount of control the platform owner has over the participants, as well as the ways to exert the control.

#### **Research Question 3:**

How do the participants benefit from the sharing economy platforms?

Platforms create value for their participants in different ways. Many platforms offer monetary benefits for their supply side participants and some may highlight the social impact. Demand side participants may benefit from the lower costs of the service or differentiated services compared with services provided by incumbent companies. However, rarely any advantages that can be used outside the platform, such as employee benefits, are offered.

## 4.3 Online study results

The online study aimed to find practical solutions that represent how managerial questions have been tackled in four sharing economy platforms chosen for the study that are Airbnb, Couchsurfing, TaskRabbit, Uber. Initially, the online study had four original questions that are presented below, but also other relevant information that supported the findings from the literature was found. The results of the online study are presented throughout Section 4.1 and summarized in Table 1.

The initial online study questions: What kind of benefits are offered for the contributors of the platform? How to maintain quality of the service? How to increase trust and prevent abuse of the platform? What kind of pricing mechanism is used?

	Airbnb	Couchsurfing	TaskRabbit	Uber
Pricing	Host decides,	Only for Verified	Tasker decides	Platform owner
	platform advises	members	the hourly rate	decides
Contributor	Mainly on the	Social network	Mainly on the	
benefits	super status		super status	
	program		program	
Quality	Rating and	Rating and	Rating and	Rating and
management	reviewing	reviewing system	reviewing	reviewing
	system		system	system
Trust increase	Host Protection	Active safety	Damage	Insurance
	Insurance,	team	compensation,	program, PSP
	PSP (Payment		PSP	
	Service Provider)			
Super	Superhost	Ambassador	Task Elite	-
status/badge				
Platform fee	Generally:	Only for Verified	30% of the price	25 % of the trip
	3% from hosts	members	paid for the task	fare
	. O 200/ frame		+ 7,5% Trust&	
	+0-20% from		Safety fee	
	guests			

**Table 1.** Summary of the online study results.

# 5 Criticism of the sharing economy

The sharing economy has already had a major impact on traditional businesses and as it grows, it will change the competition on many industries worldwide. Therefore, it is essential to discuss its dark sides and assess the criticism it has confronted.

One of the most criticized characteristic of sharing economy platforms is the distribution of the risks among the platform participants and the platform owner (Malhotra and Van Alstyne 2014; Constantiou et al. 2017). This unequally distributed risk means that the platform participants especially on the supply side of the platform bear the risk as contractors while the platform owners collect the benefits. By examining the terms and conditions, the online study showed that multiple platforms consider the contributors as

private contractors, which releases the platform owner from many risks and responsibilities. For instance, Uber sets the prices for the services, but at the same time considers the drivers as self-employed users of the Uber app (Constantiou et al. 2017).

The sharing economy participants do not always compete with the same rules as their competitors. Constantiou et al. (2017) state that putting incumbent industries at a competitive disadvantage by using irregular or even illegal means is the most contentious issue for sharing economy platforms. These differences in rules may include not paying taxes or having similar licenses than the competitors have for instance. As the licensed taxi drivers have greater costs, they are not able to compete with the drivers without the license (Malhotra and Van Alstyne 2014). The online study revealed that for instance in TaskRabbit, the users of it are solely liable for any taxes to be paid excluding taxes on company's income. This may lead to a situation where the contributors of the platform do not pay their taxes of the provided services in similar manner than the competitors, which may again lower the price of the service.

The unethical treatment of the supply side participants has also been criticized. The supply side participants, who are often treated like employees rarely receive any employee benefits (Kenney and Zysman 2016; Constantiou et al. 2017). Also, some sharing economy companies may ruin the reputation of the whole sharing economy phenomenon as they overly emphasize the social side of their services (Scheiber, 2014).

#### 6 Discussion and conclusions

This chapter discusses the findings of the research as well as presents some suggestions to tackle the challenges the sharing economy platforms are facing. Limitations of the research and the recommendations for future research are also presented in this chapter.

## 6.1 Suggestions for sharing economy platforms

Challenges found in managing sharing economy platforms are also opportunities for future innovations. The sharing economy companies, already existing or yet to be started, may found better ways to engage the participants on both sides of the platform. Engaging consumers and contributors is one of the keys as the sharing economy grows and the competition of idle resources tightens. Some aspects of gamification have already been found and used and one of the possible solutions to lock in the contributors and consumers within the platforms might lie in the gamification. Another possibility for

improving commitment would be to reconsider the employee benefits. If the sharing economy platforms want to compete with the incumbent firms in sustainable manner, they will have to sooner or later assess the possibilities of offering benefits that are not platform related. Table 2 by Täuscher and Kietzmann (2017) also identifies the challenge of engaging participants.

Since on consumer markets the revenues may be rather sensitive to market fluctuations, Täuscher and Kietzmann (2017) suggest considering the possibility of creating a hybrid business model (see Table 2) where, in addition to consumers, companies are also offered the services on the platform. Many companies including Uber have realized this and they are now offering Uber for business. Creating a hybrid business model also helps to engage the participants as in offering services to businesses enables using different pricing models and thereby stabilizing the revenue. Creating a hybrid business model also raises many questions. When is the right time to start to offer services for businesses, already at the beginning of the platform or first building a peer-to-peer network and after that convincing the businesses of the working sharing economy platform?

The questions and answers about how to engage participants are crucial, but it is also important to acknowledge the effects engagement has. Having invested large amounts of capital into expanding the network, it is essential to keep both new and older participants within the platform. Otherwise the expansion will have no effect and revenue prompts only as a peak. As the participants are continuously using the platform, the rating and reviewing systems will have greater importance. Hence, the quality improves if more participants are involved and locked-in in the platform.

The sharing economy companies already have many tools for maintaining the quality of the service and they should not underestimate their role in mitigating risks and creating quality services for the consumers. The super status programs are a good start, but also other levels of badges or other gamification-related methods should be considered. Reviewing and rating may have unwanted side-effects if there are no minimum standards or guidelines introduced to both sides of the platform.

Another way to improve the quality of the service is through terms and conditions of the service. Due to terms and conditions being relatively formal, and people paying not too much attention to the terms and conditions it is highly recommendable for the sharing economy platform to clearly state the highlights of those terms and conditions. This can be done in form of instructions, where the steps are clearly presented in chronological

order for instance. In addition to current tools there is room for innovative ways to maintain and improve the quality of the service.

To be able to enjoy the scalability of the sharing economy platform, the business model has to fit the business environment. Therefore, it is important to create a business model that is flexible enough to adjust to the changes in legislation for instance. Moreover, also other ways than expanding the market area should be considered in order to grow the business to new levels. One of these could be adding more sides to the platform.

While selecting the companies to evaluate in terms of online study questions, it was interesting to find that many new companies emerged into sharing economy have one thing in common. They have given the ownership of the platform to the producers that contribute to the platform. This tackles one of the most criticized issues in platforms found in literature that is the power of the platform owner and centralized ownership.

Businesses have to make a decision whether they want to be a part of the sharing economy and compete in it or against it (Constantiou et al. 2017).

Recommendation	Questions to Address			
1. Evaluate risks and recognize potential sources of failure	<ul> <li>How likely are demand- and supply-side participants to change to competitors? Do they have sufficient incentives to conduct transactions on our platform?</li> </ul>			
	<ul> <li>Can we ensure a consistent quality level in the work of our sharing participants?</li> </ul>			
	<ul> <li>How much will it cost us to attract new supply-side participants once more competitors enter the market?</li> </ul>			
	<ul> <li>How frequently will participants return to the platform for subsequent transactions?</li> </ul>			
	<ul> <li>Which regulatory changes would threaten our current business model?</li> </ul>			
2. Develop a hybrid business model	<ul> <li>How can we leverage the shared assets to target a new customer segment?</li> </ul>			
	<ul> <li>How can we develop a stable revenue model that is less vulnerable to market fluctuations?</li> </ul>			
	<ul> <li>Is the new business model complementary with the peer-to-peer sharing model? Does it create any virtuous cycles?</li> </ul>			

**Table 2.** Recommendations for Evaluating and Innovating Business Models in the Sharing Economy. Source: Täuscher and Kietzmann (2017).

## 6.2 Limitations and future research

Sharing economy being a rather broad subject, this thesis cannot fully cover the differences in management between sharing economy businesses and incumbent businesses. Therefore, the scope was limited to sharing economy platforms where the participants on both sides of the platform are individuals rather than a company.

The managerial perspective of the research only highlights the key differences acknowledged in the literature. This research does not provide detailed technical solutions or possibilities that could be implemented for the platforms even though the platforms as such are full of technology and technology has a great impact on the perceived quality of the service.

The managerial decisions are always dependent of the business environment. Rather than analyzing the concrete answers or managerial decisions that might be useful for some platforms in some business environment, this research tries to find the right questions to be asked. Moreover, the legislation issues are not covered in this thesis.

The online study analyzed only four companies. Although these companies were selected so that they would represent different markets and have different business models, they do not cover the whole variety of sharing economy platforms. They are four examples of how the platforms can be managed, not necessarily how the platforms should be managed. The online study does not provide quantitative data or try to find cause and effect relationships, as it focuses on the practices being used therefore only scratching the surface. Moreover, some information of the practices used in the platform might be only available for the users of the platform.

As sharing economy grows and firms its footing in the business environment, future research will have multiple possibilities in the context of managing sharing economy platforms. Future research could analyze different methods for managing and improving the perceived quality on the sharing economy platforms. As mentioned, some of the new sharing economy platforms have shared the equity among the participants on the supply side of the platform. The differences between policies and managerial decisions made in those companies and other sharing economy companies could provide a subject for future research. The sharing economy platforms exist thanks to the participants outside the formal organization. However, current studies have not covered what information about the platform or the company behind the platform should be given to the participants and how it would affect. Also, the gamification and its possibilities in

engaging participants in the sharing economy platforms need to be closely evaluated in the future research.

#### References

Baldwin, C.Y. & Woodard, C.J. 2009, "The architecture of platforms: A unified view" in Platforms, Markets and Innovation, pp. 19-44.

Bardhi, F. & Eckhardt, G.M. 2012, "Access-based consumption: The case of car sharing", Journal of Consumer Research, vol. 39, no. 4, pp. 881-898.

Belk, R. 2007, "Why not share rather than own?", Annals of the American Academy of Political and Social Science, vol. 611, no. 1, pp. 126-140.

Belk, R. 2014, "You are what you can access: Sharing and collaborative consumption online", Journal of Business Research, vol. 67, no. 8, pp. 1595-1600.

Constantiou, I., Eaton, B. & Tuunainen, V.K. 2016, "The evolution of a sharing platform into a sustainable business", Proceedings of the Annual Hawaii International Conference on System Sciences, pp. 1297.

Constantiou, I., Marton, A. & Tuunainen, V.K. 2017, "Four models of sharing economy platforms", MIS Quarterly Executive, vol. 16, no. 4, pp. 236-251.

Eisenmann, T., Parker, G. & Van Alstyne, M.W. 2006, "Strategies for two-sided markets", Harvard business review, vol. 84, no. 10, pp. 92-101+149.

Evans, D.S. 2009, "How catalysts ignite: The economics of platform-based start-ups" in Platforms, Markets and Innovation, pp. 99-128.

Hagiu, A. 2014, "Strategic decisions for multisided platforms", MIT Sloan Management Review, vol. 55, no. 2, pp. 71-80.

Hamari, J., Sjöklint, M. & Ukkonen, A. 2016, "The sharing economy: Why people participate in collaborative consumption", Journal of the Association for Information Science and Technology, vol. 67, no. 9, pp. 2047-2059.

Hawlitschek, F., Teubner, T., Adam, M.T.P., Borchers, N.S., Möhlmann, M. & Weinhardt, C. 2016a, "Trust in the sharing economy: An experimental framework", 2016 International Conference on Information Systems, ICIS 2016.

Hawlitschek, F., Teubner, T., Weinhardt, C. 2016b, "Trust in the sharing economy" 2016 Die Unternehmung - Swiss Journal of Business Research and Practice, 70 (1), pp. 26-44. Kenney, M. & Zysman, J. 2016, "The rise of the platform economy", Issues in Science and Technology, vol. 32, no. 3, pp. 61-69.

Liang, S., Schuckert, M., Law, R. & Chen, C.-. 2017, "Be a "Superhost": The importance of badge systems for peer-to-peer rental accommodations", Tourism Management, vol. 60, pp. 454-465.

Malhotra, A. & Van Alstyne, M. 2014, "The dark side of the sharing economy ... and how to lighten it", Communications of the ACM, vol. 57, no. 11, pp. 24-27.

Mittendorf, C. 2016, "What trust means in the sharing economy: A provider perspective on Airbnb.com", AMCIS 2016: Surfing the IT Innovation Wave - 22nd Americas Conference on Information Systems.

Scheiber, N. Silicon Valley Is Ruining "Sharing" for Everybody, 2014 New Republic, available at https://newrepublic.com/article/119072/silicon-valleys-sharing-economy-airbnb-lyft-are- selling-big-lie.

Staykova, K.S. & Damsgaard, J. 2015, "A typology of multi-sided platforms: The core and the periphery", 23rd European Conference on Information Systems, ECIS 2015.

Täuscher, K. & Kietzmann, J. 2017, "Learning from failures in the sharing economy", MIS Quarterly Executive, vol. 16, no. 4, pp. 253-264.

#### Web sources:

#### Airbnb:

Become a host. Airbnb website. [Cited 26.3.2018]. Available at: https://www.airbnb.com/host/homes.

Superhosts. Airbnb website. [Cited 26.3.2018]. Available at: https://www.airbnb.com/superhost.

Terms of service. Airbnb website [Cited 26.3.2018]. Available at: https://www.airbnb.com/terms.

Trust and safety. Airbnb website [Cited 26.3.2018]. Available at https://www.airbnb.com/trust.

## Couchsurfing:

How it works/ Why join. Couchsurfing website. [Cited 27.3.2018]. Available at: http://www.couchsurfing.com.

Trust and safety. Couchsurfing website. [Cited 27.3.2018]. Available at:

http://www.couchsurfing.com/about/safety/,

#### TaskRabbit:

Become a tasker. TaskRabbit website. [Cited 27.3.2018]. Available at: https://www.taskrabbit.com/become-a-tasker.

TaskRabbit Terms of Service. TaskRabbit website [Cited 27.3.2018]. Available at: https://www.taskrabbit.com/terms.

The TaksRabbit Elite. TaskRabbit website [Cited 27.3.2018]. Available at: https://www.taskrabbit.com/taskrabbit-elite.

#### Uber:

Become a driver. Uber website. [Cited 26.3.2018]. Available at: https://www.uber.com/a/join.

Safety. Uber website. [Cited 26.3.2018]. Available at: https://www.uber.com/en-FI/safety/.

Terms and Conditions. Uber website. [Cited 26.3.2018]. Available at: https://www.uber.com/en-FI/legal/terms/gb/.

Uber for business. Uber website. [Cited 26.3.2018]. Available at: https://www.uber.com/business.