

## Differences in Governance Mechanisms between On-Demand Economy Platforms and Sharing Economy Platforms

A Multiple-Case Study

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## **Abstract**

In this thesis, the researcher studies the differences between how governance models and mechanisms are implemented in on-demand economy platforms, how they are implemented in sharing economy platforms, and the differences between them.

The sharing economy is a rapidly expanding sector of society, and has already become a major part of people's everyday life through services offering free or low-price renting of everything from lawnmowers and books to cars and apartments. As the concept is still fairly new, the knowledge surrounding it remains scarce, and as the sector grows, the need for research into what makes the industry function – both technically, as well as economically – increases. Similarly, the growth of the sector has led to a multitude of different services, exposing a need to define and evaluate the implications and consequences of the structural differences between these services.

Through the use of a multiple-case study approach, four prototypical cases – two ondemand economy platforms and two sharing economy platforms – are assessed, with focus on mechanisms that have been discovered to be of importance to such platforms in existing literature on the subject. The results of the assessments are presented in form of case reports, highlighting the characteristics of each case's implementation of the mechanism in question. The findings show that there are clear differences between the types of platform regarding the implementations of certain mechanisms, and not so clear differences between others.

Through the knowledge of the differences in the implementation of certain governance mechanisms in these types of platforms, one is able to reason about both what mechanisms are important in building a platform of a given type, as well as how to implement it properly.

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# Sammendrag

I denne masteroppgaven studerer forfatteren forskjellene mellom hvordan styringsmodeller og -mekanismer er implementert i såkalte «On-demand Economy Platforms»<sup>1</sup>, hvordan de er implementert i delingsøkonomiplattformer, samt forskjellene mellom dem.

Delingsøkonomien er en raskt voksende del av samfunnet vårt, og har allerede vokst til å bli en stor del av menneskers dagligliv gjennom tjenester som tilbyr gratis eller bortimot gratis leiing av alt fra gressklippere og bøker til biler og leiligheter. Da konseptet er relativt nytt, er kunnskapen rundt temaet fremdeles mangelfull, og i takt med at sektoren vokser, øker behovet for forskning på hva som får industrien til å gå rundt – både teknisk og økonomisk. På samme måte har sektorens vekst ført til en samling av vidt forskjellige tjenester, som igjen har eksponert et behov for å definere og evaluere implikasjonene og konsekvensene av forskjellene ved slike tjenester.

I form av en flercase-studie, utforskes fire typiske caser – to «On-demand Economy Platforms» og to delingsøkonomiplattformer – med fokus på styringsmekanismer som har blitt funnet viktige for slike plattformer i tidligere forskning på emnet. Resultatene blir presentert i form av case-rapporter, som belyser karakteristikkene ved hver case sin implementasjon av den gitte styringsmekanismen. Funnene viser at det er tydelige forskjeller mellom de to typene plattformer angående implementasjonen av visse mekanismer, og ikke fullt så tydelige forskjeller mellom andre mekanismer.

Gjennom kunnskapen om forskjellene i implementasjonene av visse styringsmekanismer i disse to typene plattformer kan man rasjonalisere om hvilke mekanismer som er viktige når man bygger en plattform av en gitt type, samt hvordan man implementerer den på best mulig måte.

<sup>&</sup>lt;sup>1</sup>Plattformer som tilbyr tjenester på etterspørsel

## **Preface**

This paper is a master's thesis written in the fall semester of 2017 as my final delivery of the integrated masters study in Computer Science at the Norwegian University of Science and Technology, NTNU.

After writing a literature review on sharing economy in the health sector my previous semester, my supervisor (Babak Farshchian) suggested to write a thesis on the subject of governance models in sharing economy platforms. After a few meetings we decided that the thesis should be in the form of a multiple-case study.

A few weeks of literature study followed before the research questions were finalized, and the cases chosen. The cases were chosen based on several aspects, but the most significant was the size and longevity of each company, as these are presumably aspects that have the most significant implications towards the amount of existing research material.

The author would like to thank the supervisor of this paper, Babak Farshchian, for much needed guidance throughout the semester, both on conducting the research as well as the thesis itself, without which this thesis would not have been completed.

Trondheim, January 25, 2018

Håkon Meyer Tørnquist

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## Acronyms

ABM Aggregator Business Model. 45, 46

API Application Programming Interface. 31, 32, 35, 38, 41, 48, 52

**BR** Boundary Resources. 23

FAQ Frequently Asked Questions. 35, 38, 41

MPBM Market-Place Business Model. 45, 46

**OEP** On-demand Economy Platform. 4, 5, 15, 16, 22, 48, 51–53, 55, 56

**QoS** Quality of Service. 12, 34, 38, 45, 52, 53

SDK Software Development Kit. 32, 34, 35, 43



## Introduction

This chapter consists of a short introduction to the paper. First there will be a description and background information on the problem at hand, directly followed by a section on motivation. The scope and limitations of the thesis will be presented thereafter, after which the chapter will be concluded by a section on the thesis' contribution to the subject, as well as a outline of the structure of the rest of the paper accompanied by short descriptions of each chapter.

## 1.1 Problem Description and Background

## 1.1.1 Differentiating the Sharing Economy

In the last ten years, the sharing economy has grown from a niche market sector mostly occupied by enthusiasts and early adopters, to a global phenomenon most everyone has some form of knowledge of. The rise of giants like Uber<sup>1</sup> and Airbnb<sup>2</sup> has garnered large amounts of attention from the global community, as they have stood out as exciting and disruptive alternatives to more traditional service providers. All of the large sharing economy actors are very conscious of public opinion, and spend large amounts of time and resources to ensure that they are seen as innovative, progressive companies. They are more often than not at the technological forefront, and actively market the concept of sharing as a modern concept, largely unthought of before you could do it through an app, and as an economic model vastly superior to existing structures. Because of this, many see them as cheaper, more user friendly and user empowering, decentralized versions of their counterparts (in Uber's and Airbnb's cases, taxicab services and hotels respectively), which are often presented – and, consequently, perceived by the public – as somewhat conservative or boring.

Following this surge in popularity, it is natural to start asking questions surrounding the

<sup>1</sup>https://www.uber.com

<sup>&</sup>lt;sup>2</sup>https://www.airbnb.com/

nature and properties of the sharing economy. In order to be able to answer questions such as if these positive connotations people have with the sharing economy are well reasoned and how these companies differ from traditional businesses, one must first be able to recognize that there are huge internal differences between companies traditionally thought of as being part of the sharing economy. An answer to one of these questions in regard to one company may be completely different to an answer to the same question, but in regard to a different company.



**Figure 1.1:** "Sharing economy and related forms of platform economy" by Frenken and Schor [3]. Licensed under CC BY 4.0

According to *The Business of Sharing* by Alex Stephany [6], it is not known who first coined the term "sharing economy", which has "left the term without a guardian and vulnerable to loose definitions". The sudden rise of the concept may also in some part be responsible for the fact that there is undoubtedly some ambiguity and confusion surrounding the term. This confusion, along with the increased interest – both academic, as well as in the general public – has led to a need for constructing a more strict definition of the definitions and concepts currently encapsulated in the very broad sharing economy category. In addition, as there by now are so many different services – with almost as many different business models – available by now, it seems expedient to be able to separate between them. By granulating the term, one might also be able to see patterns not so easily seen with broader definitions. One popular<sup>3</sup> segmentation of definitions, which will also be used as a basis in this paper, is the one proposed by Frenken and Schor [3] – illustrated by figure 1.1 – which separates the sharing economy from its economical relatives, such as the on-demand, second-hand and product-service economies.

<sup>&</sup>lt;sup>3</sup>13 citations, 44 references per 11-27-2017 [7]

To be able do perform this differentiation, a base definition of the sharing economy is required. Following Frenken et al. [8], this thesis will use the definition of the sharing economy described in the list of points in below.

- 1. Sharing is about **consumer-to-consumer** platforms, in contrast to business-to-consumer, which would fit in the *product-service economy*.
- 2. Sharing refers to **temporary access** to a good, not a permanent transfer of the ownership of good. A platform providing such a service would belong in the *second-hand economy*.
- 3. Sharing is about more efficient use of **physical assets**, not services. Platforms providing services instead of assets are examples of the *on-demand economy*.

In compliance with these points, Frenken and Meelen – two of the researchers behind this framework – have previously formulated [9] a simplified, one-sentence definition of the sharing economy as follows:

Consumers granting each other temporary access to under-utilized physical assets ("idle capacity"), possibly for money.

The physical assets referred to in the definition are what Benkler [10] describes as "shareable goods", which are goods that, mostly by their own nature, provide their owners with excess capacity. Commonly used examples are cars (or car seats) and living space, but almost everything a person own will fall in this category. Notable examples that are *not* a part of this category are personal items such as mobile phones, eyeglasses or computers.

Adhering to this definition of the sharing economy, it is arguably easy to recognize the need to differentiate between these business sectors, as they represent vastly different economical models. An interesting consequence of differentiating the sectors in such a fashion, is that many of the well-known actors in what most people today associate with the sharing economy, such as Uber and Lyft<sup>4</sup>, falls outside this category. Instead, they are part of what is called the *on-demand economy*. This can be explained by an example: A trip ordered through Uber or Lyft would not have been performed, had the customer not booked the trip. This demonstrates that the physical asset – the car being booked – is not shared due to it being under-utilized, but rather to make a profit. Airbnb is in this context a middle-ground example. The platform was founded – and is still being used – as a means to rent out under-utilized rooms or apartments, which would mean that it is a sharing economy platform. That being said, properties are more frequently being bought with the sole purpose of listing them on Airbnb, as short-term accommodation has much higher profit margins than long-term rental, which would place them in the on-demand economy category.

What's worth noting, is that all of the companies mentioned in the previous paragraph

<sup>4</sup>https://www.lyft.com

are companies that undoubtedly take advantage of the positive and progressive connotations of the concept of sharing to market themselves as companies which reinstates control to and empowers the working class by allowing them to decide their own working hours, their work load, and in many cases, their own income. In reality, these companies are global, venture capitalist funded powerhouses, designed similarly to any other participant in the free market, which in simple terms is to do one thing; make money for itself or its investors. How much do these companies actually differ from their traditional opponents? Both Uber [11, 12, 13] and Lyft [13] have been under consistent fire for workers' rights concerns, and many of the services they provide are illegal in a large list of countries [14].

While the most-known actors may no longer fit under the sharing economy umbrella, there are other companies that do. One notable example is the couch sharing platform CouchSurfing<sup>5</sup>, a representative of the gifting economy industry, a subcategory of the sharing economy where you can borrow other member's assets (couches in CouchSurfing's case) without there being any monetary exchange between the guest and the host. Another example is the carpooling platform BlaBlaCar<sup>6</sup>, a service facilitating for ride sharing in the proper sense of the term: Receive lifts from people already going places, requiring only that you help pay for the actual cost of the ride (i.e. expenses such as gas and tolls), as well as a small percentage-based fee to BlaBlaCar for hosting the platform and thus enabling the providers to connect with the consumer. Most of these companies seem to have largely avoided the critical searchlight of the media. This may be due to the fact that they for the most part have a much smaller market impact than their more well-known ondemand economy counterparts, and as such are not as exposed to critical eyes. Although this is more than likely a factor, another reason may be that their business and governance models, which in many cases differ substantially from the On-demand Economy Platforms (OEPs)', inherently seem to conform more to the positive connotations people have with the sharing concept, which may lead to lesser incentives for investigating these companies.

## 1.1.2 Governance in Sharing Economy Platforms

While positive connotations yields a beneficial impact, all companies – both in the sharing economy and outside it – share commonalities. One of them is the need for identifying and correcting inefficiencies in the firm. Not only is this important for all companies, but the companies utilizing business models similar to CouchSurfing or other free-to-use services, have higher incentives for finding such inefficiencies than normal, as the profit margins of such companies are likely to be significantly lower in comparison to companies utilizing business models that are more focused towards higher profit margins.

Removing these types of inefficiencies in a company is one of the main purposes of corporate governance – a term describing the processes and relationships behind the operation of the company, which will be more thoroughly discussed in section 2.1. Through research of the governance in a company, one may be able to achieve better understanding of the internal structures of the company, which then can enable the reasoning about such aspects

<sup>5</sup>https://www.couchsurfing.com

<sup>6</sup>https://www.blablacar.com

as the company's economical milestones, its sustainability and its future.

According to a 2016 study by Hamari et al. [15], reasons people have for interacting with the sharing economy include [environmental] sustainability, enjoyment and economic benefits. This suggests that the sharing model is wanted by both consumers, as well as society as a whole, but as mentioned, there are an increasing amount of companies assimilating the sharing economy term without adhering to its principles. This poses questions whether the sharing economy model is sustainable or not, since several of the largest "sharing economy" actors does not seem to want to adopt the model, even though it enjoys such high opinion with consumers. Research into the governance of companies utilizing different business models can provide knowledge towards whether the sharing model is sustainable for most companies, or not.

### 1.2 Motivation

How sharing economy platforms function is a topic where there does not exist much research as of yet, but in a time where the sharing economy is growing into an increasingly large part of people's everyday life, it has become sorely needed. The motivation behind this thesis is to provide a more thorough insight to the governance models and mechanisms of sharing and gifting economy platforms as opposed to OEPs which people often *associate* with the sharing economy. This will in turn hopefully enable us to look into the efficiency of the mechanisms in question in terms of how well they support the company in maintaining a sustainable internal economy.

There is also an aspect of personal motivation related to this subject, as the author has previously worked on a similar subjects, both together with this paper's supervisor, as well as in other circumstances.

## 1.3 Scope and Limitations

This thesis is a research paper on governance models and mechanisms in on-demand and sharing economy platforms and how they are implemented in the different cases chosen, as well as the implications that follows. It is not a comparison of the quality of the service the providers deliver, nor a stance on which governance model is the best.

The paper is a master's thesis performed at the Norwegian University of Science and Technology (NTNU), and is worth 30 points in the European Credit Transfer and Accumulation System (ECTS), which is equivalent to 750-900 work hours [16].

There was a time constraint on the thesis of twenty weeks. This is perhaps the most major limitation factor of the thesis. A direct consequence of this is the number of cases chosen, as well as how thorough each case has been studied. Given more time, there could have been performed extensively more research into each case, for instance in form of interviewing, both consumers and providers, which could have provided insight into how

users perceive the governance of the cases, or hands-on experiences with the services provided by the cases. The number of cases could also have been expanded, to provide more robustness and trustworthiness to the results of the study.

Sharing economy is still a fairly new concept, but because of its popularity there already exists a substantial amount of research on the concept. That being said, the research focusing on *governance* in sharing economy is fairly scarce, and often limited, which is one of the reasons the topic was chosen for this thesis. This thesis will contain a section on similar and related research (2.3), which provides an overview of existing literature on the topic.

### 1.4 Contribution

This thesis will contribute to the topic of governance models in different types of sharing economy platforms, a topic on which there is not much specific research as of yet. The findings will be presented in a multiple-case study with a comparative angle to highlight both similarities and dissimilarities in the cases. Comparisons will be made both across business models, as well as across the different categories of sharing economy the cases belong to. Hopefully, the results can contribute to knowledge on how platforms that provide similar services, but that are categorized in different sectors of the sharing economy, differ in their governance models.

## 1.5 Paper Outline

#### **Chapter 1 - Introduction:**

This chapter serves as an introduction to, as well as an overview of, the rest of the thesis. It includes subsections concerning motivation, problem description and background, scope and limitations and contribution, as well as this paper outline.

#### **Chapter 2 - Theory:**

Includes all the necessary background and theory to be able to perform the study, as well as understand the results given the context of the thesis. This includes theory on the different models of sharing economy platforms as well as governance, which includes subsections on governance mechanisms and governance models.

#### **Chapter 3 - Method:**

The third chapter contains the strategies for selecting topic, research questions and methods. It also describes the specifics surrounding this thesis' implementation of the chosen method, including the selection of cases, the process of data collection and the template for the results. This section also contains a overview of the selected cases.

### **Chapter 4 - Results:**

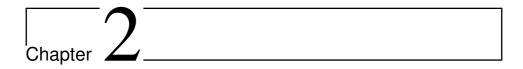
This chapter contains the results of the case study, first in form of case reports, and then by a simplified table containing a concise summary of the findings.

### **Chapter 5 - Discussion:**

The findings from the previous chapter will be discussed and compared here. Any conclusions that are possible to be drawn from these comparisons will be listed here.

### **Chapter 6 - Conclusion:**

In this chapter the results found in chapter 5 will be discussed and evaluated in the context of this thesis, along with the research questions. This chapter also contains a section on research limitations, as well as a section on future work.



## Theory

This chapter will present background theory which is required knowledge in understanding the methods, results and conclusion in the chapters following this one. It will contain sections on governance – including subsections on governance models and governance mechanisms – as well as on the four models of the sharing economy. Lastly there will be a section on related research on the topic of this thesis.

### 2.1 Governance

To be able to deduce anything about governance models, one must first define what governance means, as well as what governance mechanisms are, and which role they play to support these models.

## 2.1.1 Corporate Governance

Governance in the context of this thesis is mainly related to *corporate governance*, a term which – according to the Australian parliamentary paper *The Failure of HIH Insurance: A corporate collapse and its lessons* – can be described as in box 2.1.1 below. In the case of CouchSurfing, the subject of *non-profit governance* will also be briefly mentioned, although as they converted to a for-profit organization in 2011, this will be limited.

A framework of rules, relationships, systems and processes within and by which authority is exercised and controlled within corporations. It encompasses the mechanisms by which companies, and those in control, are held to account.

In corporate governance there are a vast number of mechanisms involved. They include monitoring of actions, policies and decisions of the corporations, but also of their agents, as well as their affected stakeholders. Stakeholders in corporations vary, but traditionally they consist of two subgroups; internal and external. External stakeholders include groups such as shareholders, trade creditors and suppliers, customers, as well as communities affected by the company's activities. Internal stakeholders are the board of directors, executives, as well as other employees.

#### 2.1.2 Governance Mechanisms

Governance mechanisms are efforts designed to reduce the inefficiencies that arises from phenomenons like moral hazard<sup>1</sup> and adverse selection<sup>2</sup>. They can be categorized into two main categories:

- **Internal mechanisms** are concerned with the inner workings of a corporation, the interests of its internal stakeholders, as well as achieving the organizational goals of the corporation.
- External mechanisms are mechanisms that encompass external stakeholders' controls over the organization, be it governments, regulators or others.

This thesis will look at which governance mechanisms are prevalent in sharing economy platforms and how they are implemented in each of the cases. It is not achievable to assess each and every single mechanism involved in the governance of these platforms. The approach this thesis will use is to rely on existing literature to discover the most prominent mechanisms in similar contexts, and then evaluate how these specific mechanisms have been implemented in the selected cases, as well as how the implementations differ from each other.

In 2016, Hein et al. performed a multi-case analysis of governance mechanisms in multi-sided platforms [19]. In this paper, the authors, through a literature study, develop a framework for comparing governance mechanisms they found to be of importance in such platforms, illustrated by a platform governance summary table. To be able to aggregate the information, the mechanisms they discovered were categorized into dimensions. Inspired by this approach, this thesis will perform a similar categorization. These dimensions will be described below, including which mechanisms are part of the dimension in question. They will later be used in the case reports, which are introduced in section 3.4.5 on data collection.

#### **Governance Structure**

According to Tiwana et al. [20] one of the central challenges in governance for the platform owner is to retain the "just-right" level of governance, i.e. enough control to ensure the integrity of the platform, while at the same time not so much control as to discourage platform users. This is described by the authors as the *Goldilocks Governance Problem*.

<sup>&</sup>lt;sup>1</sup>**Moral hazard** is the risk that a party to a transaction has not entered into the contract in good faith, has provided misleading information about its assets, liabilities or credit capacity, or has an incentive to take unusual risks in a desperate attempt to earn a profit before the contract settles. [17]

<sup>&</sup>lt;sup>2</sup>Adverse selection refers to a situation where sellers have information that buyers do not, or vice versa, about some aspect of product quality. [18]

This problem will be encapsulated in a dimension called *governance structure* and the three mechanisms to consider in this dimension are:

- **Decision Rights:** Who has the authority for making decisions, e.g. regarding what the platform should or should not do.
- **Control:** Which mechanisms are in place to encourage or discourage certain behaviour from users, both formal and informal. These mechanisms can be both unidirectional (provider-on-consumer or vice versa) or bidirectional.
- **Ownership:** Whether the ownership of the platform is proprietary to a single firm, or shared by multiple owners.

#### **Resources & Documentation**

A 2015 paper by Benlian et al. [21] argues that a platform's openness or perceived openness is an important evaluation criteria for developers wanting to contribute to the platform. As a governance mechanism, this can be translated into a trade-off between opening your platform up too much and e.g. revealing all your secrets as opposed to keeping it closed in fear of revealing your secrets, with the consequence of participants being discouraged from interacting with the platform. In a software-based platform openness one of the core aspects is documentation of the platform, i.e. how to use it, and the integration possibilities that exists, e.g. which Application Programming Interfaces (APIs) the platform expose. Furthermore, according to Ghazawneh and Henfridsson [22], Boundary Resources (BR) such as APIs "play a crucial role in the platform owner's balancing act of stimulating external contributions and maintaining platform control". The mechanisms that are of importance in this dimension – called *resources & documentation* – are thus:

- **Transparency:** How extensive the documentation of the platform is, and how much of the platform's functionality that is apparent to the user through this documentation.
- **Resources:** Which BRs, e.g. APIs, Software Development Kits (SDKs) etc., are in place to allow integration with the platform.

#### Accessibility

The accessibility dimension encapsulates mechanisms regarding who has access to the platform and what restrictions that are present to prevent certain consumers or providers from misusing the platform, i.e. how open the platform is. According to West and O'Mahoney [23], there are two distinct types of openness in a community: *Transparency* and accessibility. As a part of this is also the question of who is responsible for these regulations. Mechanisms are as follows:

- **Platform accessibility:** Who has access to the platform.
- **Platform transparency:** How easy it is to reason about the inner workings of the platform
- Regulation responsibility: Who is responsible for regulating access to the platform.

#### Control

Under the *control* dimension lies the responsibilities of quality assurance and security of the platform. This includes input and output control, i.e. assessment of which services or providers are allowed, what the lower threshold of Quality of Service (QoS) should be, as well as the principles and guidelines surrounding the output of the platform, e.g. which actions and behaviour to reward and which to penalize [20]. Mechanisms assessed are:

- Input control
- Output control
- Quality assurance
- Platform security

#### **Trust & Perceived Risk**

At risk of stating the obvious, *trust & perceived risk* is a major factor for most consumers when deciding whether to interact with a platform. Therefore it is a massively important dimension for the governance of the platform. The mechanisms are simply deduced, and are self-explanatory:

- Increase trust in the platform
- Decrease perceived risk of interacting with the platform

#### **Pricing**

The pricing dimension encapsulates all concepts surrounding the monetary aspects of the platform. In multi-sided platforms<sup>3</sup>, Armstrong [25] identifies three factors that determine the pricing structure of a platform: *Relative size of cross-group externalities*, i.e. if one group of customers exerts positive externality on another group of customers, then group one will be targeted by the platform, *fixed fees or per-transaction charges*, i.e. if the economical performance of a platform is reliant on the pricing scheme or not, and *single-homing or multi-homing*, i.e. if consumers choose to use a single platform or if they choose to use multiple platforms. Deduced from these three factors, the mechanisms that have been chosen for assessment are the following:

- **Pricing party:** Who is responsible for determining the pricing of the platform.
- Paying party: Which party is paying for the platform.
- **Profiting party:** Who if any is profiting on the platform.
- **Pricing specifics:** How is the pricing scheme of the platform structured, how are profits made.
- **Participation control:** Who decides on the participants of the platform.

<sup>&</sup>lt;sup>3</sup>Platforms that get two or more sides on board and enable interactions between the different sides [24].

#### **External Relationships**

One mechanism that is included here is the platforms' support of interoperability between systems [21], but the dimension mainly focuses on aspects such as relationships with other firms as well as with other external stakeholders, be it in the economical sense or by some other type of investment. Accordingly, the mechanisms can be described as follows:

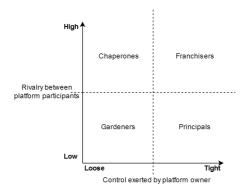
- External relationships: Both with stakeholders as well as with other firms or platforms.
- Platform interoperability support

#### **Business Model**

Although the business model of a company does not encompass any governance mechanisms in its own right, the underlying business model can – as argued by Hein et al. [19] – have an impact on all dimensions of governance, as well as how the mechanisms is implemented, and is therefore included in the case assessment of this thesis.

## 2.2 The Four Models of Sharing Economy Platforms

In a December 2017 research paper by Constantiou et al. [4], the researchers introduce a framework consisting of four distinct combinations, or – as what they will be called from this point – models: *Franchiser*, *Principal*, *Chaperone* and *Gardener*. The models are classified in two dimensions: The level of control exerted by the platform owner over its participants, and the intensity of the rivalry between platform participants. An adapted figure showing the four models can be seen below, in figure 2.1.



**Figure 2.1:** Figure showing the four sharing economy models, adapted from Figure 1, page 232 of *Four Models of Sharing Economy Platforms* by Constantiou et al. [4]

These models are most easily explained by examples. *Franchisers* are platforms like Airbnb, who foster high rivalry by means of their policy of allowing hosts to decide their own pricing, which at the same time ensures that they exert a loose form of control over their participants. *Gardeners* are platforms like CouchSurfing. There is all but no control exerted

over the participants, and the rivalry is low, seeing as there is no competition over profits. Uber is an example of a *franchiser*, a platform exerting tight control over its participants, e.g. by means of their complete control of the pricing scheme, as well as fostering a high rivalry between participants, as Uber drivers in the same city compete by a first come, first served principle, and you have to be fast to even secure a fare in large cities. BlaBlaCar is another example of a gardener. There is little to no rivalry between participants. This is in part due to the fact that trips are made regardless of how many passengers the driver is able to attract, as well as the fact that the pricing scheme is decided not by the driver, but by BlaBlaCar, which disallows the driver from making a profit. There is also little control from the platform in terms of participation or QoS requirements, and there is little to no monitoring the participants. Examples of platforms adhering to the principal model is the freelance labor provider TaskRabbit<sup>4</sup> as well as the food delivery service Deliveroo<sup>5</sup>, both platforms with little competition between its participants, but which exerts somewhat tight control both over platform participation, e.g. that Deliveroo providers are instructed where to deliver food by the platform, and QoS, i.e. that the service delivered should not differ in any way between providers.

The researchers behind the framework argue that the models facilitates for the understanding of sharing economy platforms as not much more than regular businesses. In terms of the examples used, the exceptions to this rule are CouchSurfing and – to some degree – BlaBlaCar, stemming from the fact that neither allows providers to profit on the service provided. In addition, the framework is useful "not only for analyzing sharing economy platforms and understanding their strategic positioning, but also for thinking strategically about one's own competitive positioning".

These models will not be central in the development of this thesis, as the paper on the four models was published close to the due date of this thesis, but it will be referenced where it seems fit in order to hopefully provide additional context to the results.

### 2.3 Related Research

The most obvious instance of similar research is Hein et. al's 2016 study "Multiple-Case Analysis on Governance Mechanisms of Multi-Sided Platforms" [19], which has provided a lot of inspiration for this thesis, especially when it comes to methods, and the form of presentation for the results. It also includes two of the same cases, Airbnb and Uber, thus providing a highly appreciated reference point for this thesis.

The recently published (December 2017) research paper on the Four Models of Sharing Economy Platforms [4], which is discussed in depth above, is also related somewhat to the research performed in this thesis, as it as well compares and differentiates between characteristics of different sharing economy platforms commonly placed in the same category.

<sup>4</sup>https://www.taskrabbit.com/

<sup>5</sup>https://deliveroo.co.uk/



## Method

## 3.1 Topic Selection

Chosen topic:

Governance models in sharing economy platforms

The topic of this thesis was chosen together with the thesis' supervisor, Babak Farshchian. He provided articles on the theme, which made it possible for the researcher to formulate research questions with the aforementioned articles as a basis. The topic chosen was based on a combination of the fact that the researcher had performed a pre-study on a somewhat related topic – sharing economy efforts in the health sector – with the same supervisor, combined with a lack of research on this specific subject, and lastly the fact that the supervisor has extensive knowledge and experience in the field surrounding the topic.

## 3.2 Research Questions

The topic chosen is quite broad, and the need arose for a narrower theme before deciding on the finalized research question. The supervisor suggested looking at differences in governance models in actors in the sharing economy.

Based on this more narrow topic, as well as material read, the following research question was formulated:

How does governance models and mechanisms in On-demand Economy Platforms differ from governance models in comparable sharing/gifting economy platforms? More specifically, what this thesis will look at is the following points, which can be regarded as Partial Research Questions (PRQs):

- How governance models in gifting and sharing economy platforms differ from governance models in On-demand Economy Platforms *in general*
- How governance models and mechanisms in gifting and sharing economy platforms differ from governance models and mechanisms in On-demand Economy Platforms operating in the same sector
- How governance models and mechanisms differ internally amongst gifting and sharing economy platforms, and how they differ internally amongst On-demand Economy Platforms

### 3.3 Choice of Method

According to Case Study Research - Design and Methods by Yin [5], there are three conditions to factor in when deciding what research method to choose when doing social science research:

- a) The type of research question
- b) The control an investigator has over actual behavioral events
- c) The degree of focus on contemporary as opposed to historical events

Building on this, Yin argues that "the form of your research question(s) provides an important clue regarding the appropriate research strategy to use", and that a case study is suitable when the research questions are categorized as how and/or why questions, when you do not have control over behavioral events and the research focuses on contemporary events.

Both the Main Research Question (MRQ) as well as the PRQs are formulated as "how"-questions. In addition, they focus on contemporary events, seemingly making them very suitable indeed for a thesis utilizing a case study approach. As a direct consequence, this was the method chosen.

## 3.4 Design

In addition to Yin, this thesis will use Oates' "Researching Information Systems and Computing" [26] as a base when designing the case study. Both authors use the same definition – originally defined by Yin – of what a case study is, and it is described in box 3.4 below:

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident.

According to Oates, a case study is characterized by the following points:

- Focus on depth rather than breadth: The researcher should obtain as much detail as possible about one instance (or if the research is in the form of a multiple-case study: multiple similar instances) of the phenomenon researched.
- Natural setting: The instance should be examined in its natural setting. This means that the situation should not be artificial, and the researcher should have no influence on the existence of the case, neither before nor after the study is performed.
- **Holistic study:** The researcher should not focus on individual factors, but rather on "the complexity of relationships and processes and how they are interconnected and inter-related".
- Multiple sources and methods: This point refers to the fact that the researcher should use a wide range of data sources, e.g. multiple interviewees if the research collects data in form of interviews, as well as combine multiple methods for data collection, e.g. combining questionnaires with document analysis.

Oates' book lays out a structured approach to planning and conducting a case study. This section will be organized in subsections following the order proposed by Oates, with each subsection describing the reasoning behind this thesis' choice related to the corresponding point in Oates' approach. The "Oates approach" is structured as follows:

- 1. The type of case study
- 2. Approach to time (although a sub-point of the type in Oates' structure, it receives its own subsection here)
- 3 Selection of cases
- 4. Generalizations
- 5. Selection of data generation methods

## 3.4.1 The Type of Case Study

Again according to Oates, there are three basic types of case study:

- Exploratory study: "Used to define the questions or hypotheses to be used in a subsequent study. It is used to help a researcher understand a research problem."
- **Descriptive study:** "Leads to a rich, detailed analysis of a particular phenomenon and its context. The analysis tells a story, including discussion of what occurred and how different people perceive what occurred."

• Explanatory study: "Goes further than a descriptive study in trying to explain why events happened as they did or particular outcomes occurred. The case study analysis seeks to identify the multiple, often inter-linked factors that had an effect, or compares what was found in the case to theories from the literature in order to see whether one theory matches the case better than others."

An *explanatory study* would be very time-consuming, in order to be able to provide the depth required, e.g. by researching and evaluating the theories on which to base the thesis on, and the methodology was as such discarded, due to the fairly strict time constraints on this thesis.

An *exploratory study* could be valuable, but as there is not any subsequent studies planned on the subject, this was also discarded, and the thesis was accordingly decided to bear the form of a *descriptive study*. Accordingly, the results will be presented together with (hopefully) rich discussion on the specifics of the results.

As one might have assumed or picked up on from the title or the introduction, this thesis follows a multiple-case approach to the case-study method. The reasoning behind choosing a multiple-case study in favor of a single-case one, in large parts stem from the fact that the research questions formulated in this thesis are of a comparative character, as well as the fact that the answers are more valuable in the context of each other. The conclusion to be made here, is that the questions are more likely to be answered if one is able to study more than one case, followed by a comparison between the cases. Furthermore, according to Herriott and Firestone [27], evidence from multiple cases is often considered more compelling, leading to the overall study being regarded as more robust.

In a multiple-case study the research will have to – again, according to Yin [5] – cover both the phenomenon of interest, as well as its context. This yields a large number of relevant variables, and – together with previously mentioned time and human resource constraints of the thesis – is the main support for the reasoning behind the number of cases chosen. This may represent a trade-off in terms of the certainty one might be able to have in the results of this thesis, but is considered necessary in order to maintain a high enough quality on the research performed into the cases chosen.

## 3.4.2 Approach to Time

As mentioned earlier, the approach to time is in Oates' book a sub-selection of the choice of type, and similarly to the type, there are, according to Oates, three different approaches to time in a case study.

- **Historical study:** "...examines what happened in the past by asking people what they remember about earlier events and analyzing documents produced at the time."
- **Short-term or contemporary study:** "...examines what is occurring in the case *now*."

• Longitudinal study: "...involves the researcher investigating the case over time, anything from a month to several years, analyzing those processes and relationships that are continuous and those that change."

A *longitudinal study* was quickly discarded, due to the thesis' time constraint, as well as the nature of the cases not facilitating for the close connection between the researcher and the cases over time that would have been required.

As the sharing economy is such a new phenomenon – none of the cases are much older than fifteen years, as well as the fact that this thesis attempts to produce results which is relevant in the context of the *current* state of the selected sharing economy platforms, the *historical* approach was also discarded, effectively deciding that this thesis should be a *short-term or contemporary study*, focusing on the current state of the cases.

#### 3.4.3 Selection of Cases

As it was decided that this thesis was to be a multiple-case study, a not insignificant amount of the process was spent on the selection of cases to research. This section will contain the reasoning behind and the justification of the choice of cases for this thesis. The selected cases will be more thoroughly introduced in section 3.5.

According to Oates [26], when selecting a particular case to study in a case study, there are certain aspects that you might base your selection on:

- **Typical instance:** A case that is considered typical, i.e. that it is similar to others and can thus be representative for an entire class of potential cases. Results should then be generalizable for the entire class.
- Extreme instance: Describes a case that is *not* typical, but rather provides "a contrast to the norm". Results are accordingly *not* generalizable.
- **Test-bed for theory:** A case which is seen as suitable for testing some predetermined theory. Results should determine whether the theory can be confirmed or that it must be challenged or modified.
- Convenience: A case with participants that have agreed to give you access, and is convenient in terms of time and resources. Oates underlines that this should not be the main reason for choosing a case.
- Unique opportunity: A case that arose as an unique opportunity which the researcher had not planned for, or which will not arise again, i.e. the researcher met the right person or was at the right place at the right time.

It was found best that the cases should be **typical instances**, as this would facilitate for the comparisons between the cases that were to be made in accordance with the research questions. Focusing on extreme instances seemed somewhat counter-intuitive given the fact that this would presumably return results which would show how each case differed from the norm, i.e. *all comparable cases*, and not from each other. No cases were chosen

out of convenience, nor as unique opportunities, and as the study was to be of a descriptive sort, the test-bed for theory was discarded due to the simple fact that there did not exist a theory to test.

To be able to select cases, a set of selection criteria were outlined to serve as a basis for the first cases. The criteria were as follows:

- Company widely regarded as a sharing economy company. This is implied by the theme of the thesis, and does not need any further explanation.
- Large. In order to improve the likelihood of finding material on the company, it was to be as large as possible, both in terms of revenue and in terms of users. A lower bound was set to 1 000 000 monthly users. A lower bound for revenue was not set, as it could have made it difficult to find gifting economy cases, as these often operate with fairly low margins. Revenue number also proved difficult to find in some of the cases.
- Currently operating. This thesis is a descriptive study into current phenomena, and the cases would as such have to be currently operating to be able to be selected.

The first two cases were chosen early in the process. Airbnb and Uber are not only the largest, but also, by far, the most well-known actors in the sharing economy sector, and are what can be called prototypical cases according to the previously listed criteria. This, together with the fact that both of them have been around for a significant amount of time in the sharing economy context – both around a decade – is a strong implication towards them also being the companies with the most existing research performed on them.

After deciding on the first two cases, decisions were made regarding theme and research questions. The thesis' supervisor suggested the theme – described in section 3.1 – which led to the definition of the research questions, which are described in section 3.2.

Given that the thesis was to follow a comparative approach, the number of cases should facilitate for this. As one needs at least two cases to perform a comparison (as well as to ensure that the case study is in fact multiple-case), the minimum number of cases was two. Based on the research questions, cases adhering to different models of the sharing economy was needed, as well as from different business sectors. This, together with the constraints regarding both time and resources mentioned in section 1.3, was the main factors considered when deciding that the total number of cases should be four. Although it should optimally have been more, this was regarded by the researcher as a comfortable compromise between time consumption and research robustness. In addition it matched the number of models described in the framework by Constantiou et al. [4] discussed in section 2.2.

As mentioned in the previous paragraph, the research questions effectively decided that the two other cases should be platforms that operated in the same, or at least similar, business sectors as the two cases already chosen. This narrowed down the list of candidates significantly. The final cases should be two proper (in this context meaning that they should

adhere to the sharing economy definition described in the text box found in section 1.1.1) sharing economy companies. One of them should operate in a similar business sector to Uber, meaning that it should focus on *personal transport*, i.e. car rental, ride sharing or similar. The other should similarly be a operating in a sector similar to the sector Airbnb operates in, which is the short-term accommodation industry.

As the ride sharing case, BlaBlaCar was chosen. The reasons behind this were many. They are a proper sharing economy company, as they do not allow their drivers to earn a profit, and they fit perfectly in the sharing economy definition provided in section 1.1.1. They are – with 40 million users and 12 million rides per quarter [28] – also one of the larger companies in the industry, and they have existed for nearly fifteen years. Although their business model differs in several major ways from Uber's, there is a lot of potential comparisons that can be made between them.

CouchSurfing was chosen as the short-term accommodation case. They are, as BlaBlaCar, one of the older companies in the industry, and they do not allow the hosts to earn a profit. Another interesting aspect of CouchSurfing, is the fact that they in 2011 converted from a non-profit organization to a for-profit organization, which can potentially give insight to what consequences and implications such a move can result in for companies that rely heavily on public opinion and positive connotations. In addition, they are, as the other cases, a major player in the sharing economy, with over 15 million registered users and over 400 000 active hosts, according to a October 2016 talk by founder Casey Fenton [29].

The chosen cases should provide a fairly large and robust set of possible comparisons, both between each other, as well as between the categories they belong to, illustrated by figure 3.1. This should facilitate for both a more readable, as well as a more interesting paper.

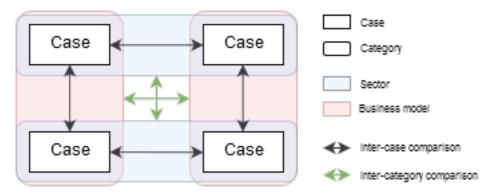


Figure 3.1: Possible comparisons

An interesting aspect of the four selected cases is the fact that they perfectly match the four models of sharing economy platforms described in section 2.2, in the sense that the four cases are a one-to-one mapping of the models. Although this was not entirely intentional, as this thesis was started before the paper describing the models was published, it facilitates

for multiple other possible comparisons between the cases for the researcher to perform.

#### 3.4.4 Generalizations

Generalizations are what Oates calls "broader conclusions that are relevant beyond the case itself". This is possible to an extent comparable to how typical the selected case is. There are a vast amount of factors to consider when deciding if a case is typical or not, important factors include physical location, history, social mix, technical basis or organizational type. Out of these, the last factor is especially important in this thesis. The choice to perform this thesis as a multiple-case study, as well as to opt for typical instances is – in part – to hopefully facilitate for generalizations. In a case study, there are, according to Walsham [30], four approaches to these generalizations: Concept, theory, implications and rich insight. The different approaches are not mutually exclusive, and can be combined when needed. Oates describes them as follows:

- Concept: "A concept is a new idea or notion that merges from the analysis, and which sometimes may even require a new word to be added to the vocabulary of the research discipline."
- **Theory:** "A theory is a coherent collection of concepts and propositions with an underlying world-view."
- Implications: "Implications arising from a case study are suggestions about what might happen in other similar instances, possible with specific recommendations for actions."
- **Rich insight:** "Rich insight is what we might glean from reading a case study that does not fit neatly into the three categories of concept, theory or implications, but nevertheless gives us important new understanding about a situation."

In this thesis, the approach to generalization is to give **rich insight** into the governance models and mechanisms present in OEPs and in sharing economy platforms as well as the eventual differences or similarities between them. If successful and given that the results allow it, this may also lead to **implications** towards the same topic, facilitating for future research.

The reason for not choosing the other approaches is simply that no theory or concept has been discovered through the initial analysis of the selected cases. This may though be a possible approach for eventual future research, if a theory or concept can be extracted from the results presented in this thesis.

#### 3.4.5 Data Collection

This thesis will use an observational approach to data collection. The information collected will be through existing sources such as academic papers, news articles and web pages. No interviews will be performed. This is mostly due to the nature of the selected cases, which are all global companies with few to none ways of contacting them directly and most of them not even operating services in Norway, leading to obvious obstacles in

the hypothetical pursuit of interviews. Questionnaires would only have given subjective data, which is not preferable given the theme and research questions of this thesis. As described in figure 3.2, these observations will be in the form of case reports – short papers that will be developed for each of the cases. The reason for this choice was the fact that it enables a structured assessment of each case, that is bound to be structured equally for each of them, hopefully providing a framework that facilitates for comparison between the cases.

The layout of these case reports is of major importance to both which results can be achieved, as well as how they can be presented in the later chapters. Because of the time restriction on this thesis, it was seen as preferable to spend a good portion of time designing the case report structure, trying to get it as suitable as possible on the first attempt, as going back and redesigning the study (as shown by the dashed arrow in figure 3.2) after each case could potentially be very time consuming if it has to be performed often.

Section 2.1.2 discussed the different dimensions of governance that were found to be of importance based on earlier literature on the topic. These dimensions will lay the basis for the case reports that are to be developed as part of this thesis. A compact description of the dimensions follows.

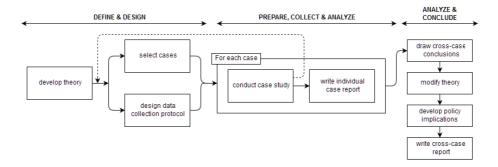
- Governance structure The overall governance structure of a company, who is responsible for decisions and the structure of ownership are all of major significance to understanding the governance of the company. In this thesis, governance structures will mainly be compared through their centralizedness, i.e. how centralized or decentralized they are in comparison to each other, although other aspects of the structure will be considered where relevant.
- Resources & documentation This is of importance because it can have implications towards the understanding and usability of the platform, as well as the transparency of the platform. For instance should governance decisions regarding the functionality of the platform's marketplace be easy to follow and understand for the users. The availability of platform BRs has a further impact in this category. This includes tools for third-party integration with the platform, such as APIs or SDKs.
- Accessibility This dimension encapsulates mechanisms related to who can access
  the platform and what restrictions are in place to avoid unwanted participants. It is
  important in order to understand the reasoning behind the composition of the user
  mass of a platform, which can be used to determine the effectiveness of the existing
  accessibility restrictions as well as to determine eventual new restrictions.
- *Control* Refers to the mechanisms of input and output control, which describes the processes of assuring the quality of the participants of the platform and the QoS provided. It can be used to reason about which behaviour to encourage, as well as which behaviour to discourage.
- *Pricing* This is an important segment, as this is an area where there is perceived to be significant differences between the selected cases. It has the potential to have

major implications on the sustainability of the company, as well as the user's perception of the company. It encapsulates aspects such as who profits, how much they profit and who is paying.

- External relationships Another aspect which is important for the cases in question, as external relationships are of major importance in any company, but especially in venture-capitalist funded companies. If the company is unable to maintain inter-firm or inter-departmental relations, it may have implications on external factors such as the amount of funding the company is able to receive. In addition, external relationships with other companies is important in order to maintain alternative sources of income, as venture capital can not sustain a company forever. This aspect also describes how well the platform allows for interoperability with third-party applications.
- Business Model As mentioned in section 2.1.2, the business model of a company does not encapsulate any mechanisms of its own, but is of importance to how the other mechanisms and dimensions mentioned are implemented in a given platform, and is therefore included to provide more depth and context to the results.

## 3.4.6 Replication approach

The figure below describes what is called the *replication approach*. It suggests that the theory should be revisited and evolved after each case study is performed, to include conclusions found in one case in the study of another in an attempt to replicate the circumstances under which the previous study was performed.



**Figure 3.2:** Case Study Method of the COSMOS Corporation, adapted from *Case Study Research - Design and Method* by Yin [5], page 49.

In this thesis, the approach has been widely used. The nature of the cases, i.e. that they are fairly new – none of the selected cases are older than 15 years (3.1) – as well as not very thoroughly researched, means that there are large differences in what information is available in each case. Because of this, when some interesting number, statistic or other characteristic of case was discovered, the characteristic was added to the list of what would be looked for in the other cases as well. It is important that this technique is not

overused, as it has the potential to lead to cherry-picking of results, but nevertheless it was an important tool in the process of obtaining the results of the thesis.

## 3.5 Cases

This section will provide background for the cases chosen, both from a historical, as well as an economical perspective. It will start with a subsection on other potential cases, which includes reasoning behind not choosing other cases.

#### 3.5.1 Other Potential Cases

There were other cases that were in contention for being selected, but either did not fit the criteria outlined earlier in this section, or had other issues or shortcomings that prevented them from being chosen.

The only sector where there may be enough sharing economy platforms to choose from, is the food delivery industry. By now there exists a lot of platforms in this sector, such as Deliveroo<sup>1</sup>, Foodora<sup>2</sup>, Just Eat<sup>3</sup> and Uber branch-out UberEATS<sup>4</sup> – all examples of companies utilizing similar business models to Uber, where technically self-employed workers provide a service – in this case food delivery – to a consumer under the brand of an aggregator. There are also alternatives with models more similar to the likes of Airbnb and – in part – BlaBlaCar in the food delivery industry, such as Norwegian student project Grabster<sup>5</sup>, where producers sells portions of homemade meals to consumers without further interference from the aggregator, i.e. that they are allowed to price the meals themselves.

The main reasoning behind not choosing these cases are that none of them were considered to be large or widespread enough. The only exception may be UberEATS, which is, by far, the largest of them with well over 5 million monthly users (August 2017 [31]), and is most likely capitalizing heavily on their name and brand.

Another sector which had the potential to provide cases fitting for this thesis, is the health sector. Health related sharing economy actors (mostly home care providers at this point) are growing in numbers. This is also a subject that the researcher of this thesis has been involved with previously, but the fact that none of these providers are global – likely due to the vast differences in health care laws and regulations around the world – was somewhat off putting, and resulted in the sector being discarded.

The situation in other sectors is that there are not enough companies adhering to all of the criteria described in section 3.4.3 to be able to perform the comparisons in a satisfying way.

<sup>1</sup>https://deliveroo.co.uk/

<sup>&</sup>lt;sup>2</sup>https://www.foodora.com/

<sup>3</sup>https://www.just-eat.com/

<sup>4</sup>https://www.ubereats.com

<sup>5</sup>http://grabster.no

## 3.5.2 Overview

Logo	Section	Name	Founded	Launched	Latest valua- tion
UBER	3.5.4	Uber Technologies Inc.	2009	2010	\$69 billion (07-2017)
Bla Bla Car	3.5.5	BlaBlaCar	2006	2007	\$1.5 billion (2016)
<b>⊗airbnb</b>	3.5.6	Airbnb	2007	2008	\$31 billion (03- 2017)
<u>Q couchsurfing</u>	3.5.7	CouchSurfing International Inc.	2003	2004	Unknown <sup>6</sup>

Table 3.1: General overview of the selected cases

Company	# of Funding Rounds	<b>Estimated Amount of Funding</b>	Source
Uber	18	\$22.2b	[32]
Airbnb	13	\$4.4b	[33]
BlaBlaCar	5	\$335.2m	[34]
CouchSurfing	2	~\$22.5m	[35]

**Table 3.2:** Venture capital funding of the selected cases

<sup>&</sup>lt;sup>6</sup>The author has been unable to find any valuation numbers for CouchSurfing, but its total funding amounts to \$22.6 million, which is approximately  $\frac{1}{15}$ th of BlaBlaCar's,  $\frac{1}{200}$ th of Airbnb's and  $\frac{1}{500}$ th of Uber's total funding. If one assumes that CouchSurfing's valuation is based on a similar ratio that is expressed in the other cases, the total valuation lies somewhere between \$100 and \$150 million.

#### 3.5.3 Commonalities

#### **Venture Capital**

Since 2011, when CouchSurfing became a for-profit organization, all four cases have been heavily funded by venture capitalists, as illustrated by 3.2. It shows that Uber is in a class of its own when it comes to the amount received. It is difficult to determine why, other than the fact that they are the largest and most well-known company, and will as such not struggle to find investors. CouchSurfing suffers from the fact that before 2011 they were – as a non-profit organization – not allowed to seek funding.

#### Location

With the exception of BlaBlaCar, which is based in Paris, France, all of the selected cases are based in San Francisco, US. Together with the neighboring county of Silicon Valley, the area is globally recognized as the undisputed venture capitalist and technology capital of the world, which is backed by the Q2 2017 MoneyTree report from PwC, showing that the two areas capture the top two spots in their venture capital investment overview of areas in the U.S. [36].

#### Software development

All of the chosen platforms are heavily reliant on their web and mobile applications, and are as such closely connected to the field of programming. With the exception of Couch-Surfing, whose GitHub repository consists of 20 repositories, whereof 19 are forks of other repositories, all of the cases maintain fairly sizable code repositories containing large amounts of tooling, SDKs and other programming efforts provided mostly as open source, either through the MIT<sup>7</sup> or the Apache 2.0<sup>8</sup> license. What all of them also have in common, is that the source code of their applications is *not* open source, but this is to be expected as it is something that most comapnies do, and is a simple measure of property protection.

Out of the four companies, Airbnb has by far the largest presence in the open source community. Their most popular repository – a JavaScript style guide – has over 60 thousand GitHub stars<sup>9</sup>. Following this, it's interesting that Airbnb only recently began providing an API, and still only to a few, select partners. In comparison, both Uber and BlaBlaCar maintains – as will be discussed further at a later stage of the thesis – public APIs, and have been for some time.

#### 3.5.4 Uber

Uber was founded as UberCab in 2009 by Garrett Camp and Travis Kalanick, two experienced startup entrepreneurs, having founded or co-founded projects such as Stumble-

<sup>7</sup>https://opensource.org/licenses/MIT

<sup>8</sup>https://www.apache.org/licenses/LICENSE-2.0

<sup>&</sup>lt;sup>9</sup>GitHub's method of "favouriting" a repository, i.e. saving it for later [37].

Upon<sup>10</sup> (Camp) and Red Swoosh<sup>11</sup> (Kalanick). The idea behind Uber – which is attributed to Camp – emerged on a New year's Eve where Camp had spent \$800 hiring a private driver, leading to the realization that sharing the cost could make it affordable [38]. The service was subsequently launched in beta in 2010, and officially launched in 2011. The company is seen as one of the pioneers of the sharing economy, in fact to such an extent that the process of transitioning to an economic system where participants exchange underutilized capacity of existing resources is now called Uberisation [39, 40]. Per July 2017, it was by far the highest valuated company in the sharing economy sector, at approximately \$69 billion [41]. Although disputed by some [42], others, such as prominent Uber investor Benchmark, suggests a \$100 billion valuation is viable in the not too distant future [43]. Coming from an investor, though, this statement should perhaps be taken with a pinch of salt.

Uber's business model can be described in short terms as follows: Drivers work for Uber not as employees, but as independent contractors, and are defined in their contracts as "partners", although this is subject to change, as courts in California, New York and the UK has ruled that Uber drivers are in fact Uber employees [44]. Customers hail rides through an app in which they can specify time and location of the pickup. In the beginning, these drivers were private chauffeurs that sat idle large parts of the day, and as such had both an available vehicle, as well as available time to perform other trips. As Uber grew, so did the need for drivers, with the demand soon overtaking the supply of private chauffeurs. This lead to a shift in employment strategy, where more regular people were employed, performing Uber trips in their own cars in their spare time.

Uber use a slightly different pricing scheme than the other selected cases. While most other sharing platforms leave most – or all – of the pricing up to the service provider, Uber utilizes a centralized pricing scheme which the driver has no control over. In most cities, a ride fare is presented to the customer upfront, while in some cities the fare is calculated similarly to how a taximeter in a taxi functions. In addition, Uber bases its fares on a dynamic pricing model, meaning that fares are higher during periods of high demand, similar to how taxi services often are more expensive during weekends and late at night, when there is a decrease in taxi supply, as well as an increased demand caused by partygoers and other nightlife, together with reduced public transport access. This pricing scheme will be more thoroughly assessed in Uber's case report found in section 4.1.1.

#### 3.5.5 BlaBlaCar

BlaBlaCar is a ridesharing community which focuses its efforts as well as its economic model towards long-distance rides. The idea behind the platform was conceived by french entrepreneur and Stanford alumni Frédéric Mazella as early as in 2003, while trying to travel home for Christmas. Unable to book trains, as the holidays were fast approaching and they were full, his sister agreed to make a 150-kilometre detour to pick him up. On the way home, he noticed the large amount of empty seats in other vehicles, none of which

 $<sup>^{10} \</sup>mathrm{https://www.stumbleupon.com/}$ 

<sup>11</sup>https://en.wikipedia.org/wiki/Red\_Swoosh

he had any way of accessing, which served as the inducer for Mazella's idea of a global ridesharing community [45]. The company was subsequently founded in 2006, with the mobile application launching a year later, in 2007. This makes it one of the earliest efforts of its size in the sector still in business as of 2017. Through five funding rounds, they have reached a total funding amount of over \$335 million, and was of 2016 valuated to an estimated \$1.5 billion.

The model is simple: Motorists traveling with empty seats in their vehicle can register and create a profile with BlaBlaCar and advertise the seats to other members through the BlaBlaCar web or mobile applications. The platform provides functionality common to other social platforms – both in and outside of the sharing economy sector – like member profiles, a two-way rating and reviewing system, social network verification, users' rate of response, as well as an experience system, which rewards use of the platform. In addition all member profiles include a "BlaBla" measurement, which serves as an indication as to how willing the member is to engage in conversation during a trip. Rides can be found through a step-by-step process combining free text search for destination, date search through a date picker, and filtration and sorting on properties like price and time window of pickup.

In contrast to Uber, BlaBlaCar's pricing system is entirely consistent, as its pricing is solely based on the cost of a trip, and not allowing the driver to make a profit. This ensures that the capacity shared is actually under-utilized, and not excessive capacity acquired with the purpose of making money. Besides effectively defining BlaBlaCar as a sharing economy platform, this prevents issues with regulators and lawmakers, as Uber has struggled so much with.

#### **3.5.6** Airbnb

In October 2007, roommates Brian Chesky and Joe Gebbia had problems affording the rent for their San Francisco loft apartment, which in a way forced the conception of the service called AirBed & Breakfast; a platform providing short-term accommodation in private homes to business travelers and others unable to book a hotel, or in need of a cheaper alternative. This accommodation typically came in the form of air beds, which is what resulted in the original name of the service. A web site was launched on August 11, 2008, and in march 2009 the company was renamed and rebranded to what we today know as Airbnb.

Although it started out as an outlet for air beds, Airbnb soon expanded to include a large variety of properties, including everything from tipis and igloos, to entire private islands. In February 2011, Airbnb announced its 1 millionth booking, further manifesting its position as one of the sluggers in the industry. This also reflects in the funding and valuation of the company. Since 2009, Airbnb has had twelve funding rounds, resulting in a total of nearly \$4.4 billion in funding, and in March of 2017, the company was valuated to approximately \$31 billion, making it the second-most valuable start-up in the U.S., trailing only Uber.

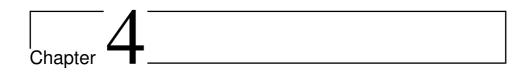
Their model share aspects with both BlaBlaCar's and Uber's. As a host, you rent out your under-utilized space, such as an apartment or a room, when you are not using it. The pricing is determined in its entirety by the host, which, although enabling hosts to make a profit, has distanced the platform from the sharing economy, as it has lead to people buying property with the sole purpose of renting them out, thus disabling the property from being defined as under-utilized. This has lead to sanctions in certain cities, such as Barcelona, which will be more thoroughly discussed later on.

## 3.5.7 CouchSurfing

Based on an idea conceived by computer programmer Casey Fenton when he in 1999 booked a flight to Iceland, but did not have a place to stay. He emailed 1500 Icelandic students whose emails he found in the database of the University of Iceland, asking them for lodging offers, which he received between 50-100 of. On the flight back to the U.S. Fenton came up with the idea for a website providing such a service, and on June 13th the same year he registered the couchsurfing.com domain name.

In April 2003, CouchSurfing International Inc. was formed as a non-profit corporation, with the website launching on June 12, 2004, which – on the encouragement of the company – has been celebrated as "International CouchSurfing Day" every year since. In 2011, based on a belief that its non-profit status was an obstacle to innovation due to regulatory requirements, the company decided to transform into a for-profit entity. The transition took place on November 4, 2011, when all the assets of the organization were sold to a for-profit company carrying the same name. This caused major concerns in the user base, which were not silenced by the fact that critical members had both their posts as well as their profiles deleted, an action seen by some as censorship [46].

CouchSurfing is the only gifting economy representative of the four selected cases, meaning that they have no revenue from transactions, as there *are* no transactions. Instead, they rely entirely on their freemium model, where non-basic features of the platform are unlocked to members by a monetary fee. The CouchSurfing model is heavily community-focused. Surfers (guests) do not look up rental listings, as is the case with Airbnb, but other members in the area they want to stay in, who, upon request from the surfer, will then be asked to serve as hosts. The host is normally present during the stay, and making new acquaintances is considered a large part of the CouchSurfing experience. This is also underlined by the fact that CouchSurfing supports local hangouts, where members in the same area can find each other's location in the app, socialize and get to know each other, increasing the sense of community.



## Results

This chapter will present the results found during the case study. It will begin with case reports for each case, followed by a roundup in the form of tables presenting the results in a more concise format.

## 4.1 Case Reports

#### 4.1.1 Uber

#### **Governance Structure**

The governance structure of Uber is split between the corporation and the drivers. Although the corporation controls the pricing scheme – described in depth below –, both the driver and the passenger retains some control in form of the rating system, as described below.

#### **Resources & Documentation**

Uber maintain a categorized help center – fittingly called Uber Help – providing answers to everything from legal questions to guides on using the platform and financial issues. The help center supports free text search with auto-complete, and in addition to being available in their web application, is available directly from the mobile application on your device. One thing Uber do not seem to provide, is a live help service via either e-mail, phone or chat. This means you are stumped if you have an obscure question which is not addressed by any of the entries in their help section.

They do provide an extensive API, offering functionality such as ride requesting, custom trip experiences, delivery services, IFTTT<sup>1</sup> applets and much more through third party applications. To enable users to integrate with the API, mobile SDKs, both for Android and

<sup>1</sup>https://ifttt.com/

iOS, are provided, with extensive documentation and examples. They also maintain multiple blogs, such as the Uber Engineering blog<sup>2</sup> and the Medium-powered Uber Developers blog<sup>3</sup> in which they share technological articles.

#### Accessibility

In terms of accessibility, Uber does not have very strict measures in place when it comes to consumers, they only require that you are registered in the app with your correct personal information, i.e. that you have identified yourself. For drivers, on the other hand, the accessibility is limited by a number of factors. First of all, it is required that the driver provides their own vehicle, as well as a valid driver's license. The driver and the vehicle are then subjects to substantial background checks in order to evaluate whether they fulfill Uber's requirements. In this regard, Uber separates themselves from the rest of the cases.

#### **Control**

As is discussed in the pricing section below (4.1.1), Uber controls its own pricing scheme, which has a large impact on general platform control, as it effectively disables under- or overpricing by dishonest drivers. Uber also uses their rating system to control the QoS provided by the drivers, and if a driver's rating drops below a predetermined threshold for some number of days, the driver is suspended from driving for Uber.

This rating system also works in the other direction, allowing drivers to see the ratings of their passengers-to-be. The passenger has the ability to leave written reviews of their driver, but this is not public information. The driver only sees the reviews from passengers who have given five star (i.e. the highest score) reviews, and they are listed in random order as anonymous reviews. The other reviews is most likely for Uber's use, for instance in cases of potential driver suspension.

#### **Trust & Perceived Risk**

Of course, being the largest and most well-known company in the sharing economy in itself provides Uber with a trustful image. In terms of actual mechanisms in place, Uber utilizes a two-sided ranking system, where both passengers and drivers rank each other after a trip. By enforcing driver suspension on low ratings over time, Uber further increases the security of the service. In addition they maintain an extensive and descriptive set of deactivation guidelines, should the driver receive any complaints. Passengers also risk deactivation of their accounts following breaches of any of Uber's community guidelines.

#### **Pricing**

Uber utilizes a quite sophisticated, fluctuating pricing scheme. As the core of this scheme sits the two types of fares Uber utilizes: *Upfront* and *Post-trip*.

 $<sup>^2</sup>$ https://eng.uber.com/

<sup>3</sup>https://uber-developers.news/

Upfront fares includes a base rate, rates for estimated time and distance of the route, as well as a rate based on the current demand for rides in the local area. In addition to these fluctuating rates, Uber also calculates and collects a booking fee, in addition to any applicable surcharges, fees and tolls. Although this may be perceived as a strategy which makes it difficult to predict a ride fare, the fare the customer is to be charged is agreed upon on *request* of the ride, and will remain the same when the trip ends, as long as the customer does not change destination, requests the driver to make additional stops during the ride or the trip somehow takes much longer than expected, mostly applicable in cases of heavy traffic or road work.

Post-trip fares, on the other hand, is based on either a minimum fare or a fare based on the time and distance for the trip. Additionally it includes everything the upfront fare includes, such as fees, surcharges and tolls. It also retains the dynamic pricing scheme which raises the price when demands are high.

In addition to the fluctuation factors mentioned, Uber fares also fluctuate based on location, the vehicle option you selected when you requested the trip, as well as what Uber calls "other factors". To illustrate, as well as provide a basis of comparison, these are the specifics of an Uber fare estimate calculated using the official Uber Fare Estimator [47] from Heathrow Airport to the center of London on a Saturday evening:

• Time of search: 2017-12-02 15:42 (Saturday)<sup>4</sup>

• **Distance**: Approximately 24km

• **Price**: Ranging from £44 (cheapest uberXL estimate) to £119 (most expensive UberLUX estimate)

The fact that Uber's control their own pricing in its entirety, allows them to increase the profit of the platform. This is popular with investors, but has received negative press and feedback, both from drivers and passengers. Many perceive parts of the pricing scheme – specifically the surge pricing – to be unfair [48]. It is likely not so much the surge pricing as a concept which anger customers, as it has been used by e.g. airlines for many years, but rather the fact that Uber's extensive use of the technique is so blatant to the user. Research suggests that this skepticism of the pricing scheme may stem from the fact that people misunderstand the market [49], but nevertheless, there *is* skepticism. This can in turn lead to consumers perceiving the surge pricing as exploitative, which can result in the consumer feeling unfairly treated by the provider [50].

#### **External Relationships**

One of Uber's main efforts in this area is their strategic relationships<sup>5</sup>. For instance, they in 2015 partnered with Hilton Hotels & Resorts to provide the chain's guests with localized travelling tips, as well as reminders to book a car [52]. The Uber app would also

<sup>&</sup>lt;sup>4</sup>It was checked again on 2017-12-05 14:05 (Tuesday), and the price estimates were nearly identical

<sup>5&</sup>quot;Agreement between two or more entities to conduct specified activities or process, to achieve specified objectives such as product development or distribution" [51]

recommend Hilton hotels as destinations. This partnership was expanded in 2016, when functionality for ordering Uber rides was implemented directly into the Hilton Honors members app, and hotel stay information became available directly in the Uber app [53]. Uber maintain similar partnerships with other hotel chains such as Hyatt [54] and Starwood [55]. Other long time strategic partners include Toyota, which provides Uber drivers with the possibility to lease Toyota vehicles and cover their payments through earnings generated as Uber drivers [56], Capital One [57], Amex [58] and Paypal [59], while Uber have had short-term partnerships with the likes of Pepsi [60] and BMW [61].

In addition to strategic relationships, Uber's external relationships extends to developers – either in other software companies or by themselves – by providing extension SDKs, allowing other app manufacturers to implement Uber functionality in their own apps, as described in the section on Resources & Documentation above.

#### **Business Model**

Uber utilizes what is called the Aggregator Business Model (ABM), which is a very common business model in the on-demand economy, and is described in the text box below.

The **Aggregator Business Model** is a network model where the firm collects the information about a particular good/service providers, make the providers their partner, and sell their services under its own brand.

In addition to how it is defined above, the ABM is recognized by features such as consistency in pricing and quality, meaning that the aggregator (Uber) decides on pricing scheme, and is responsible for maintaining a consistent QoS across providers. This is in contrast to models where different offerings is priced differently, or is of differing quality, such as in the so-called Market-Place Business Model (MPBM) found in e.g. EBay<sup>6</sup> or – as will be discussed in depth in the business model section of its case report – Airbnb.

#### 4.1.2 BlaBlaCar

#### **Governance Structure**

BlaBlaCar's governance structure is fairly decentralized. They do take a cut of each ride's cost (ranging between 12-15%). They also control the allowed slack of a trip's cost, which they do have the ability to change, hereby retaining control of a *part* of the profits, the fare of the ride is — with the exception of the transaction fee and the aforementioned slack — decided by the trip's cost, and not by a dynamic scheme. In addition, they employ a similar two-way rating system that is used in all of the other cases, which shifts power to the user.

As BlaBlaCar – with the exception of the aforementioned transaction fee – do not control its pricing scheme, they are not in a position to optimize their profits in the way that

<sup>6</sup>https://www.ebay.com/

Uber is. Although profits are one of the key elements of any organization's survival, this can also have impact on how BlaBlaCar is perceived by the public, as well as their ability to avoid regulations, as this makes it simpler to argue their status as an idealistic company.

#### **Resources & Documentation**

BlaBlaCar provide an extensive Frequently Asked Questions (FAQ) section on their website. Although they also support free text search of their articles, they do not support auto-complete, which may increase difficulty of having your questions answered, as you are required to know what you are searching for. This is in large part made up for by the fact that BlaBlaCar supports custom questions, as you are able to contact them through a very understandable form, which you are given access to in the event that you can not find what you are looking for in the FAQ.

BlaBlaCar also provide an API, which offers integration possibilities like searching for a ride and see a trip's details. They do not provide any SDKs, but rely on HATEOAS<sup>7</sup> flavoured REST<sup>8</sup> principles, returning data as JSON<sup>9</sup> or XML<sup>10</sup>, which should be familiar concepts to most developers who have previous experience working with external APIs.

#### Accessibility

BlaBlaCar require that their drivers provide their own vehicle, as well as a valid driver's license. They do not perform the same background checks that Uber does, and only require that members identify themselves properly. Another aspect which has an impact on accessibility is BlaBlaCar's "Ladies only" offer, which is only available to female members.

#### **Control**

As mentioned in the previous section, BlaBlaCar do not perform extensive background checks on their drivers. That being said, the more verification steps (e.g. adding a profile picture) you complete, the higher your listing will be shown in a given search for a ride, and the higher the chance you will have in getting accepted as a passenger. This does not prevent unfitting drivers, but should theoretically decrease the chance of them receiving any passengers.

As the other cases, a two-way rating system is utilized for output control. It is uncertain whether drivers can be suspended based on low ratings. Both parties also have the possibility to leave written reviews, providing more depth to the rating system. Members also have the opportunity to respond to reviews, which is useful in cases where information given in the review is incorrect or otherwise based on false premises.

<sup>7</sup>https://en.wikipedia.org/wiki/HATEOAS

<sup>8</sup>https://en.wikipedia.org/wiki/Representational\_state\_transfer

<sup>9</sup>https://en.wikipedia.org/wiki/JSON

 $<sup>^{10}</sup>$ https://en.wikipedia.org/wiki/XML

#### Trust & Perceived Risk

BlaBlaCar has introduced multiple measures to decrease the perceived risk of using the service, which is understandable seeing as joining a long-distance ride with strangers may induce some restraint in people. The measure which stands out in regard to this is the so-called "Ladies only" offer, where BlaBlaCar guarantees that a ride consists of exclusively female persons, both the driver and the passengers. Another – somewhat unintentional – risk-reducing effect, is the fact that because the drivers do not make profit on the rides, their insurance is not affected by passengers joining them. In addition to this, BlaBlaCar provides extra insurance cover free of charge to members travelling on rides booked online.

As the other cases, BlaBlaCar utilizes a verification system. This system in particular is rather sophisticated. You can verify your account partially by email and phone number, and if you connect your account to Facebook, your number of friends is also evaluated to determine whether your account is legitimate. Your profile image, which is fetched either through Facebook or from a manual upload, is not required, but should you choose to use one, it has to be manually approved by BlaBlaCar's Member Relations team. To complete the verification process, you will also have to provide valid identification such as a passport or a driver's license.

#### **Pricing**

The pricing model BlaBlaCar uses is fairly simple. BlaBlaCar uses an algorithm considering things like distance and car model, which calculates the cost of each trip. This is proposed to the driver as a base price, which the driver is then able to adjust inside a fixed, range (not below 50% of the base price and not more than 10% above the base price) to – as BlaBlaCar puts it – "account for the comfort of their car or their willingness to make a detour" [62].

Not included in this price is a service fee between 12% and 20%, depending on the total price of the trip where longer trips means lower fee percentage, which BlaBlaCar is entitled to. This fee is only included in the trip cost presented to the customer, so the driver shall not feel that BlaBlaCar is taking any money from them. The exact calculation of the fee is based on a table found in appendix A.1. The total price of the trip is calculated simply by adding the trip cost with the service fee. It is then split equally among the passengers. Theoretically, this means that the driver will never earn money, but can eliminate all of the costs for the ride if the car is filled up with passengers.

To exemplify how this works in real life, these are the specifics of a search for rides from London to Manchester, a trip totaling at approximately 330km:

• Time window: 2017-12-08 10:00-19:00

• Number of rides: 6

Average price presented to the customer: Approximately £25, ranging from £18 to £30

Of these £25, BlaBlaCar takes £4 (16%), and the driver gets £21.

#### **External Relationships**

BlaBlaCar – as the other cases – also maintains strategic partnerships, but arguably in a somewhat dissimilar fashion to how Uber does it. In 2015, BlaBlaCar partnered with global insurance provider AXA [63] to be able to provide the free of charge insurance coverage described in section 4.1.2. This insurance is tailored to cover BlaBlaCar's specific needs, such as a final destination guarantee. In 2017 they partnered with Google Maps, which enabled french Google Maps users to book a BlaBlaCar ride through the public transportation tab in the Google Maps app [64]. They also have longtime partnerships with PUR Projet, a french organization fighting deforestation [65, 66], as well as a three-way partnership with leasing company ALD Automotive and car manufacturer Opel, which offers lower-priced leasing, warranty and maintenance services to BlaBlaCar ambassadors [67].

Besides the strategic partnerships BlaBlaCar does not rely heavily on other external relationships. Their model is very little intrusive, both with users and governmental institutions, resulting in the platform maintaining a low profile. This is supported by the nature of the strategic partnerships discussed above, seeing as they are both few and uncontroversial. The exception from the rule here, is that BlaBlaCar have grown through the acquisition of their competitors, such as their 2015 takeover of German carpooling platform Carpooling.com<sup>11</sup> [68].

#### **Business Model**

BlaBlaCar – as Uber – utilizes a version of the ABM, operating as an umbrella brand for its service providers. They also maintain somewhat consistent pricing and quality across providers, but to some degree they have been influenced by the MPBM here. They do provide some room for slack on the pricing of a trip, meaning that trips between the same location can vary somewhat in price, and they also allow drivers to decide whether smoking or pets is allowed, and to display whether he or she is chatty and how much he or she likes music, effectively allowing differing QoS.

#### **4.1.3** Airbnb

#### **Governance Structure**

As Uber, Airbnb's governance structure is split, although with the governance seemingly more shifted towards the user than in Uber's case. With Airbnb, the user decides the pricing in whole, except for the fixed service fee Airbnb takes for each transaction. In addition, Airbnb utilizes the same two-way rating system, although instead of automatically deactivating providers or consumers with low ratings, as Uber does, Airbnb's system seem to only send out warnings to users with low ratings.

<sup>11</sup>https://en.wikipedia.org/wiki/Carpooling.com

#### Resources & Documentation

Airbnb's FAQ section – called Help Center – is very similar to the other service's, by now it seems apparent that this is a popular formula. Like the others, Airbnb have an extensive, categorized and searchable database of FAQs. It supports free text search with auto-complete, but in addition offers a contact form which first tries to guide you to a section of the FAQ, but allows for submitting customized inquiries if you are unable to find what you are looking for in the Help Center.

When it comes to API, Airbnb utilizes a somewhat different strategy to the other cases. Firstly, they did not provide an API until recently. Secondly, it is open only to "partners", which you can apply for by submitting a request through a Google Form. This enables them to handpick partners they think will provide solutions that benefit Airbnb the most. In their own words: "Our global team of partner managers will evaluate your application based on the supply opportunity your application represents, strength of your technology, and ability to support our shared customers." [69]

#### Accessibility

Similarly to how Uber and BlaBlaCar limits provider accessibility by requiring the drivers to provide their own vehicle, Airbnb requires that their hosts provide their own apartments or houses. They also require that hosts identify themselves, but no background checks are performed before allowing hosts to list their rental. Accessibility for consumers are – similarly to the other cases – not very limited, although Airbnb also requires you to identify yourself properly. As a guest you are also subject to the approval of the host, leaving the host in sole control of determining whether a booking should be approved.

#### Control

In terms of input control – which was somewhat touched upon in the section on accessibility section above – Airbnb does not have very rigid routines in place, as no quality control is performed on hosts. This is part of the Airbnb model, as it allows for different QoS, theoretically resulting in lower prices, which heightens accessibility.

Airbnb performs output control through a rating system, as do all the cases. Although it is uncertain whether hosts can be disabled from hosting solely by receiving low ratings, hosts receive warnings after continuous ratings of four stars or less [70, 71]. Another aspect Airbnb uses is written reviews. This is, as the rating system, a two-way measure, giving both guests and hosts the opportunity to write a review of the other part.

#### Trust & Perceived Risk

Airbnb operates a host protection insurance program, protecting their hosts against insurance claims of up to \$1 million. It does not cover incidents regarding for instance loss of income, terror actions or contagious diseases, but it covers claims put forth by injured guests or claims put forth by third parties harmed by accidents in the building. As the other cases, they also incorporate verification systems, where you can verify your email

and phone number, social media accounts like Facebook, Google and LinkedIn. You can also verify yourself by a valid government identification, which also requires you to upload a profile picture for (automatic) photo matching. Hosts can require that their guests provide such identification to be able to book a listing.

Despite these efforts, there have been multiple cases where Airbnb guests or hosts have been involved in allegations of assault [72], racism [73] or even rape and murder [74]. It is important to underline the fact that these are isolated incidents which are not surprising in light of the fact that the total number of Airbnb guest arrivals in 2017 was in July of the same year projected to surpass 100 million [75]. Regardless, there are websites like Airbnbhell<sup>12</sup> which are solely dedicated to stories and reasons supporting the notion to not use Airbnb. Although none of the stories there seem to be verifiable, it is still shows that there is a substantial amount of displeasure from certain groups or people towards Airbnb.

#### **Pricing**

Airbnb's pricing model is somewhat different to the other cases, although it bear resemblances to both Uber's and BlaBlaCar. For instance they utilize service fees, as do both Uber and BlaBlaCar, which is understandably very common in service oriented platforms. In Airbnb's case they operate with multiple service fees: The host is charged a fee of between 3% and 5% – dependant on chosen cancellation terms – and the guest is charged a fee of between 5% and 15% which is calculated based on factors like reservation cost, length of stay as well as the locations "characteristics". As is the case with BlaBlaCar, the higher the cost of the reservation, the lower the service fee percentage. Should the host offer experiences instead or in addition to accommodation, the entire fee is charged the host and set to a fixed rate of 20%.

When it comes to the cost of reservation, this is determined by its entirety by the host, which in large part is what separates Airbnb's pricing scheme from that of for instance BlaBlaCar.

#### **External Relationships**

Airbnb have had a vast number of strategic relationships through the years. In November of 2015, Guesty<sup>13</sup> – a professional management service for Airbnb property managers – compiled a list of some of the many partnerships Airbnb had had up until that point [76]. Although not exhaustive, the list provides a good insight into Airbnb's strategies behind their partnerships. On many occasions, Airbnb have partnered with charitable organizations, for instance by contributing and sponsoring local San Francisco firefighters' annual toy drive [77], or to provide free emergency preparedness training for hosts through the American Red Cross [78]. They have also had partnerships with the purpose of brand promotion, such as contests only open to hosts, where prices have included VIP tickets to a Graceful Dead concert [79], or 3-day VIP passes to the music festival Lollapalooza [80], as well as partnerships to encourage travel and tourism, such as their partnerships with

<sup>12</sup>https://www.airbnbhell.com/

 $<sup>^{13}</sup>$ https://www.guesty.com/

KLM [81] and Brooklyn Chamber of Commerce [82].

Airbnb have in some places struggled with authorities, due to examples of long-term rent going up because real estate investors are buying property with the sole purpose of renting it out via Airbnb. This will be discussed more thoroughly in the section on pricing in the results chapter (5.1.5). In the context of external relationships, this means that Airbnb is required to maintain such relationships with local communities in order to avoid sanctions or worse, and perhaps even invest in these communities at some point. This is illustrated by the nature of many of the strategic relationships mentioned in the previous paragraph, i.e. those that are either directed at local charity events, or the partnerships that increase tourism in certain areas, such as the one with KLM.

#### **Business Model**

Airbnb's business model also takes several aspects from the ABM (e.g. that all providers must offer their service under the aggregator's brand), but is in total closer to what is called the Market-Place Business Model [83], which was mentioned in the section on Uber (3.5.4). Although very similar, there are a few notable key differences between how aggregators operate to how a hybrid like Airbnb operates:

- Standardized quality: Aggregators believe in standardized service delivery, meaning that the service or product they provide should be close to equal between providers (trips performed by two different Uber drivers are in theory mostly equal), as opposed to the view of a marketplace, where products or services may differ in quality, as they target different customers (different Airbnb offerings also differ in quality).
- Standardized pricing: Aggregators also believe in standardized pricing, meaning that the aggregator determine the price based on a set of criteria also determined by the aggregator. Marketplaces, on the other hand, allows the provider to determine the pricing, giving them the opportunity to either increase their profits, or provide cheaper alternatives to other providers.

## 4.1.4 CouchSurfing

#### **Governance Structure**

When they were a non-profit organization, CouchSurfing had a nearly fully decentralized governance structure. The only profits of the organization were made through donations, effectively placing the entire financial control with their benefactors. The organization could – and can still – ban members from using the service, if they were perceived to act in violation of CouchSurfing's policies<sup>14</sup>, but users otherwise remained fully in control of the governance of the service through the rating system. Even the website was crowd-sourced through regular hackathons<sup>15</sup>, which were part of organized meetups called CouchSurfing Collectives [85].

<sup>14</sup>http://www.couchsurfing.com/about/policies/

<sup>&</sup>lt;sup>15</sup>An event, typically lasting several days, in which a large number of people meet to engage in collaborative computer programming. [84]

In 2011 CouchSurfing became a for-profit organization, disabling them by law to receive donations, but in turn enabling them to appropriate venture capital funding, thus shifting the control of their finances to venture capitalists. Following the transition to a for-profit company came a rebuild of the website, meaning that this was another user controlled aspect of the service that shifted into the company's control.

#### **Resources & Documentation**

In the Help Center section of CouchSurfing, there is again a very familiar structure. A searchable, although not auto-completing, categorized FAQ, as well as the contact form where you customize your query through both a text area, as well as some select boxes for categorizing. CouchSurfing, in contrast to the other cases, also provides a PO BOX address, if you for some reason should want to send them anything by mail.

Again, in contrast to the other cases, CouchSurfing does not provide an API whatsoever. There are multiple attempts at reverse engineering it [86, 87, 88], but that is not a reliable way to access the platform, as the functionality of such attempts breaks every time CouchSurfing changes their API, which is illustrated by the fact that two of the libraries referenced are already broken and no longer maintained <sup>16</sup>.

#### Accessibility

CouchSurfing is arguably the case with the highest accessibility, as there are no prerequisites required to be neither a host nor a guest, aside from requirement that the host should have a location for the guest to sleep, such as a couch, as well as the need to identify yourself before hosting or booking, a requirement shared by all the other platforms researched. In addition, the fact that the service is free also heightens accessibility and lowers the threshold for using the service, potentially increasing the chance of guests or hosts with ulterior motives.

#### Control

The high accessibility mentioned in the previous section have implications towards the input control, as this is significantly lowered when the service does not have the possibility to remove unfit hosts or guests before a booking. CouchSurfing utilizes the so-called "Freemium" model. This is a pricing strategy where a service is provided free of charge, but additional features costs money, which should theoretically help with the issue of unfit users, as it favours hosts who have payed to use the platform, improving their position in a given search.

In terms of output control, CouchSurfing also utilizes a two-way rating system, although it is not asynchronous as Airbnb's. The service also supports written reviews, as well as the ability to leave written references for other uses that you personally know, without the

<sup>&</sup>lt;sup>16</sup>In this context "no longer maintained" refers to the fact that they are no longer worked on by their creators, and no longer updated to work with future changes to the CouchSurfing API.

need for having interacted with them through the service (i.e. hosting them or being hosted by them). There is also the possibility to leave anonymous feedback after a stay in form of predetermined tags. What separates this from similar systems, is that "negative" tags are not seen by the person under review, but rather solely by the CouchSurfing safety team.

#### **Trust & Perceived Risk**

CouchSurfing have had similar problems to those experienced by Airbnb, where crimes have been committed, either against hosts or against guests, during stays, such as illegal filming of guests [89], rape and sexual assaults [90, 91], as well as murder[92]. This has an obvious impact on the perceived risk of using the service, and it is easy to find articles discussing [93, 94] – as well as people asking about [95] – the safety of the service, with answers usually recommending reading the host's description and references thoroughly, as well as always having a backup plan if anything does not work out. CouchSurfing has tried to battle this, for instance with the previously mentioned feedback system which simplifies the process of sending negative feedback of a host to the safety team.

In a 2017 study by Mittendorf [96], results illustrated that the 248 respondents showed significant hesitance in using CouchSurfing, as the statement "I hesitate to use Couchsurfing" achieved a mean score of 3.35, where the scale ranged from 1 to 7. This being said, the statement "Using Couchsurfing is unsafe" aquired a score of only 2.72, and the statement "I would feel comfortable requesting a booking on Couchsurfing" had as high a mean as 4.89, both on the same 1 to 7 scale.

These numbers show that – although most respondents were comfortable with using Couch-Surfing – the service definitely struggles with risk perception and trust issues. The study does not say anything regarding whether these are issues that is inherently a part of such a service, or if it is something that is acquired on a per-service basis, and is based on e.g. the previously mentioned criminal cases CouchSurfing has been involved in.

#### **Pricing**

CouchSurfing separates itself from the other cases by the fact that it is entirely free to use. CouchSurfing recommends reporting anyone who charges for a couch, and it will most likely result in the account in question being disabled. In order to make money, CouchSurfing uses the previously mentioned freemium model. In CouchSurfing's case, it is implemented in a form where customer can pay to become a "verified" member – a membership which includes features such as unlimited messaging with other members (otherwise limited at ten introductions <sup>17</sup> per week), 24/7 support, and – according to CouchSurfing – higher trust, and up to two times faster host searching.

#### **External Relationships**

In stark contrast to the other cases, the author could not find any evidence that CouchSurfing has maintained any strategic partnerships. Although it is of course possible that they

<sup>&</sup>lt;sup>17</sup>Introduction in CouchSurfing terms means initiating a conversation with another member

do or have done so in the past, it seems clear that it is not something they focus heavily on. This may stem from the fact that CouchSurfing have been a non-profit organization for a large part of their existence, which may have prevented them from being able to form many types of strategic partnerships, due to the nature of these partnerships often involving some form of monetary income or revenue.

#### **Business Model**

As the other cases, CouchSurfing takes aspects from the ABM, again mainly the fact that services are provided under the same brand, but in addition the pricing is also consistent, as all CouchSurfing offerings are free of charge.

Despite these similarities, CouchSurfing's business model is not that of an aggregator, but as discussed in the previous section, is much more closely resemblant to the previously mentioned freemium model. It is not as an aggregator CouchSurfing earn their profits, but through providing extended services and possibilities to paying members in comparison to non-paying members.

## 4.2 Results Tables

This section will display the results found in the previous section in a compact table format. To improve readability, the results are divided into two tables containing the same rows, the first table presenting the results of Uber and BlaBlaCar, and the second presenting the results of Airbnb and CouchSurfing.

Dimension	Uber	BlaBlaCar	
Governance structure	Split, Uber controls pricing, passenger controls through rating	BlaBlaCar controls allowed slack of pricing, passenger has some con- trol through rating	
Resources & documentation	<ul><li>✓ Help center</li><li>✓ API w/docs</li><li>✓ SDK</li></ul>	<ul><li>✓ Help center</li><li>✓ API w/docs</li><li>X SDK</li></ul>	
Accessibility	Background checks  Vehicle/driver's license	Ladies only option  Vehicle/driver's license	
Control	Pricing control  Automatic low rating driver suspensi	Multi-step verification on	
Trust & perceived risk	Insurance  Background checking  Rating system	Insurance Verification Rating system Experience levels Ladies only option	
Pricing	Dynamic pricing Fluctuating service fee [97]	Service fee dependent on trip price [98]	
External relationships	SP <sup>18</sup> : Vast amount, unmoderated  Extension developers	SP: Low amount, targeted approach	
Business model	ABM	ABM w/support for differing QoS (MPBM)	

Table 4.1: Results table, Uber and BlaBlaCar

Dimension	Airbnb	CouchSurfing	
Governance structure	Company controls suspension and approval of members. Decentralized through pricing, QoS, rating system and hosts' approval of guests	Nearly fully decentralized (although decreasing since 2011)	
Resources &	✓ Help center	✓ Help center	
documentation	△ API w/docs	➤ API w/docs	
documentation	× SDK	× SDK	
Accessibility	Identification	Identification	
	Rating system	Favours paying members	
Control	Low rating warnings (suspension)	Rating system	
	Written reviews	Written reviews	
T	Insurance	Verification  Rating system	
Trust & perceived	Verification		
risk	Rating system		
Pricing	Reservation fee of	Freemium model	
Themg	8-18% [99]	[100]	
External	SP: Vast amount, somewhat targeted	approach SP: None	
relationships	Local communities		
Business	MDDM / ADM	Freemium service provider (hints of ABM)	
model	MPBM w/some ABM aspects		

Table 4.2: Results table, Airbnb and CouchSurfing

<sup>&</sup>lt;sup>18</sup>Strategic partnerships



# Findings & Discussion

This chapter will contain two main sections. The findings section will discuss the results found in the previous chapter, while the discussion section will evaluate the findings in the context of the research questions of this thesis.

## 5.1 Findings

This section will be structured into sections presented as a one-to-one mapping of the list of points presented in each case report, where each section will discuss the implications and consequences of the different results for the given point.

#### **5.1.1** Governance Structure

The cases places somewhat equally distributed on a scale from most decentralized (Couch-Surfing) to most centralized (Uber). Although none of the cases are fully centralized, Uber, with its tight control of pricing schemes, is the company which utilizes the most centralized governance structure of the chosen cases.

According to Weill and Ross [101], "The most profitable companies tend to be centralized in their approach to IT governance". Together with the fact that Uber with its custom pricing scheme is the case with the arguably highest level of control over its profits, this may make one assume that Uber is the most profitable of the companies, but this is not the case. After going public in May 2017, Uber released their numbers for the first quarter [102], presenting – despite a \$3.4 billion revenue, an 18% rise from the year before – an estimated loss of \$708 million. In contrast, Airbnb started making profit in 2016 [103], as well as maintaining this trend throughout the entirety of 2017, while at the same time maintaining an increasingly large revenue, with the Q3 2017 number allegedly surpassing \$1 billion [104]. Neither CouchSurfing nor BlaBlaCar seem to disclose their numbers, although one 2015 calculation concerning the latter estimates a yearly revenue of \$72 million [105].

#### 5.1.2 Resources & Documentation

Also in this section, all the cases differ to varying degrees. All of them provide help centers and FAQs. Although of somewhat varying quality, this suggests that there is not much to conclude with in regard to this aspect, besides the fact that it seems to be deemed necessary by the platforms to provide such a service. A 2016 report by research and advisory firm Forrester [2, 106] showed, among other things, that 53% of US online adults are likely to abandon their online purchase if they can not find a quick answer to their question, which substantiates this notion. The report also showed that pricing increases drastically per customer contact as the type of contact changes in form of decreased response time requirements (e.g. that a telephone conversation with a customer is more expensive than an email exchange, see the table in appendix B.1 for specifics).

When it comes to the aspect of public APIs, the differences are much larger. Uber provide by far the most extensive API. It is also the only platform to provide SDKs – both for Android and iOS – lowering the threshold for developing integrating software. BlaBlaCar also provide a public API, although with more limited functionality than Uber's. Airbnb, on the other hand, only provide their API to partners who have been selected manually, and CouchSurfing do not provide a public API at all.

## 5.1.3 Accessibility & Control

There are some apparent similarities between the cases in their approach to this aspect. All of the platforms require some form of identification from both providers and consumers. This is to be expected, given the nature of the platforms in question. Uber and Airbnb also limits accessibility in force of the monetary cost of the service. This is also true to some extent with BlaBlaCar, but considering the fact that BlaBlaCar passengers often are going to perform the trip regardless of which service they use, as opposed to trips with Uber or bookings through Airbnb, this limitation is most likely not as severe. CouchSurfing is the only platform that does not have this limitation, as it is free to use.

When it comes to provider requirements, the platforms differ quite significantly. Uber stands out, as it is the only company which performs thorough background checks on their providers – in Uber's case the drivers – beforehand. In addition, they require their drivers to provide their own vehicle, as well as a valid driver's license, two requirements they share with BlaBlaCar. Airbnb and CouchSurfing require that you have either a location or a couch to rent out, but nothing else.

In terms of output control, all platforms provide a two-way rating system, which – again – implies that it is a feature which is platform independent, and is regarded as a necessity both in sharing/gifting economy platforms as well as in OEPs. That being said, the rating system is implemented differently in all the platforms. Airbnb has a system which only allows you to see the other part's rating once you have submitted a rating yourself, encouraging both parts to rate the other. Airbnb and BlaBlaCar heavily relies on written reviews, whereas CouchSurfing even allows you to review other members even though you have not stayed with or hosted them, likely as an attempt to give new hosts a higher chance

of receiving bookings, as this enables reviews of a host before he or she has hosted any surfers. Uber does not support written reviews, with the exception of anonymous comments passengers can leave for their drivers, of which the driver can only see those that are linked to positive ratings. As Uber drivers are suspended fairly quickly as well as automatically after persisting low ratings, written reviews is a feature likely seen by Uber as unnecessary, due to the fact that most all of them would be positive.

#### 5.1.4 Trust & Perceived Risk

All of the selected platforms have struggled with trust issues, although some to a much higher degree. CouchSurfing separates itself from the others in this regard, as a substantial amount of criminal cases involving use of the platform have lead to an abundance of forum posts and articles discussing the safety of the platform and potential hazardous situations that can arise when booking stays with the service. Airbnb have also struggled with similar incidents. There does not seem to exist any numbers which shows the ratio of incidents per booking, neither for Airbnb nor for CouchSurfing. It can be tempting to think that the fact that CouchSurfing is free may lower the threshold for using it, and higher accessibility may lead to a higher number of unwanted users, although without numbers this obviously remains speculation.

Both Uber and BlaBlaCar also suffer from these issues, but seemingly to a lesser extent. This most likely stems in large part from the fact that a car is a much more inconvenient location to perform a crime, be it rape or murder. Both because of physical limitations, i.e. the small space and the driver's physical orientation in comparison to the passenger (with his/her back turned), as well as the fact that consumers and providers are exposed to each other for a fairly short amount of time in comparison to the accommodation services, although these limitations may *increase* chance of other types of crimes, such as robbery. Additionally, due to the short time span of an Uber trip, the number of related incidents are likely to be higher than is the case with Airbnb and CouchSurfing, and it is not hard to find instances of both rape and murder cases [107] related to Uber trips, showing that crimes are committed regardless of conditions. In BlaBlaCar's case, the fact that the trips are mostly long-distance and often shared with others, may have a positive impact on the perceived risk of the platform. It is likely that potential perpetrators would want to avoid both long trips and potential witnesses to the crime, at least if the crime is planned beforehand.

As the companies become more and more well-known, perceived risk of participation is reduced, and the different measures that the platforms have put in place, such as verification and rating systems, also help.

## 5.1.5 Pricing

As both BlaBlaCar and CouchSurfing incorporates a financial model disallowing providers to earn a profit, they remove a large portion of the customisability of a provider's offer (a driver's car seat in the case of BlaBlaCar, a apartment owner's couch in CouchSurfing's case). Although this can initially seem like a measure with negative implications for users,

it also ensures that the cost of being a provider always remains constant – in the sharing platforms' case: zero. That the cost of being a provider remains constant can also be said for Airbnb, but they allow their users to determine the pricing of a listing themselves, which goes against the sharing principle by allowing providers to make a profit. This forprofit pricing scheme has also had consequences for the company. It it is not unrealistic to assume that it carries a substantial part of the responsibility for the fact that cities like Barcelona have started to fine Airbnb for advertising unlicensed short-term rental apartments [108], as there has been a massive spike in people buying apartments with the sole purposes of renting them out on Airbnb, due to its high return of investment. This has in turn made it significantly more expensive to buy or rent long-term accommodation in these cities, illustrated by Barcelona's 23% increase in rental prices in just the last three years [108].

The platform that separates themselves from the others the most is Uber. They do not allow their drivers to customize the pricing, and they run what seems like a highly profitable pricing scheme not concerned with the cost of the trip as is the case with BlaBlaCar or with the consistency of the provider's cost, as is the case with all the other cases. This separates them even further from the sharing economy, which they seemingly does not have much in common with anymore.

## 5.1.6 External Relationships

All cases have different external relationships to maintain, but they also share some important aspects in this regard. All of them are invested in strategic partnerships, but their methods differ vastly. Imagine a scale going from "partnering with anybody" to "partnering with no-one". On one end of the scale you have Uber, who have partnered with a vast number of companies, in all sectors of society. They do have partnerships with clear implications towards the specific value that Uber get in return, such as their relationships with hotel chains Hilton, Hyatt and Starwood, which all serve very specific purposes to both sides of the relationship, but they have also partnered with the likes of Pepsi, seemingly with no other goal than for pure branding purposes. The next step on the scale is home to Airbnb, who are also heavily invested in a large amount of strategic partnerships, but with what arguably seems like a more targeted approach to which companies they partner with, and following a clearer strategy, focusing mostly on either travel and accommodation related partnerships or partnerships with charitable purposes. Following Airbnb on this linear scale, we find BlaBlaCar. Although they do maintain strategic partnerships, they are both very few, as well as even more tightly focused, as all of them are partnerships that either have a charitable purpose, such as the partnership with anti-deforestation organization PUR Projet, or have direct consequences for BlaBlaCar's operations, such as the partnership with insurance company AXA. In the opposite end of the scale from Uber, is CouchSurfing, who having been a non-profit organization for most of its existence, does not seem to maintain any strategic relationships, or at the very least so few that the researcher have been unable to find any.

#### 5.1.7 Business Model

In terms of business model, all companies share an important aspect: All of the cases adhere – to some degree – to the Aggregator Business Model (described in section 4.1.1), as service providers on the platform are forced to offer their service under the case's brand. Airbnb separates itself from the rest in regard to this by allowing providers to determine their own pricing, which is also allowed by BlaBlaCar to a limited extent. These two, and in a way CouchSurfing also allow offerings differing in quality. Both quality differences and price differences are aspects taken from the Market-Place Business Model.

CouchSurfing separates itself from the other three in this aspect by being the only platform not profiting on transactions. For BlaBlaCar and Airbnb, this transaction fee is the major source of income, although Airbnb – through its policy of allowing hosts to determine their own listing prices – most likely profits the most of the two on this scheme. For Uber, this is only part of the revenue stream, and is as such not that significant.

## 5.2 Discussion

The previous section evaluated the results of the case reports developed from the selected cases of the study. This section will discuss the implications of those results in terms of the research questions defined in section 3.2. The main question was:

How does governance models and mechanisms in On-demand Economy Platforms differ from governance models in comparable sharing/gifting economy platforms?

This question was then broken up into multiple sub-questions (PRQ), which were as follows:

- How governance models in gifting and sharing economy platforms differ from governance models in On-demand Economy Platforms in general
- How governance models and mechanisms in gifting and sharing economy platforms differ from governance models and mechanisms in On-demand Economy Platforms operating in the same sector
- How governance models and mechanisms differ internally among gifting and sharing economy platforms, and how they differ internally among On-demand Economy Platforms

This section will be structured as a set of subsections, each outlining the answers to one of the PRQs. This is done with the possibility of repeating information, but is necessary in order to have structured answers to the questions asked.

#### **5.2.1** General Differences

In terms of governance structure, there are not very apparent conclusions to be made, but there seem to be a tendency towards the notion that the OEPs are more centralized

than the sharing economy platforms. This is illustrated by the fact that Uber is by far the most centralized platform, while CouchSurfing is the most decentralized platform. Airbnb and BlaBlaCar are close to each other in the middle of the scale. The former allows the provider to determine pricing themselves. The latter does at first glance not seem to allow this, but when considering that they do not have the ability to determine the pricing themselves (according to their own no-profit policy), and the only slack in pricing that is allowed is adjusted by the user, it is difficult to argue which of them is most centralized. After CouchSurfing became a for-profit organization, all of the cases are single-entity platforms, owned by a single company.

In terms of accessibility, all platforms require similar amount of verification from the user, with the exception of Uber, who performs rigid background checks of their drivers prior to employment. That being said, the sharing platforms both support the opportunity to pay for increased visibility in listings and extended features. This is most likely first and foremost a measure to increase profits, but can also be seen as a counter-measure to having too high accessibility, which can lead to increased risk of use of the platform.

All platforms use similar tools in the process of output control, namely a two-way rating system, although the OEPs utilizes a somewhat stricter implementation, as low ratings in these platforms can lead to either automatic suspension (Uber) or warnings (Airbnb). Only Uber disallows differing QoS, as all drivers are held to the same standards and the same pricing. In terms of input control, Uber again separates itself from the rest through its thorough background checks.

Uber has the most extensive set of resources and documentation of the cases. If one were to conclude with differences between OEPs and sharing platforms in regard to this dimension, Airbnb would show similar traits, but in fact they do not. Although the documentation of the platform seem to be equally good, so does BlaBlaCar's and CouchSurfing's, and Airbnb's lackluster approach to an API is somewhat strange. That being said, there has been a massive focus on this, which may lead to Airbnb loosening their restrictions somewhat, which may enable some conclusions to be made towards this dimension. CouchSurfing falls behind in this category, having no API whatsoever. BlaBlaCar have an open API, but it is fairly limited.

Regarding trust and perceived risk, the fact that the OEPs has a lower accessibility due to their higher pricing may lead to reduced risk of use, and the fact that they are so well-known most likely has a positive impact on how much people trust them. That being said, this dimension seems to be closest connected to how large and well-known the platform is question is, and not which economical model it utilizes.

The pricing models between the cases differ quite a bit, although not perhaps as much as one would think. The pricing schemes seem to be heavily reliant on the platform's business model, seeing as all of the three cases that have transactions, use transaction fees as part of their pricing model. Other than that, the main difference of this dimension seems to be whether the price is decided by the provider or by the platform, where Uber is the ex-

tremity not allowing the provider any decision rights in regard to pricing, whereas Airbnb leaves the entire pricing up to the provider and BlaBlaCar falls somewhere in between.

A dimension it is very simple to draw conclusions from, is the external relationships dimension. Here one can see a clear separation between the OEPs – who both maintain a large amount of strategic partnerships, mostly with no limitations towards who they partner with, although Airbnb seem to at least have a written strategy – and the sharing economy platforms who either maintain no strategic partnerships at all (CouchSurfing), or at least very few (BlaBlaCar), of which all are subject to a strict selection policy regarding the nature of the company in question.

#### **5.2.2** Differences in Similar Sector Cases

This section will discuss the differences found between cases operating in the same sector, such as accommodation platforms Airbnb and CouchSurfing, and the personal transport platforms Uber and BlaBlaCar.

#### Airbnb vs. CouchSurfing

Both companies currently (2018) utilize a fairly decentralized governance structure, although CouchSurfing edges out somewhat in this regard, as it retains no control of monetary transactions from its users. Airbnb runs a stricter policy both when it comes to input control and output control, although both platforms allow differing QoS from their providers.

In terms of accessibility and control, Airbnb has inherently lower accessibility due to it not being free, but other than that the platforms operate quite similarly. This is also the case when it comes to trust and risk, although Airbnb will have a higher level of trust due to it being a lot larger and more well-known platform.

The dimension of external relationships is represented by the two cases as two vastly differing implementations. Whereas Airbnb maintains a long list of external partnerships, with multiple categories of partnership types, CouchSurfing does not seem to have had **any** of these types of partnerships. This is likely in part due to the latter's past as a non-profit organization, which make these partnerships legally challenging. Because of their impact in the real estate market, Airbnb have been forced to maintain relations with local communities as well, while CouchSurfing avoids this due to not being a viable competitor to the long-term rental market, as it is not profitable.

#### Uber vs. BlaBlaCar

In terms of governance structure, these companies are substantially different. Uber's structure is highly centralized, controlling both pricing and automatic suspension of users with low ratings. BlaBlaCar do not employ a dynamic pricing scheme, and as such do not control the pricing of the platform, but do not allow providers to determine their own pricing either (with the exception of a predetermined percentage of slack allowed to stimulate trips

that the driver would rather not take). Users can be suspended, but rather in the event that they have been reported by other users, and likely only if they have broken BlaBlaCar policies or guidelines in some form, not automatically on low ratings.

In the dimensions of accessibility and control, there are some small differences between the platforms, but nothing very notable except for the fact that Uber performs extensive background checks on their drivers, which BlaBlaCar do not. Both platforms offer an API, although Uber's is more extensive, and they offer mobile SDKs as well.

When it comes to perception of trust and risk, there does not seem to be much of a difference in regard to how mechanisms are implemented, but the fact that Uber is so much larger and more known than BlaBlaCar can have potential positive implications for trust. Trip fares are lower with BlaBlaCar, which can potentially lower the accessibility and increase the risk of using the platform, but this is counter-acted by the fact that BlaBlaCar trips often have more than one passenger, which most of the time do not know each other.

Similarly to what was the case with CouchSurfing and Airbnb, the dimension on external relationships is perhaps the one that the two companies differ the most in. Uber's strategic partnerships contains a long list of companies, and they have few to none criteria for which companies they partner with. In contrast, BlaBlaCar only maintains a few strategic partnerships, with all of them being either charitable organizations, or partners that provide services that have direct implications for BlablaCar's operations.

#### 5.2.3 Differences in Similar Model Cases

In this section, the differences between cases that operate with similar economic models will be discussed, such as the differences between the sharing economy platform BlaBlaCar and the gifting economy platform CouchSurfing, and between the two ondemand economy platforms Uber and Airbnb.

#### BlaBlaCar vs. CouchSurfing

The largest difference between these two platforms, is the fact that CouchSurfing is free to use, while BlaBlaCar is not. None of them allows their providers to make a profit, but BlaBlaCar drivers are allowed to charge passengers a sum corresponding to the cost of the trip. This sum includes a transaction fee, which is BlaBlaCar's main source of income, while CouchSurfing relies on their freemium model, offering extended features and increased visibility in listings for their users.

Due to this difference in pricing, the accessibility of CouchSurfing is higher than with BlaBlaCar, which is supported by the fact that BlaBlaCar uses multi-step verification as a means of input control, CouchSurfing uses it as a part of their freemium model, effectively decreasing their input control, as the main measure of control is not free, but also not required.

In terms of trust, it is likely to be similar, as none of the platforms are very well-known outside their core user base. Perceived risk might be higher with CouchSurfing due to its high accessibility, but high perceived risk may also be an inherent trait of the accommodation platforms.

#### Uber vs. Airbnb

The pricing scheme is the main separator between these two platforms. Uber's dynamic pricing scheme ensures that the company retains tighter control of its profits, but Airbnb's policy of allowing differing QoS and pricing is likely more popular with users.

In the other dimensions there are not too many notable differences. Uber operate with somewhat lower accessibility through their background checks, as well as a stricter output control and more centralized governance structure with their automatic low-rating suspension system. Perceived risk seem to be of an equally low level with both companies, likely due to their size and widespread reputation. The trust levels in the platforms are also difficult to distinguish between. Both maintain a vast amount of strategic partnerships, although Airbnb's approach seem to be somewhat more targeted than Uber's.



### Conclusion

This chapter will begin with a section discussing the general conclusions one can gather from the findings discussed in the previous chapter, followed by a section describing the limitations of the research performed in this study, as well as a final section on future work on the topic.

#### **6.1 General Conclusions**

The results of this thesis feel somewhat ambivalent in terms of how well they answer the research questions. Some of the dimensions assessed showed tendencies towards there being clear distinctions between OEPs and sharing economy platforms, such as the external relationships and accessibility dimensions, some mechanisms showed differences between accommodation platforms and personal transportation platforms, such as the API support in the resources and documentation dimension, while other dimensions again showed no clear relations between the implementation of the mechanisms and the economical model of the cases.

Although not all of the results show conclusive evidence or implications towards the answers to the research questions, this thesis can hopefully serve as a good starting point for anyone wanting to perform research on a similar topic. Due to the small amount of cases, it is important to not over-generalize the results. More research is needed in order to confirm or disprove the results found in this thesis.

#### **6.2** Research Limitations

The results of this thesis, described in 4 and discussed in 5, is by default limited by the method described in 3. This section will describe what other limitations that also applies.

#### 1. Number of cases:

The number of cases in a multiple-case study will always have to be thoroughly

assessed. In order with the time constraint of this thesis is was decided that this study should focus on four different cases. In hindsight, although four cases provided more than enough work, it would have been preferable to have a higher number of cases, as it could have lead to the researcher being able to make more robust generalizations about the results, or even provided contradictions to the results of this thesis.

#### 2. Distance to cases:

The nature of the selected cases meant that the researcher did not get as close to each case as would have been preferred. A case study is to be an in-depth research into some phenomenon, and a closer relationship with the cases in the study is likely to have yielded better results.

#### 3. Data amount:

Especially the case of CouchSurfing proved difficult to gather the necessary amount of data about, either due to there not being any, or as a consequence of an unsatisfying job performed on the researcher's part.

#### 4. The Researcher:

Due to there only being one researcher, thus there only being one person in charge of all parts of the research process, the results are sensitive to any shortcomings of the researcher or any errors he has made.

#### **6.3** Future Work

The findings in this thesis shows definite signs that there exists implications towards major differences in how certain governance mechanisms and models are implemented in OEPs versus those that are present in sharing/gifting economy platforms. This opens possibilities for research that can build upon these results. This chapter will contain sections discussing examples of areas or subjects that can be explored further, based on these results.

#### **Research Implications**

It would be interesting to investigate what implications the results of this thesis could have towards some of the aspects touched upon in the introduction, such as the economical sustainability of a company. Such research would require that the researchers look into what physical effect different governance mechanisms traditionally have on a company.

#### **Replicate Study with Different Cases**

The perhaps most natural next step following this thesis, would be efforts to replicate the methods used in this thesis in a study containing different cases, to see if the conclusions found in this thesis can be confirmed to be present in other cases. This would add robustness to the results, which as of now are somewhat fragile due to the low number of cases researched in this thesis.

#### **Expand Study**

Another possibility is to expand this study with either new methods or by looking for other governance mechanisms, in order to investigate if there are other notable differences in the cases than the ones found in this thesis.

#### **Study More Similar Cases**

Although cases like BlaBlaCar and Uber are interesting to compare due to them operating in similar areas of business and solving a similar business problem while at the same time operating with very different business models, it would be interesting to investigate how even more similar cases – for instance Uber and Lyft, who solves similar problems, but also utilizes similar business models – differ in terms of governance mechanisms. This will add much needed insight to questions regarding how tightly – if at all – a company's governance mechanisms are connected to its business model.

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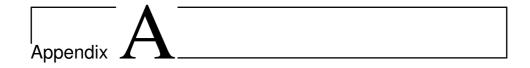
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# **Appendices**



## BlaBlaCar Fee Calculation Table

Cost contribution to the driver	Service fees per passenger (including VAT)		
£1 – £3	£1		
£4 – £6	£1.5		
£7 – £9	£2		
£10 – £13	£2.5		
£14 – £17	£3		
[Numbers removed for shortening purposes, see source for details]			
£64 – £67	£9		
£68 – £72	£9.5		
£73 – £77	£10		
£78 – £79	£10.5		
over £80	£1.068 + 11.88% of the cost contribution to the driver,		
0101 200	rounded at the nearest £0.5		

**Table A.1:** BlaBlaCar Fee Calculation Table [1]



# Forrester Customer Contact Pricing table

Type of Contact	Cost per customer contact
Self-Service Help Center Problem Resolution	\$0.10 or less
Email with Customer Service Agent	\$5.00
Web Chat with Customer Service Agent	\$5.00 or more
Telephone Conversation with Call Center Customer Service Agent	\$6.00

**Table B.1:** Forrester Customer Contact Pricing table [2]