

Exploring Problems Associated With the Sharing Economy

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Abstract

As the sharing economy has become more popular, its problems are discussed increasingly. However, these discussions are often confusing because there are multiple definitions for the sharing economy, and the discourse does not usually specify which definition it is based on. Therefore, the actors may be wrongfully accused of problems that do not concern them, only because they are perceived as belonging to the sharing economy. We aim to clarify this discussion by creating a framework that maps specific problem discourses to specific actors and stakeholder groups. We create a framework based on a review of the academic literature in which the sharing economy is delineated into smaller markets. The framework is further utilized to map empirically identified problems based on data collected from 180 web pages that discuss problems in the sharing economy. The findings indicate that the key problems in the sharing economy, such as labor rights, concern a very narrow segment of the sharing economy. We conclude that issues concerning safety are neglected in the academic research.

Keywords: sharing economy, gig economy, sharing platform, peer-to-peer, regulation, collaborative consumption

Introduction

The aggravating environmental problems have led many actors to question the economic system based on consumption and constant growth (Heinrichs, 2013). This has resulted in a search of alternative systems of producing and consuming goods and services (Howard-Grenville et al., 2014). One of these new systems is called the “sharing economy”, which relies on the consumers’ urge for collaborative consumption and search for alternatives to resource ownership. The sharing economy is a broad term that includes a variety of models that are based on sharing services, short on-demand jobs, and peer-to-peer (P2P) rentals. The best known companies include eBay (sharing of multiple types of goods), Handy and TaskRabbit (services), AirBnB (accommodation) and Uber (travelling) (Owyang et al., 2014; Cohen & Kietzmann, 2014).

When the sharing economy started to become a mainstream phenomenon, it was seen as a new way of life correcting the environmental and social problems of the “old economy” (Botsman & Rogers, 2010). However, the discussion has recently become more and more critical. The sharing economy has been presented as a façade for hyper-capitalism of venture capital -backed Silicon Valley entrepreneurs (Slee, 2016) and it has been accused of many kinds of problems, such as exploiting employees belonging to vulnerable people groups (ibid.) and increased discrimination (Frenken & Schor, 2017). So far, with the exception of car-sharing (e.g., Nijland & Meerkerk, 2017; Martin & Shaheen, 2011) the academic discussion on the impacts of the sharing economy has been based on anecdotal evidence and speculation. This will most likely continue in the near future because the service platforms in the sharing economy are hesitant of sharing user data, which is necessary for estimating the impacts of this industry (Frenken & Schor, 2017).

There is no clear agreed-upon definition for the sharing economy (Martin, 2016). Instead, there are different definitions, many of which contradict each other (Belk, 2014; Botsman & Rogers,

2010; Frenken & Schor, 2017; Schor, 2014). We argue that the vagueness of the term sharing economy, combined with the active discussion on its problems can lead to confusion: it is unclear, which problem discourses are connected to which companies. On the other hand, since much of the academic discussion on the sharing economy is conceptual, there might be a disconnection between what is seen as relevant in the public and regulatory spheres and what is discussed in the academia. Our research goal is to clarify this discussion by mapping the problems to clearly distinguishable segments of the sharing economy and stakeholder groups. Furthermore, to extend the discussion, we identify possible problem areas that are discussed in the media, but which have not received scholarly attention.

To fulfill these aims, we first create a framework of different markets in the sharing economy by using the work of earlier scholars. We then present the sharing economy problems raised in the academic literature and map these issues by using the framework created in the previous part of the study. This is followed by mapping the problem discourses identified in the public discussion into this framework. As data we use 180 web pages found with the Google search engine by using a set of keywords and then sifting through the results by using exclusion criteria, and analyzing them with qualitative content analysis tools. Finally, recent academic articles on the sharing economy are discussed in the light of the framework.

Conceptualizing the sharing economy

Sharing economy is a contested term and experts and scholars are in disagreement, which organizations are part of it and which are not (Acquier et al., 2017). Therefore, it seems impossible to find a universal conceptualization for it. As a basis for our classification, we use the definition of the sharing economy by Botsman and Rogers (2010). Their book was the first attempt to collect different kinds of sharing services, and it contributed substantially to the mainstreaming

of the phenomenon (Martin, 2016). This work is frequently used as a basis for sharing economy in the media, and therefore provides a good starting point for classifying the problem discussions.

Botsman and Rogers (2010)¹ disseminate the sharing economy to three parts: product-service systems (where a product is provided as a service, e.g. Zipcar), re-distribution networks (expanding the life-cycle of products by searching for new consumers, e.g. eBay), and collaborative lifestyles (sharing of immaterial things, e.g. Uber.). This definition is quite broad. In addition to new kinds of services, such as peer-to-peer apartment rentals, it includes services that have been in the marketplace for quite a while, such as online auction platforms.

This study does not focus on creating a typology for sharing economy per se, but rather creates a structure for the features and characteristics found within the sharing economy and their related conflicts. However, we use the classification work of previous academic literature to slice the wide umbrella term of sharing economy used by Botsman and Rogers (2010) into smaller markets. Based on this, we are able to attribute the specific problems to specific actors more accurately.

Academics have generally created narrow definitions of the sharing economy to restrict it to services that bring something new to the marketplace compared to the traditional economy. Belk (2014) restricts the sharing economy² to peer-to-peer transactions that involve money. The novelty value in Belk's definition comes from a large-scale P2P rental. Therefore, the companies that operate with the traditional B2P-model but provide access to resources (e.g., Zipcar) Belk labels as pseudo-sharing services. This is because nothing is actually shared between individuals, and therefore they are more accurately described as short-term rental activities. Frenken and Schor (2017) restrict the sharing economy to peer-to-peer sharing of physical assets, but unlike Belk (2014), they also include non-profit actors. Furthermore, Frenken and Schor exclude some actors, such as Uber, because they do not exactly share anything, but are in the business of on-demand services. According to Frenken and Schor (ibid) the novelty value in the sharing economy is that sharing takes place primarily among strangers, whereas in the past it has been done only among friends and family.

¹ Botsman and Rogers actually used the term "collaborative consumption". The phenomenon has been referred to in many terms, but "sharing economy" has been later established as the most common word to describe the phenomenon (Martin 2016). Therefore, we uniformly use this term in this paper.

² To be accurate, this is Belk's definition of collaborative consumption. However, we use the term sharing economy. For justification, see previous footnote.

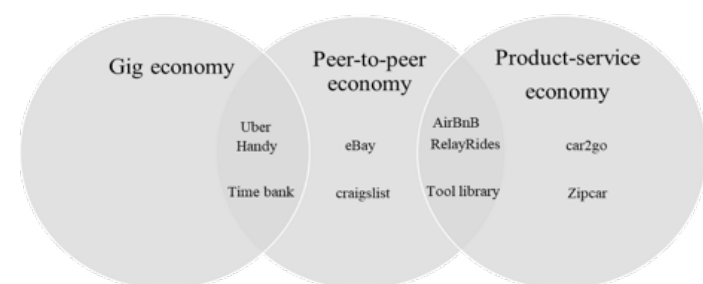


Figure 1. Three categories within the sharing economy

Using the work of the scholars mentioned above, we have created a framework for our classification, presented in Figure 1. The framework covers the whole sharing economy as defined by Botsman and Rogers (2010), but creates a starting point for classifying the problem discourses. We place "peer-to-peer economy" at the center of our model because previous academic literature considers it as a core of the sharing economy. The salient feature of the peer-to-peer economy is the fact that both the consumer and the producer are individuals and not companies. Following Frenken and Schor (2017), we differentiate services that provide physical assets from services that provide short job assignments. For the former, we use the same name as Frenken and Schor: "product-service economy", and the latter, by following some earlier authors (e.g., Friedman, 2014), we call "gig economy". The salient feature of the product-service economy is that there is a physical product such as a car or an apartment, or to which a company offers an access. In contrast, the gig economy organizations relay short work tasks, such as driving a person from one place to another or delivering food from a restaurant.

In our model, the sharing economy, as defined by recent academics, can be found at the intersections between different markets. The sharing economy of Frenken and Schor (2017) is at the intersection between the peer-to-peer economy and gig economy. Belk's (2014) collaborative consumption is at the intersection between the for-profit half of the peer-to-peer economy and gig economy and the product service economy. The more traditional actors lie outside these intersections. For example, within the peer-to-peer economy, there are web auctions, such as eBay and Craigslist. Within the product-service economy, there are B2C (business-to-consumer) car-sharing services, such as Zipcar, and car rental services, such as Hertz. Following the definition of the sharing economy by Botsman and Rogers (2010) there are no actors within sharing economy that belong to the gig economy, but not to the peer-to-peer economy.

Problems of the sharing economy

The previous literature raises various problems associated with the sharing economy. These problems affect various stakeholders, from national level actors to individual users. We delineate the stakeholders to six distinct groups: states, cities, incumbents, producers, users, and other people. With the public actors, we make a distinction between states and cities, because some issues concerning sharing services are regulated on the state level (e.g. taxation) and some on the city level (e.g. housing markets). Incumbents refer to the established players in different industries competing with sharing economy services (e.g. hotels or taxi companies). We call the laborers of the sharing economy platforms (e.g. Uber drivers) producers. We deliberately avoid the word employee, because it is an on-going discussion whether the producers work for the platform or not. The people using the sharing services (e.g. guests in AirBnB) are called users. Finally, there are other people not directly involved in sharing economy transactions, but who might be influenced by them.

This study defines a problem as an issue that any stakeholder group perceives as a problem. The problems mapped in this paper are unique to the sharing economy, and we do not consider issues that could happen to any company. Furthermore, analyzing the evidence behind each of the identified problems systematically is out of the scope of our study; therefore, we cannot say whether they are legitimate or not.

One of the problematic issues that has received significant

public attention is the differing views on the worker classification of sharing economy operators (Friedman, 2014). For example, Uber classifies its drivers as independent operators. This problem of worker classification creates further problems related to safety nets. Safety nets are degraded when independent operators lack worker benefits and standard employee rights, such as healthcare and minimum wages (Friedman, 2014; Hill, 2015; Eisenbrey & Mishel, 2016). Both these problems affect the producers of the gig economy (e.g., Uber drivers).

The rise of the sharing economy has brought along additional problems, such as increased P2P discrimination, as people exhibit a variety of exclusionary behaviors, such as racial discrimination in ratings, reviews, waiting times, and prices, when choosing collaborative partners (Frenken & Schor, 2017). Users (i.e., customers who use platforms in the sharing economy) have recently shared their experiences of discrimination in the sharing economy. For example, African American people have shared their experiences of being turned down frequently by Airbnb hosts. Similarly, Uber drivers with non-American-sounding names claim to receive less positive reviews than their colleagues with American-sounding names. Therefore, the problem of discrimination is also visible at the level of the producer (Frenken & Schor, 2017; Edelman et al., 2016; Ge et al., 2016).

The sharing economy also affects the activities of incumbent operators in industries where companies in the sharing economy are active (e.g., hotel and car rental industries). For example, Airbnb enjoys certain political and economic benefits in relation to hotels, which causes the problem of decreased income. Incumbent operators consider this unfair competition (Zervas et al., 2016; Frenken & Schor, 2017).

Sharing services may also create negative externalities that result in losses for third parties, i.e., people who are affected by transactions in the sharing economy, but do not take part in them themselves (Cohen & Sundararajan, 2015). For example,

in certain areas, Airbnb has raised the prices of apartments and houses in the cities where it operates and decreased the number of available apartments, which has made it difficult to maintain affordable housing. Furthermore, noisy or and misbehaving Airbnb guests may disrupt other residents and increase feelings of insecurity (Frenken & Schor, 2017).

There have been calls for tightened regulation in order to respond to the problems mentioned above (Cohen & Sundararajan, 2015; Koopman et al., 2015). However, it is difficult to enforce regulation for several reasons, such as the lack of access to data. This problem is particularly worrisome for actors at the state level and affects cities where companies in the sharing economy operate. Generally, scholars do consider regulating and taxing sharing economy actors necessary. However, the regulation designed for “the old economy”, based on large companies as providers might be unsuitable for the sharing economy, which relies on smaller and semi-professional providers. Therefore, existing regulation may create barriers to entry and stifle grass-root innovation and P2P exchange (Cohen & Sundararajan, 2015).

The difficulty to enforce regulation is related to the problem of taxation, for example, where incumbent hotel operators blame Airbnb or house-sharing providers for avoiding or not being aware of the need to pay taxes (Cohen & Sundararajan, 2015; Frenken & Schor, 2017). The lack of taxation is even argued for being behind the growth of the sharing economy (e.g. Hill, 2015). This problem concerns strongly the actors on city and state levels. In Figure 2 we summarize the analysis of the sharing economy problems and attribute them to specific stakeholder groups and market types. For example, the problem of worker classification is connected to gig economy but not to product-service economy, as in this market companies rely much on physical products. On the other hand, taxation is clearly connected to P2P type of business, as this market lacks established regulation.

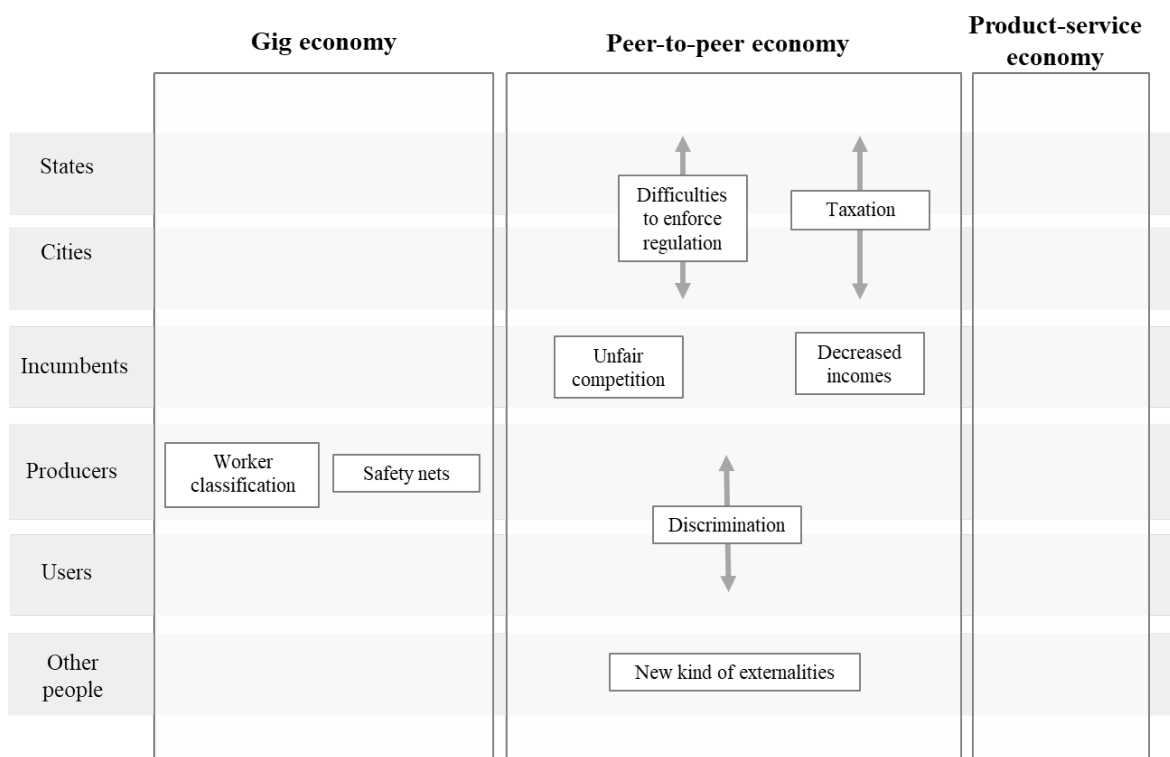


Figure 2. Summary of problems related to the sharing economy and their association with stakeholder groups

Methodology

Data gathering and selection

This study uses a qualitative and exploratory research methodology (Eriksson & Kovalainen, 2008) to analyze conflicts attributed to companies in the sharing economy. Since the sharing economy is a relatively new phenomenon, exploratory research is valuable for drawing conclusions from empirical research in this under-researched area (Bryman & Bell, 2003; Eisenhardt & Gaebner, 2007).

Two independent researchers gathered the data by searching Google by using a set of previously identified keywords based on a literature review (see Table 1). We chose Google as the search engine because it has a wide scope and is considered a leading Internet search engine that uses the broadest set of index sites. Google also includes a variety of sites from news articles and company homepages and reports. Since the aim of our study was to create a typology of problems related to the sharing economy, the key requirement for the data was that it uncovered as many issues as possible. Furthermore, Google allowed us to sort the results based on the sites that created the most public discussion and were thus the most relevant for our study.

Although different terms exist for the studied phenomenon, the term “sharing economy” is nowadays used as a standard term to describe these new kinds of services (Martin, 2016). Thus, we selected this term as a primary keyword in all the data searches. As the focus of the study was to examine existing conflicts, we selected four different keywords to be combined with the term “sharing economy”: problem, conflict, lawsuit, and sanction. We searched for words that strongly signaled a problem. For example, ‘lawsuit’ indicated that two or more parties were involved in a conflict that needed to be resolved. At this point, we chose generic and wide keywords consciously.

To keep the study within a reasonable scope, we explored the first 100 searches of each keyword combination. Although this approach likely left many cases out, it was considered acceptable for the scope of this study, which aims at creating explorative results that could be refined in future studies. Furthermore, Google ranks the most-discussed pages first in the search results. This allowed us to determine what issues the online community deemed most important.

We acknowledge that the results of the Google research may differ between different viewers due to the algorithms. However, this does not cause major concern on the validity and reliability of the study. In any case, the number of investigated pages is a restricted sample of all the discussions, and our framework represents these discussions. Therefore, we do not claim that we describe the problem discourses comprehensively. To increase the reliability of the study, the results of the search-

ers were listed to a joint database, which was then analyzed. Therefore, we can break up the resulting framework back to the collected data if needed.

The search was conducted in February 2017. To ensure the relevancy of all the links included in the study, we developed detailed inclusion and exclusion criteria, which are shown in Table 2. For example, our search pointed out some scientific articles that provided more insights into the literature background (not data) and were thus excluded from the data. Of the collected 400 links, 183 were excluded immediately because they were duplicates, dead links, articles behind paywalls, or general info pages. After reading the remaining 217 webpages, 37 links were excluded based on their general content (i.e., scientific articles or pages that did not describe the conflicts). After all the exclusions, the results included 180 links that were used for further analysis.

Data analysis

An inductive approach (Bryman & Bell, 2003) was used in the study to analyze the data. This approach starts by exploring the similarities and differences (e.g., type of industry or market) across the data. The data analysis was conducted by using the content analysis method (Krippendorff, 2013; Miles et al., 2014). The research data was divided into two sets, and both researchers did a first round of coding individually by examining emerging cases and conflict examples. For each link on the database, we wrote a short description of the article and coded the problem discourses. We coded both the types of problem and what companies or groups of companies they were related to. We then cross-checked the codings to tie the observations of both researchers to the whole dataset. After the cross-checking, we discussed the observed problem discourses and tied them to specific companies and stakeholder groups.

The data analysis was continued by examining the research results in the context of theoretical insights. We utilized similar classification as in the theoretical background (see Figure 2), where the problems are categorized in relation to the attributes of different sharing economy market types. For example, problems of discrimination were found to be related to both physical (e.g. sharing products) and non-physical (e.g. sharing services) models of sharing economy. However, this problem was not found in the context of e.g. car sharing services (product-service economy) or labor agencies (gig economy), and thus it was categorized to be related to P2P economy. Table 3 contains examples of these cases and illustrates the themes related to these conflicts.

Results

In this study, multiple problems related to the sharing economy

Keywords		Results (approx. number)	No. of examined links	No. of results of exclusion
[Sharing economy] AND	[Problem]	18 200 000	100	38
	[Conflict]	5 440 000	100	34
	[Lawsuit]	906 000	100	81
	[Sanction]	2 750 000	100	27
Total			400	180

Table 1. Keywords and results used for analysis

Exclusion criteria	Inclusion criteria
Duplicate entries	Author information available
Dead link	Full text available
General info pages	News article, blog, essay, report, or opinion piece
Article behind a paywall	
Does not describe conflicts	
A scientific article or book	

Table 2. Inclusion and exclusion criteria

Case	Short description	Problem
Lawsuits about worker rights: Uber	Thousands of Uber drivers have filed a class-action lawsuit against the ride-sharing app Uber for better, more traditional working conditions. The lawsuit considers how people are employed, what they are entitled to, how legal issues are regulated, and how the safety of the "employees" and users is ensured.	Worker classification
AirBnB labeled illegal accommodation in Catalonia	Hundreds of people accused of illegal accommodation have been penalized in Catalonia.	Unfair competition
Uber sexual assaults	An Uber driver has been accused of raping a customer in India, and two Uber drivers in Chicago have been charged of sexual assault.	Safety
Promoting racial discrimination: Airbnb	Airbnb has come under fire for racism. Many black Airbnb users have shared their experiences online via the AirbnbWhileBlack hashtag.	Discrimination

Table 3. Examples of identified problems related to companies in the sharing economy

that have been debated publicly were identified. These challenges were caused by certain characteristics of the gig economy, P2P economy, and product-service economy that affected certain stakeholder groups. Although our findings were largely consistent with the insights in the literature, the data analysis revealed problems that have not been considered in the academic debate, even though they have attracted significant public attention. These problems included increase in producer risks, user-related safety and privacy issues. Confusion of who is liable in insurances was another problem that was strongly related to these issues. The findings are categorized in this section and presented in Figure 3 (p. 43), which combines the results based on public debate and the problems identified in the academic literature.

Businesses in the gig economy mainly experience problems with their producers, such as worker classification and safety nets. Although P2P economy is seen to be linked to a higher number of problems, especially these problem types have received a great deal of public attention. Worker classification problems refer to situations where the workers are technically independent service providers. Many sharing economy operators classify their workers as independent contractors (Wogan, 2016). They base this argument on the point that the contractors are free to select their work tasks and are responsible for their own working conditions. Although this type of business is in accordance with existing legislation, the legislation has been targeted at relatively small-scale work, not at situations where entire worker classes are transformed into the class of independent contractors.

The gig economy companies usually define themselves as technology platforms and not service companies. The companies perceive that they only relay the services and therefore do not employ the producers. However, the platforms can make unilateral decisions, such as decreasing the price of services or expelling workers from the platforms, which causes problems in maintaining certain levels of earnings. Therefore, the producers lack much of the freedom that is usually considered part of being an independent contractor. This problem is further aggravated by the fact that sharing economy companies often restrict their producers' rights to litigation. Uber, for example, has made forced arbitration as part of the contracts that the

drivers have to sign, which inhibits them from making class action lawsuits. Therefore, the producers have often difficulties to defend themselves because they are vulnerable people, who are not aware of their rights and cannot afford litigation. (Erdman, 2016; Wogan, 2016).

The safety net problem was found in our data in the context of the rise of the new "precariat" class (Codagnone et al., 2016), which refers to people working in fragmented work environments and outside the normal employee safety nets (Steinmetz, 2016). These jobs have replaced jobs that were formally based on employment contracts, such as taxi driver jobs being replaced by Uber contracts. Furthermore, the safety net problem (Irwin, 2016) is also present when platforms do not take responsibility for the wellbeing of the producers, such as providing health benefits. This disrupts entire industries because the gig economy removes large amounts of people from the society's safety nets, which are designed for people with steady jobs.

Many of the identified problems are related to the P2P economy. They include problems related to difficulties with enforcing regulation, taxation, unfair competition, discrimination, producer risks, safety, insurance, and new kinds of externalities. The existing taxation is designed for companies and is difficult to fit with the practices of the sharing economy. For example, many individual service providers are avoiding or are not aware of the need to pay taxes. This causes a taxation problem (Baker, 2014) that resembles the difficulties with enforcing regulation. The effects of this problem are especially visible at the municipal and national levels. Because of the taxation and regulation issues (Woolf, 2016), incumbent actors complain about unfair competition (Strong, 2014). However, this might be due to decreased income (Mahmoud, 2016), because the sharing economy operators compete for the same customers as the incumbents. It is hard to determine what is unfair treatment and what is simply protecting the interests of the incumbents.

The sharing economy has also problems that are visible at the user level. The first of these problems is the safety problem (Smith, 2016; Risberg, 2015), which may be because the users already expect a certain level of safety from the services they are used to getting from similar services (e.g., Airbnb versus a hotel or Uber versus a taxi). This problem is especially related to the P2P economy, where both the consumer and the producer are individuals. When accidents occur, the liabilities are highly unclear. Furthermore, because accidents are rare, the risks are not captured by the reputation systems. Both users and producers might face discrimination, which has traditionally been covered by regulations and company policies (Spross, 2016). For example, Uber drivers have been accused of not giving rides for disabled people because of their special needs. Taxi companies are in most countries obliged by law to take care of the special needs groups. This legislation does not usually affect platforms such as Uber, and they can ignore the issues or accuse individual drivers.

Although there has been a lot of discussion on insurance in the sharing economy, it is still difficult to know who is responsible for remuneration when accidents happen. It is also difficult to determine what kinds of insurance the producers should have. This causes an insurance problem, which is visible for the users and producers, but also for people not directly involved in the transactions (Pell, 2016). There is also a high producer risk, as the producers might take risks they are not aware of, such as getting evicted because of renting their apartment through Airbnb or investing in a new car to participate in Uber, but being unable to pay because of price cuts (Wogan, 2016; Clambet, 2014). Finally, the P2P economy is accused of creating new

kinds of (negative) externalities, such as increases in traffic jams or rental markets becoming unaffordable because of AirBnB. These externalities affect people who are not directly involved in the sharing economy (Hill, 2016).

The privacy problem is the only problem that is directly connected to the product-service economy (Arribas et al., 2016) and affects the users of these types of service. This is because sharing services collect large amounts of data on their users, of which the users might not be aware. For example, a car-sharing company might save data on the movements of its users. This information could end up in wrong hands if, for example, the company experiences a security breach.

Most of the problems identified in this study are especially visible when services are combined with several new kinds of markets (e.g., both gig economy and P2P economy). Also other problems related to the sharing economy, but could be problems for other companies as well were identified in this study. These included questionable business practices (Black, 2016), such as misogyny at Uber, intentional violations of regulations, such as AirBnB apartments in the confiscated Palestine area, and selective data disclosure. Increased consumption was also identified as a problem. For example, AirBnB and Uber have been accused of not sharing resources, but rather increasing consumption (Pargman et al., 2016). However, these problems are not specific to the sharing economy, and have therefore been excluded from our framework.

Figure 3 illustrates the problems identified in this study by using the framework illustrated in Figure 2, and categorizes them by using the stakeholder categories they are related to. Figure 3 combines insights from the academic literature and the results of this study, based on public debate. The light grey boxes represent problems that have raised both academic and managerial awareness. For example, problems related to workers' rights in the sharing economy have received strong media attention and are present in the academic debate. The dark grey boxes include problems that have been discussed publicly, but have received little academic attention. For example, there are multiple problems that the academic literature has not addressed, including increased producer risks, user safety, and privacy issues.

Discussion and conclusions

We have created framework for problems in the sharing economy that link a specific problem discourse to a specific actor and a specific stakeholder group, by examining the problem discourse in the academic discussion and in the public domain. We found that the problem discourse varies greatly between different kinds of markets. The most diverse sets of problems concern the P2P economy. In the gig economy, the problems are related exclusively to producer rights, and almost none of the problems concern the product-service economy.

This paper contributes to the recent discussion on the sharing economy by mapping the problems in this sector to specific actors. For example, Martin (2016) shows that one of the macro discourses of the sharing economy in the accommodation and transportation industries is problem framing that presents actors in the sharing economy as rogue companies operating in unregulated markets. However, according to our data, it seems that this discourse revolves specifically around peer-to-peer economy and not around actors not operating with a peer-to-peer model, for example, B2C car-sharing companies, such as Zipcar.

Furthermore, attributing the much-discussed problems re-

lated to producers' rights clearly to the gig economy creates clarity on the sharing economy discourse. For example, the safety net problem is inherent in the gig economy, but not in the product-service economy. This means that the discourse revolves around specific companies, such as TaskRabbit and Uber, but not AirBnB. A recent study by Palgan et al. (2017) on sharing platforms in the accommodation industry supports this result. The researchers found that most of the hosts participating in for-profit platforms had steady jobs and only rented their apartments for additional income. Most AirBnB renters also have medium to high incomes. This makes sense because many of the hosts own the apartments they are renting; therefore, they must have a relatively high level of income.

Besides delineating the various problems in the sharing economy, our paper also raises problems that are not currently discussed in the academic literature. In particular, the risks related to the sharing economy are under-represented in academic research. These risks entail the users and producers, as well as people that belong to neither group in issues concerning insurances, because the liabilities might be unclear in the case of accidents. There has been discussion of the risks related to information asymmetries between the producers and users in the sharing economy (Cohen & Sundararajan, 2015; Thierier et al., 2016). These studies perceive self-regulatory mechanisms as possible solutions to the age-old information asymmetry problem in any given market, where the producers always know much more about their products than the users. The fact that the users rate the producers and vice versa helps to remove poor producers from the market or at least gives the good ones pricing advantages.

While rating systems can be a good mechanism for quality control, we argue that they work poorly when it comes to accidents and extreme events. Our data showed incidents where people died accidentally in AirBnB apartments and cases where Uber drivers raped their customers. The ratings do not necessarily represent these kinds of cases: a cozy apartment can be hazardous and a nice driver can turn out to be a sexual predator. Safety standards and background checks are the usual regulatory mechanisms used for these issues. However, our data showed out that background checks are difficult to enforce in the sharing economy context. Furthermore, it was very unclear who would be responsible for accidents in the sharing economy.

The questions related to safety in the sharing economy call for more research. It is possible that a part of the affordability of services in the sharing economy comes from the lacking safety requirements. However, it is not clear whether the users and producers in the sharing economy are aware of the risks they take when they sign up for the platforms. It would be interesting to know, for example, how the customers, producers and the sharing economy platform perceive the liability of the platform. Furthermore, it would be interesting to know who ends up being responsible, when there is an accident or a major problem, and whether the responsibilities adhere to the expectations of the stakeholders or not. We want to stimulate a discussion on the sufficiency of current insurance and safety policies to handle problems in the sharing economy, which is changing the rules of the game. The traditional models have been designed specifically for B2B (business-to-business) and B2C business purposes; therefore, they need to be updated to answer the new peer-to-peer business environment.

The biggest limitation to this study arises from its limited scope and the role that Google played in the sorting of the results. Google displays the most commonly linked and followed pages related to the search words. Therefore, our search might

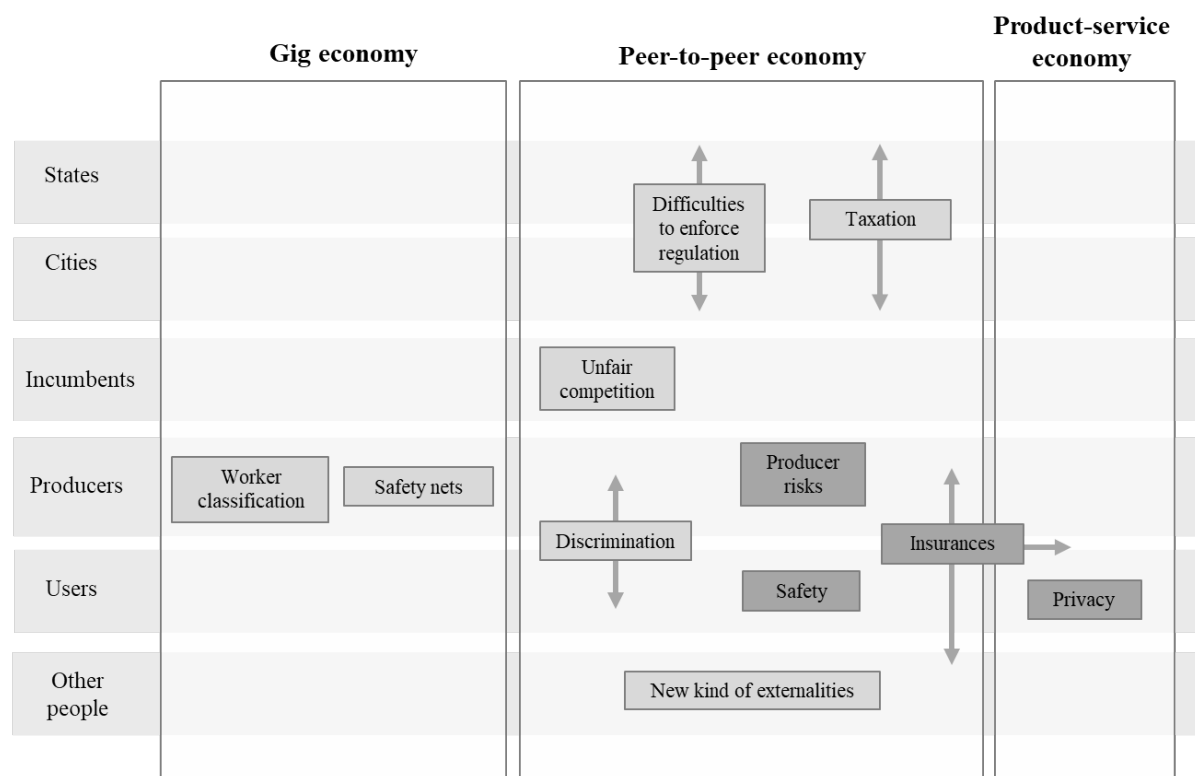


Figure 3. Mapping of problems in the sharing economy

have missed some issues related to the marginalized groups of society and some issues that are big problems for a small group of people. In addition, the search words that we used might have focused our attention on certain problems. Although “sharing economy” has become established as the standard term (Martin, 2016) of the studied phenomenon, it might be that in some problem discourse it is uniformly referred to with a different term.

Another limiting factor is the fact that the searches were conducted in English and focused on problems in the English-speaking world. Therefore, this study might have neglected some problem areas inherent to for example the German or Spanish -speaking world. Considering that many of the problems are tied to local institutions and regulations, it can be expected that a different institutional environment would present at least slightly different sets of problems. To overcome this and to create a more comprehensive view of the problem discourse, future research could conduct similar studies by using different languages.

Due to the limitations of the study, we do not claim that our classification presents all problem discourses on the sharing economy. We have aimed at identifying the most crucial issues related to conflicts between sharing platforms and their audiences and providing a starting point to analyzing their characteristics. Therefore, we present a call for further research to map the problems in this emerging field. For example, it would be interesting to investigate, which problems might be tied to the issue, whether the organizations operate on for-profit or non-profit basis. Even though we did not systematically examine this, practically all the companies that were mentioned

in our data operate on for-profit basis. However, this does not necessarily mean that all the problems would be inherent to only for-profit companies. For example, the Finnish tax authorities have required the skilled workers operating in the non-profit timebank in Helsinki to pay taxes (Commons Strategies Group, 2017).

It is should also be pointed out that the focus of our study was on examining the immediate problems of the sharing economy. There might be problems that will develop in the long term, and the sharing economy is only a piece in the puzzle. A good example of these are the effects of the sharing economy on increased inequality. The immediate effect of the sharing economy to inequality is that it crumbles some of the safety nets of the “old economy”, where employees have steady contracts, for example in the taxi business. However, in the longer term, there is also a possibility for increased inequality in the distribution of income, as highly educated people begin offering services (e.g., through TaskRabbit) that were previously performed by less educated workers (Frenken & Schor, 2017).

Our study only raises the problem discourse and cannot take a stand on whether the problems are based on solid arguments or not. For example, it is very hard to determine whether claims of unfair competition with taxi companies and hotels are legitimate or whether they are meant to protect the interests of existing businesses. To shed light on this issue, each question must be assessed separately on the basis of appropriate evidence. Therefore, we endorse the call by Frenken and Schor (2017) for the long-overdue empirical research on the impacts of the sharing economy.

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