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Master Thesis

THE ROLE OF TRUST WITHIN THE SHARING ECONOMY AND HOW IT CAN BE INCREASED

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Declaration of Authorship

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Management Summary

Trust is seen as a prerequisite for any relationship, so it plays a crucial role in the sharing economy. Technology has made it possible for peers which have never met before to now trust each other. However, trust is still seen as a major barrier to participate in the sharing economy. Sharing economy platforms try to overcome this obstacle by so called trust-increasing measures such as ratings, reviews etc.

The effectiveness of such measures has yet not fully been researched. Most studies were conducted in the United States and focused on specific measures in the context of specific sharing platforms. Furthermore, only limited research about new tools is available. These major gaps in existing research call for additional studies providing a larger picture on the effectiveness of trust-increasing measures. Therefore, this thesis examines the effectiveness of several already established, but also new tools that P2P sharing economy platforms can use in order to increase trust. The analysis focused on the trust building relation from a consumer perspective towards the private offeror of a product/service. The thesis provides information to startups and already existing sharing platforms about the importance of trust and how it can be increased.

This master thesis followed an approach using primary and secondary research. The latter was used in order to identify different trust increasing measures and their special characteristics. Thereafter, an internet-based survey was conducted, which collected primary data from 268 participants using a snowball sampling approach.

The analysis has shown that the importance of trust is perceived at a higher level if peers take the role of the offeror of the product/service rather than being on the consumer side. Furthermore, it plays a crucial role if the shared product or service touches the private sphere or not. The study also revealed that trust-increasing measures can be highly effective. This can be observed by the fact that people can trust a host from a sharing economy platform more than their neighbor or colleague. It became apparent during the study that conventional trust-increasing measures such as verification of the identity, the offeror's certificates (i.e. trusted host), ratings, reviews etc., had a strong positive effect on trust. Links to social media accounts of the offeror had the smallest effect on trust. Additionally, the study made clear that the effectiveness of trust-increasing measures also depends on various other characteristics and features.

Under current circumstances it is recommended that sharing economy platforms implement the most effective trust increasing measures as identified in this paper. Those specific features and characteristics which provide the best adapted trust building effects should be considered. Thereby it is important that the tools are, on the one hand, clearly visible, but, on the other hand, also easily understandable for consumers.

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1 Introduction

The term sharing economy resounds everywhere. However, the idea of sharing is anything but new. Already during the 3rd century BC, for example, the Egyptians shared around 500'000 papyrus rolls in what was, back then, the world's largest library in Alexandria (Müller, 2018). The internet and mobile technology today are catalysts for the sharing economy, thus further boosting it to become an ever-growing phenomenon in today's world. During the last few years, the meaning of sharing has completely changed. Airbnb and Uber made internet-based sharing services internationally known. Also, many other sharing platforms have ensured that classic industries such as the tourist or transport industries have been turned upside down in recent years. The concept behind is simple: Everything that is not permanently used can be shared (Zobrist & Grampp, 2015). Rinne (2013) sees as one of the principles of a sharing economy the redistribution of things which are not always needed by someone or somewhere, to somewhere where they find a use. A holiday flat which is only used a few weeks per year or a car which stands parked 23 hours per day can be offered for rent on sharing platforms. In 2010, the Australian journalist Rachel Botsman stated in a TV Show called TED that an electric drill is used for 13 minutes in an average lifespan. This is a ridiculously short time; what the majority wants is a hole in the wall, not a drill. With such statements, the spectators woke up and were made aware there most probably will be a decisive shift in consumer values and behavior. Instead of owning products, access to them will be more important; people will shift towards a 'collaborative consumption' society (Kessler, 2015). This shift, combined with the power of the new technologies, could dramatically reinvent traditional market behaviors on a large scale and in ways which would not have been possible before the invention of the internet.

The well-known social and economic theorist Jeremy Rifkin (2014) predicts that the internet's ability to exchange and share immaterial and material resources with nearly zero cost will bring a fundamental shift in the economic order. People will move away from capitalism towards a sharing economy (Holodny, 2017). Whether this prophecy becomes true or not will have to be seen. But it is already undisputed that collaborative consumption based on digital networks, for instance, the economy of exchange and sharing with peer-to-peer (P2P) platforms such as Airbnb or Sharoo, is fundamentally changing consumer behaviors. To what extent a sharing economy will further influence and disrupt industries and how consumer behavior will be influenced, will as well be seen in the future. The

phenomena have already proven, however, that it has high potential to further disrupt industries and is congruent with the trend of 'do more with less.'

As in every business relationship, trust is seen as a major precondition for sharing. Therefore, sharing economy platforms strive to create and maintain trust towards the platform, but especially between the mainly anonymous peers that interact with each other. The 2016 Eurobarometer Survey revealed that trust is still the second largest obstacle in using the sharing economy (Newlands, Lutz, & Fieseler, 2017). Having a stranger in the car or renting out one of the most personal things, such as your own apartment or house, is still unimaginable for many. In order to overcome this challenge, many sharing economy platforms use trust increasing measures, the so-called trust cues. With such mechanisms, platforms try to increase trust within the community and therefore get away from often-heard phrases such as 'don't accept a ride from a stranger' or 'stranger danger.' The fact that such trust cues can increase trust is uncontroversial. However, it has not been analyzed *which* trust increasing measures have the largest impact, especially for the main user group between the age of 18 and 39 (PwC, 2015b). Stan (2016) stated *'trust is becoming the global—most valued—currency of modern time.'* If companies are not willing to provide a trust increasing environment, the future will be formed without them.

1.1   Need for Research

Sharing economy organizations are viewed critically because their business activities are still not fully regulated. They sometimes do not have to follow existing rules and regulations which apply to traditional businesses in a given area. For instance, they do not comply with local consumer protection regulations, which gives them potentially more room to act in grey areas. (Wiencierz & Röttger, 2017)

Providers of sharing platforms promise their consumers freedom, flexibility, savings or earnings. On the other hand, there are risks of abuse of trust and surveillance. But there are not only risks involved for the operator of such platforms, they can also be found in the relationship of provider and consumer. To leave one's own home to strangers or to give people a lift with a car is something that, for many, is still unimaginable. This leads to the fact that the lack of trust is a main obstacle for sharing platforms. (Haucap & Kehder, 2018).

Most processes happen online and there is rarely a personal interaction between the two parties involved. This leaves users with a feeling of anonymity and impersonality. The exchange relationships in the sharing economy can never be completely controlled by formal rules or contracts. The provider always has an information advantage in terms of the knowledge, skills and resources they offer, and they can take advantage of it (Wiencierz & Röttger, 2017). Therefore, the provider can easily give incomplete information or even lie about the products and services and therefore easily deceive the exchange partner. But deception and taking advantage of the anonymity of the internet can also take place the other way around: Providers also must trust the consumers; for renting out your apartment to a stranger or driving somebody around in the back seat of your car, you need to trust these people.

The risk or the relevance of trust depends on the situation and if the shared product or service affects the provider's private sphere or not (Ert, Fleischer, & Magen, 2016). For instance, making private accommodation available to strangers needs much more trust than just sharing an unpersonal item. Those problems lead to the fact that there is always an uncertainty in the relationship between provider and consumer. Sharing platforms try to minimize the problem with certain measures. Airbnb and Uber, for example, try to create trust and a feeling of intimacy with photos and evaluations of the providers, as well as the customers. Consequently, the evaluation of the other party after the transaction is an essential part of a successful concept. But such mechanisms are by no means perfect and it takes much more than just a photo and a rating to enable trust. (Haucap & Kehder, 2018)

It is forecasted that revenues from platforms where goods and services can be shared will increase from USD 18.6 billion in 2017 to more than USD 40 billion in 2022 (Juniper Research, 2017). Observations show that there are shareable goods that in some households account for 20-30% of the total household expenditure. The potential of sharing platforms is considered to be huge and they grew exponentially over the last few years (Ke, 2017). In Switzerland, the sharing economy is also becoming more and more popular. But not only the number of people who use sharing economy services is rising, but also the number of Swiss sharing economy startup companies. Some of the Swiss companies already established themselves as big international players, such as Housetrip, for instance, which follows a similar concept as Airbnb. However, there are still a lot of startups which are in their early stages. But also here it is assumed that the number of sharing economy startups will rise and

expand in the future, not only due to the fact that Switzerland offers an accommodating environment with great infrastructure, a good labor market, top international universities etc., but also because its sharing economy-friendly legislation. Switzerland has a far more accommodating legal environment as compared to other European countries, where overly bureaucratic processes such as getting a license to start a new business are considered to be big hurdles. (Deloitte, 2015)

As already explained above, trust is an essential factor if a sharing platform is successful or not. Especially new platforms that do not have social proof often tend to have trust issues (Ismail, 2017). There are many Swiss and other startups that try to participate on the rising market of collaborative consumption. In Europe in 2016 alone, several hundred sharing economy startups were founded (Constantiou, Marton, & Tuunainen, 2017). But having a good idea and concept how an item/service can be shared is only one of many important factors which define whether the business idea will become a success or not. Especially in the early stages of a business, trust plays a crucial role. People have to trust the idea, the platform, but also trust their counterparts to register and participate on these platforms. The use of such platforms often depends on the number of registered participants and their offerings/transactions, the attractivity and value of a sharing platform depends on the number of its users. The more users and the larger the market, the more attractive the platform is, which in turn leads to new people joining. This so-called network effect can often be seen in the telecommunication industry or on social media networks (MBN, n.d.); it is one of the fundamental aspects of the sharing economy. A platform with a good business idea but no users is worthless. In order attract users and build an attractive environment, it needs trust. Trust within the community, but also trust towards the platform providers, are important prerequisites for the success of sharing platforms. But trust and safety programs, on the one hand, cost money to build, and on the other hand require human resources to keep them up. Small startups with only a handful of people are thus limited in that aspect. Therefore, it is essential that smaller companies in their early stages, but also larger companies know which trust increasing measures are relevant and which will have the profoundest impact. The following master thesis analyzes the current situation and provides insights for startups as well as for already established companies. It defines which digital tools can achieve a significant level of trust from a consumer perspective towards the offeror of an item/service on a sharing economy platform.

1.2   Structure of this Thesis

This paper is structured in six chapters. **Chapter 1** outlines the need for research and the background information which is necessary in order to give context. It also shows the objective and limitations, plus the research questions and the hypothesis derived. The **second part** reviews the existing literature, analyzes relevant fields and identifies the research gap. The research questions and the hypothesis introduced earlier are based on this literature review. The **third part** about the research design and the methodology explains how the study was executed and gives detailed information about the survey. The results of the study then are presented in the chapter analysis, the **fourth part** of this thesis. The **fifth part** entails the discussion of the results in a summary of the findings and shows how they relate to prior research. The last part of this paper is **chapter 6,** which is the conclusion, where the research questions are answered and the hypotheses either accepted or rejected. Additionally, some recommendations for sharing economy platforms about how to increase trust are presented. The chapter ends with a listing of the limitations of the study and the identification of possible further areas of research.

1.3   Term Definition and Background

In order to lay down the basis and terminology for this thesis, the definition of the major topics as well as some background information are now explained in detail.

1.3.1   Definition of Sharing Economy

The term 'sharing economy' celebrates its 12th birthday this year and many sharing platforms have exceeded their figures every single year (Bennet, 2017). Research is struggling to keep up with this rapid development. There is not even a nomenclature term for this way of doing business in the first place. On-demand economy, collaborative consumption, gig economy, access economy, peer-economy, the matching economy and many other names are alternatively used in literature (Van Welsum, 2016). But there is no uniform understanding. This is caused, among other things, by the fact that the sharing economy consists of a large number of heterogenous P2P (peer-to-peer) and B2C (business-to-customer) platforms, which all offer different products and services (Wiencierz & Röttger, 2017). This thesis will use the term sharing economy, which means the systematic lending of objects, spaces, areas, or time (services) by mainly private individuals and interest groups. The buyer therefore does not turn something into property, but temporarily use, inhabit and manage it. The goods/services change hands as long as they are needed or available (Bendel, n.d.).

1.3.2   Platform Providers

The sharing economy platform provider is the company which offers the infrastructure where consumer and provider of the good/service find each other. Sharing platforms play several roles, such as mediating between private persons, organize supply and demand, facilitate to overcome language and trust barriers etc. (Stanoevska-Slabeva, Lenz-Kesekamp, & Suter, n.d.). The term platform provider therefore always refers to the company which provides the infrastructure where consumer and provider find each other.

1.3.3   Community on a Sharing Economy Platform

The community on a sharing economy platform consists of the consumer and the provider of the product/service, who is also called the 'offeror.' The term 'provider' should not be confused with the term 'platform provider.' Therefore, a strict distinction has to be made between the platform provider and the provider of the product/service. If the term provider is used in this thesis, it is the provider of the product/service and consequently the offeror.

Provider and consumer can either be a company or a private person/individual. This master thesis sets a focus on P2P sharing platforms. Therefore, the terms consumer and provider/offeror always refer to an individual and never to a company.

1.3.4   Models

The sharing economy consists of many business approaches. Rinne (2013) and Botsman & Rogers (2011) categorize the sharing economy in three different systems (see table 1). System one is the redistribution markets where people can sell used goods. System two offers resources that can be used for a certain time without buying them. System three is summarized under the term collaborative lifestyle and allows to share resources such as money, skills, space, time etc.

	1. System	2. System	3. System
Aim	Redistribution of products from where they are not needed to somewhere where they find use.	System which allows members to pay (rent) a product without the need of buying it.	Collaborative lifestyle platforms which allow members to share and exchange of less-tangible assets like skills, space, time, experience etc.

Examples	Ricardo, eBay, Tutti, Craigslist	Sharoo, car2go, LimeBike	Uber, Airbnb, Taskrabbit

Table 1: Different sharing economy systems (Rinne, 2013)

The first system has already existed for quite some time. Ebay, for instance, was founded in 1995 (Ebay Inc., n.d.). The concept behind the second and third system got very popular a few years ago with the success of Sharoo, Airbnb and others. Platforms which are categorized to be in the second or third system force whole industries to rethink their conventional business models.

It is also necessary to distinguish which target groups are involved, since the concepts behind the different constellations differ strongly. Literature distinguishes numerous different types regarding the target groups involved. However, the main distinctions are made between peer-to-peer (P2P), business-to-business (B2B) and business-to-customers (B2C) models, as can be seen in table 2 (Eichhorst & Spermann, 2015).

Type	Provider/Offeror	Consumer	Example
P2P	Privat person/individual	Privat person/individual	Uber, Airbnb, Sharoo
B2B	Company	Company	Salesforce, Microsoft, Google
B2C	Company	Privat person/individual	Mobility, car2go, DriveNow

Table 2: Different actor constellations (own table)

1.3.5   The Dependency of Age and Sharing

The will to share heavily depends on people's age. A study from Frick, Hauser & Gürtler (2012) pointed out that especially younger people are more willing to share. The 18- to 29-year-olds share the most whereas the 50- to 74-year-olds share the least. Consequently, it can be said that the willingness to share decreases with age. A reason can be the different phases of life. Students share significantly more things than, for instance, pensioners. Another reason can be technology, for instance social media, which shaped a new culture of sharing. The study pointed out that respondents who have a Facebook account share significantly more than ones without. However, this statement has to be interpreted with caution, as especially the younger generation is active on social media. A third reason, presented in the study of Frick et al. (2012), is the so-called 'zeitgeist.' The second half of the 20th century was strongly influenced by the trend of individualization, with slogans like "*do your own thing*" or "*you can get everything you want*", owning things was considered desirable. Characterized by self-realization and independence, this generation sometimes

became self-centered and selfish. The own house, the own washing machine and a second car were seen as a sign of freedom and success. (Frick, Hauser, & Gürtler, 2012)

The results of this study are also reflected in the study of PwC (2015b) which examined the different usage patterns for sharing economy platforms between the different age groups. It was found that 82% of the people under the age of 30 have already used a sharing economy offer (see table 3). The percentage for people over 60 years of age was only 27%. Furthermore, the study says that especially people from 18 to 39 years plan to use a sharing economy offer in the future. Hence, there is a negative correlation between the percentage of people who already used (or plan to use) a sharing economy offer and the age. The higher the age, the lower is the percentage of a probable future use.

		Age				
Used in the last two years	**Total**	**18 - 29**	**30 - 39**	**40 - 49**	**50 - 59**	**60+**
yes	46%	82%	64%	44%	32%	27%
no	54%	18%	36%	56%	68%	74%
Plan to use in the next two years	**Total**	**18 - 29**	**30 - 39**	**40 - 49**	**50 - 59**	**60+**
yes	64%	88%	79%	60%	56%	52%
no	36%	12%	21%	40%	44%	48%

Table 3: Usage behavior by age (PwC, 2015b)

1.4 Research Objective

As already outlined in the previous chapter, trust is a crucial factor in the sharing economy. This thesis analyzes the importance of trust for sharing economy platforms and how it can be increased. As mentioned previously, sharing economy is a wide term; this thesis focuses on the innovative P2P business model which represents the newest innovation in the sharing economy (see figure 1). In the B2C model, companies rather use the characteristics of a sharing economy to enhance their existing business model; for instance, a car leasing company who offers short-term rental possibilities. Furthermore, the thesis emphasizes on system two and three (see figure 1), due to its new role and therefore the limited availability of research. Consequently, the importance of trust within a redistribution system will not be analyzed.

Figure 1: Research objective/focus (own figure)

Trust is important and influences many levels. It is necessary to create trust for the idea, for the platform, and within the community (provider/offeror to consumer), thus trust between companies and customers, in the sharing economy between platform providers and users, and trust for an idea do not represent a new constellation. As a result, there is already a lot of literature available. But the relationship between the product/service provider and the consumer is new. It is a relationship which is mostly anonymous, and which must be strengthened and supported by the platform provider and the growing trusting community. This thesis will therefore focus on how important trust from the customer perspective towards the product/service provider turns out to be. Therefore, the focus is on the layer 'The Individuals' and how it can be strengthened and improved (see figure 2, also subchapter 2.3.4).

Figure 2: Layers of trust (own figure)

Most of the existing studies focus on a specific platform and do not distinguish between age classes. The questions which measures/strategies generally influence the trust on sharing platforms considering age groups has so far been neglected. However, this question is essential due to the fact that the majority of people that use or consider using sharing economy offers are at a younger age (Levering & Icks, 2016). This thesis will therefore focus

on the age group of 18- to 39-year-olds, which represents the main group of current users as well as the group that most likely plans to use a sharing platform in the next years (PwC, 2015b).

The thesis provides startups and already existing sharing platforms information on how important trust is from a consumer perspective towards the offeror of a service/item, and by which measures it can be increased. The identified instruments to create and increase trust will be evaluated. The question of how essential trust on sharing platforms is and how it can be created and maintained is addressed in the following thesis.

1.5 Domain Limitation

This thesis investigates which measures have the biggest impact on trust from a consumer perspective towards the offeror of a service/product. Even though the survey focuses on a specific category of sharing platforms (P2P) and on trust within the community (consumer view), it is not about a specific sharing economy platform, but rather gives general indications which measures can increase trust. As already mentioned, the relevance of trust depends whether the shared service or product touches the private sphere or not. The effectiveness of the trust-increasing measures thus varies from platform to platform, respectively on the product/service shared. This research does not focus on a specific area within the sharing economy such as car or accommodation sharing; therefore, it rather gives general indications which measures are most effective. The results from the thesis can therefore not be generalized for specific platforms, as the importance of trust and the effectiveness of measures can depend on multiple factors such as the shared product/service and the platform participants. Nevertheless, this paper gives insights about the importance of trust in different sharing economy scenarios and shows which trust-increasing measures are generally most effective.

Additionally, the thesis focuses on people between 19 and 39 years, which represent the main user group of the sharing economy. The importance of trust and effectiveness of the individual measures might be different for people who are not in this age group.

Sharing economy platforms are typically international. However, the thesis does not take cultural aspects into account. As only people living in Switzerland took part in the survey, the results cannot be generalized for a global level. Furthermore, the recommendations are

purely based on the results from the survey and do not take other parameters such as country specific regulations etc. into account, which might be seen as a limitation.

1.6 Research Question

Based on the research need and the objective presented, the following questions arise:

1. Is the lack of trust between the offeror and consumer a reason why consumers do not participate in the sharing economy?
2. Does a lack of trust prevent transactions?
3. Is the importance of trust dependent on the product/service that is shared?

Those questions lead to the main research question of this paper:

"Which measures have the highest positive impact on trust from a consumer perspective towards the offeror of a service/product?"

1.7 Hypotheses

The hypotheses are based on the research questions described above, as well as on the term definitions, the background and the literature review about already established and new trust increasing measures explained in subchapter 2.4.

The first hypothesis is based on the findings of a study from PwC (2015b) which came to the conclusion that the younger generation in Germany is more likely to use the sharing economy in the future than the older generation.

H1: Younger people are more likely to use the sharing economy services in the future than the older generation.

The second hypothesis is based on the result of two studies suggesting that the lack of trust (Tussyadiah, 2015) and the reason that certain things are too personal to share (Frick, Hauser, & Gürtler, 2012) are seen as major reasons why people do not participate in the sharing economy.

H2: The lack of trust is seen as a bigger barrier not to participate in a sharing economy as compared to the reason that certain things are too personal to share.

The third hypothesis is based on the assumption that the degree to which a product affects the private sphere has an effect on the importance of trust.

H3: Trust towards the private offeror of an apartment is seen as being more important than the trust towards the offeror of a drilling machine.

Lastly, the fourth hypothesis is based on the assumption that the principle of social proof has a bigger effect on trust than access to more background information of the offeror by having access to his/her social media profiles.

H4: Ratings increase trust more than linkage to social media.

2   Literature Review

This chapter presents relevant literature for this master thesis. The objective is to provide essential information about the topics and give an overview of the research that has been done on these or similar topics. Furthermore, it sets the fundament for the creation of the survey. As this study is examining the role of trust in the sharing economy and with which measures trust between consumer and provider can be increased, the following four topics emerge:

- ➢ Drivers and inhibitors of the sharing economy
- ➢ Barriers and impediments of the sharing economy
- ➢ Trust in the context of the sharing economy
- ➢ Measures that increase trust in the sharing economy

The upcoming chapters will, therefore, give detailed background information about these topics in respective order.

2.1   Drivers and Inhibitors

There are many motives why people use the sharing economy. During the last years, some in-depth research in this area has been conducted. A major motivation for using it are economic benefits. The intention to save money often is a significant positive influence on why people use such platforms, for instance pointed out by Hamari, Sjöklint, & Ukkonen (2016) and Barnes (2016). This motive is especially relevant when research is done about sharing consumer products such as cars and costly tools. The acquisition of such products is often perceived to be unnecessary, especially if it is only going to be used rarely. Wiencierz

& Röttger (2017) pointed out that the sustainable aspect is an additional motivator today, because a product can serve multiple people and less resources have to be used. Also, flexibility and availability are further reasons. A study from 2012 identified that emotional benefits such as helping oneself and others, the sense of a community and other lifestyle and cultural reason (for instance being part of a movement) are additional factors for participating in the sharing economy (PR Newswire, 2012). Möhlmann (2015) pointed out that the flexibility, which means access to goods and services only for as long as they are needed, is another important aspect. It can be said that the motives differ strongly, depending on what products or services are shared. Platforms such as Airbnb for private accommodation, for instance, are used not only for cost reasons, but also to get in touch with other people. In contrast, service quality plays an important role in the area of car sharing on platforms such as Car2go or Sharoo (Möhlmann M. , 2015).

2.2   Barriers and Impediments

On the other hand, there are many reasons or barriers why people do not like to share things and do not participate in sharing economy platforms. A study from Frick et al., (2012) points out that the top five reasons why people do not like to share things are (1) certain things are too personal, (2) the things of others may be unhygienic, (3) other people do not pay as much attention to things as I do, (4) I am afraid that the borrowed things will break, and (5) I am afraid that the borrowed things never come back. It is noticeable that especially for the younger generation between 18 and 29 years, the barriers 3-5 were more significant. On the other hand, those factors are less relevant to the older generation between 50 and 74 years (Frick, Hauser, & Gürtler, 2012).

There are multiple further studies which reveal barriers to the participation in the sharing economy. Those barriers mainly deter participation for both roles; for service/products providers as well as consumers. Hawlitschek, Teubner & Gimpel (2016) identifies too many legal and economic risks, as well as the unavailability of the desired product/service at a given time. Another reason is the disclosure of personal information (Hawlitschek, Teubner, & Gimpel, 2016).

Tussyadiah (2015) identifies the lack of trust between the peers as a main reason for not participating. Spindeldreher, Fröhlich, & Schlagwein (2018) identify the effort to participate by signing up to the platform, as well as the interaction that is necessary in order to share as a barrier. Furthermore, the lack of trust towards the counterparty, as well as the concern that

the provided resource may not meet the expected level of service or quality are expressed as barriers. The loss of privacy together with the possibility of undesirable social interactions are also identified as obstacles. (Spindeldreher, Fröhlich, & Schlagwein, 2018)

2.3 Trust

This chapter first defines the term trust and its various forms and gives background information about trust in the context of the sharing economy.

2.3.1 Definition

What is Trust? The answer to that question highly depends on the context. Trust in a romantic relationship means something totally different than trust in a business context. The Cambridge Dictionary (n.d.) defines trust as: '*the believe that someone is good and honest and will not harm you, or something is safe and reliable.*' Many scholars refer to Coleman's (1988) explanation that if one party did something for another, trust refers to the expectation that this exchange is reciprocal. Generally, it can be said that trust is an important element in every relationship and especially when it comes to financial matters (Robbins, 2016). Business relationships are always based on trust; thus trust plays an essential role when products or services are being shared for monetary benefits. Belk (2010) says: "*Companionship is the consequence of a shared meal… between people who trust each other because of shared involvement in a ritualistic community. Sharing, whether with our parents, children, siblings, life partners, friends, coworkers, or neighbors, goes hand in hand with trust and bonding.*"

2.3.2 The History and Evaluation of Trust

As already explained in previous chapters, trust plays a crucial role in business, in a relationship, in the sharing economy and in many other areas of live. But whom we trust and how to build trustworthiness changed a lot in the past and will also change in the future. In earlier years, trust was something exclusive for friends or close friends. But often circumstances made it impossible to only trust close circles. Mediterranean traders, for instance, had to trust their oversea agents. The trader could not travel along with the goods as it was to inefficient, which means they had to establish a relationship with someone they could trust and who would not steal from them. A study by Greif (1989) reveals that a combination of self-interest and reputation is key to success. In order to create self-interest, the traders back then payed the oversea agents a comparably good wage to make sure that

the agents realized that they are better off in the long run if they stayed with the traders. Furthermore, the traders and agents created a community who had as a rule not to employ anybody who ever was caught stealing (Greif, 1989). Not employing people with a criminal background relied on reputation. Paying a good salary and therefore not willing to risk the job as well as creating a community also helped to create shared interest. This is what many trust increasing measures of sharing economies rely on.

With the globalization in the 20th century (WTO, 2008), trust had to reach a global level. This became possible through institutions and brands (Mazzella, Sundararajan, D'Espous, & Möhlmann, 2016). Nowadays, a significant amount of trust is created by the usage of brands. They transfer values as well as quality attributes, which increases customers trust in the product. This so-called 'institutional trust' can, for instance, be consuming food of a well-known brand with a good reputation in countries with flaky food safety laws and/or questionable hygienic standards.

Technologies of the 21st century are turning established conventions upside down about how trust is built, managed, lost, or repaired. They allow new mechanisms that enable us to trust unknown people, companies or ideas. Those technologies caused disruptive innovations where trust is a fundamental prerequisite, as with Airbnb, but also blockchain technologies as the necessary setting to exist and to be successful. Rachel Botsman talks about a shift from 'institutional trust' towards 'distributed trust' (see figure 3), which is created by large networks of people, organizations, and intelligent machines. (Botsman, n.d.)

LOCAL   INSTITUTIONAL   DISTRIBUTED
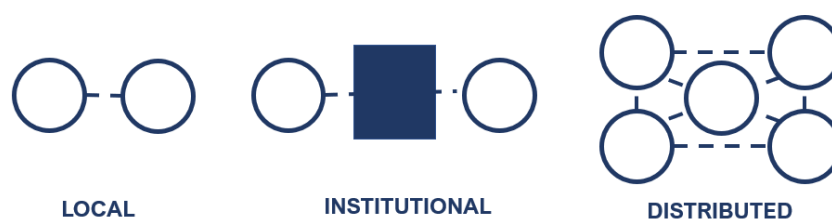
Figure 3: Evolution of trust (Botsman, n.d.)

2.3.3   Trust and its Role in the Sharing Economy

Trust plays an essential role in any relationship. But especially in the sharing economy, trust plays a very crucial role. The participants of sharing platforms mostly are in anonymous relationships to each other; neither the consumer nor the offering person know each other. The sociologist James Coleman defined trust as the "willingness to commit to a collaborate efforts before you know how the other person will behave" (Mazzella, Sundararajan, D'Espous, & Möhlmann, 2016). Previous studies such as Hawlitschek, Notheisen, &

Teubner (2018), Cheng, Fu, Sun, Bilgihan, & Okumus (2018) and Tussyadiah & Park (2018) examined that trust is a crucial factor in the sharing economy and came to the conclusion that without trust, no collaborative consumption is possible. Rinne (2013) says that trust is the social glue that enables collaborative consumption marketplaces and the sharing economy to function without friction. Especially as the sharing economy is based on human interactions and often characterized by social contact, interpersonal trust plays a more significant role than in other online transactions, such as normal e-commerce via Amazon or Zalando (Möhlmann M. , 2016). Compared to just having the contact with the postman who delivers the Zalando package, sharing economy settings often involve close personal interactions such as driving in a car together or spending a night in the host's apartment (Möhlmann & Geissinger, 2018). In addition, sharing economy platforms differ from conventional companies in that suppliers and consumers often do not have to go through an application process, or just a very rudimentary one. The check-up to becoming an Uber driver is way easier as compared, for instance, to a taxi driver in London, who has to do a detailed test about his skills as a driver (Rosen, 2014).

How trust can be established in general depends on a multiplicity of dimensions, for instance the counter-party's authenticity, intentions, and an assessment of their expertise or quality (Mazzella, Sundararajan, D'Espous, & Möhlmann, 2016). The more often the parties interact with each other, the more they start to learn about these aspects. But how do you identify the counterparty's intentions, or how do you know how much expertise they have if you have a transaction via a sharing platform and therefore with someone anonymous? The solution is trust-increasing measures, so-called digital trust cues. A measure that many sharing platforms use is an online reputation system which collects feedback from peers of a community regarding past transactions with other members, for instance, in the form of reviews or ratings (Huurne, Ronteltap, Guo, Corten, & Buskens, 2018). This method of increasing trust between parties has already proofed to work. The rating system eBay introduced in the 1990s has been a big success which helped to increase trust within the community (Mazzella, Sundararajan, D'Espous, & Möhlmann, 2016).

2.3.4 The three Layers of Trust in the Sharing Economy

The concept behind the sharing economy differs from traditional business in many respects. If a room in a Hilton Hotel gets booked, typically two parties are involved: the Hotel itself and the customer who booked the room. If an apartment gets booked through Airbnb, three

parties are involved: the platform providers, meaning Airbnb itself, the host who rents out the apartment, as well as the customer who booked the apartment. This leads to the fact that the conventional binary relationship between trustor and trustee is extended by a third one (Möhlmann & Geissinger, 2018).

The different actors as well as new processes lead to completely new scenarios where trust is seen as a basic requirement. Instead of having trust towards a corporate brand or traditional institutions, the trust needed in the sharing economy can be seen in three different layers (see figure 4). The first layer is defined as trust towards the idea; for instance, you have to trust the idea of sharing or renting the home with a stranger instead of staying in a Hilton Hotel. Regarding Botsman (n.d.), many companies already fail at this level and struggle to transmit their benefits to the customers, which leads to a lack of acceptance. The second level is defined as trust towards the platform itself; this can be seen as institutional trust. People have to trust the institution which runs the platform. Platforms act as intermediaries which offer the right tools that the right people find each other and make sure that certain tasks run smoothly. People have to trust that the platform provides an environment which allows smooth transactions and is available if something goes wrong, for example. The sharing platform provider should therefore be perceived as a trustworthy institution, but on the other hand should also be an enabler for interpersonal trust, which leads to the third layer. The third layer according to Botsman (n.d.), is the Holy Grail: the trust to the individual. This can, for instance, be the host who rents out the apartment, but also the person who rents the apartment as a visitor.
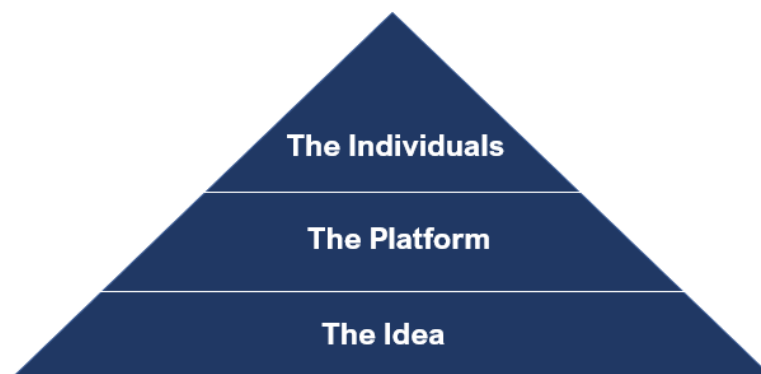
Figure 4: Three layers of trust in the sharing economy (Botsman, n.d.)

2.3.5   Spillover Effects

Digital trust cues increase trust not only within the community. Möhlmann (2016) states that trust in the sharing economy is a hierarchical construct, meaning that high trust in platform providers positively influences trust between providers and consumers on the sharing platform and vice versa. However, this spill-over effect between the trust entities can also work the other way around. A public scandal around a platform provider, such as Uber had several over the last years, negatively influences trust between parties using the platform. But a negative experience between the product/service provider and the consumer can also negatively impact trust of the users towards the sharing provider. (Möhlmann M. , 2016)

That spill-over can as well take place across platforms. People participated in the sharing economy are one to three times more likely to try other forms of sharing economy activities. The more social and economic interaction peers have with each other, the more trust within the society will build up. This increase in trust consequently leads to more interaction, which then boosts trust again. Mazzella et al. (2016) see the possibilities which can arise due to this cycle as endless and talk about the beginning of the 'Trust Age' which, according to them, would change the life we know.

2.3.6   Interpersonal Trust

For many years, brands have been seen as an important factor when it comes to create trust. A brand can convey qualitative attributes and values. But most importantly, it promises a current and future reliability (Mazzella & Sundararajan, 2016). A brand of a sharing economy platform can therefore increase trust towards the platform but, thanks to the spill-over effect (see previous chapter) can also build trust between the community (Möhlmann M. , 2016). However, due to the fact that individuals are mainly doing business among each other and the sharing platforms are merely intermediaries, interpersonal trust plays a crucial role within the community. Williams (n.d.) defines interpersonal trust as the perception that other people will not do anything that will harm your interest. Geller (2016) sees interpersonal trust as confidence in the integrity, ability, character, and truth of a person or situation between people. Geller (2016) therefore makes a distinction between a person's good-naturedness (integrity, character) and its behavior/skills (ability). A person can therefore have good intentions but due to his/her lack of ability still not be able to fulfil the task. Möhlmann & Geissinger (2018) see interpersonal trust as trustworthiness which is

defined by Schoorman, Mayer & Davis (1995) based on three characteristics: ability, benevolence and integrity. This is congruent with Gellers (2016) definition. It can be said that interpersonal trust consists of the confidence in the intentions as well as confidence in the ability of others. Or in Rotter's (1967) words, as a generalized expectancy to rely on others words or promises.

Such interpersonal trust was, for a long time, limited to people in the closer circle, such as family members or close friends, people form homogenous communities with sets of behaviors and common norms that increase honesty and cooperation (Möhlmann & Geissinger, 2018). But technologies and trust-increasing measures made it possible that interpersonal trust can also exist between unknown parties. Peers trust, for instance, that an Uber driver has certain driving skills (ability). Benevolence or good-naturedness would be that the counterparty has good intentions such as an Airbnb-host who wants to give the consumers a great experience rather than just optimizing his profit. Such interpersonal trust within the community is also created with branding. Individuals become their own brands. They create profiles, accumulate feedback, upload pictures etc. Making all these things visible to others is part of their 'trust capital' and helps to foster interpersonal trust (Mazzella & Sundararajan, 2016). All those digital trust cues facilitate trust between people who have never met in real life.

2.3.7   Calculative Trust

Calculative trust, also described as calculation-based trust or economy-based trust, is characterized by the fact that the decision to trust is made dependent on the individual calculation of a person, whereby costs and benefits of the action as well as of possible alternatives fall into account (Hsu, Ju, & Yen, 2007; Fischer, n.d.). The underlying cost-benefit calculation of the parties is determined by social, psychological and explicit incentives and sanction potentials, as well as the alternatives and risks associated with them(Fischer, n.d.). In other words, calculative trust is a sort of economic exchange and is formed by economic factors where economic benefits and possible negative impacts get weighted. During this process, individuals are economically and rationally motivated by their self-interest, maximizing benefits and minimizing potential losses (Lewicki & Bunker, 1996). Ratnasingam (2005) sees in the calculative trust something that is linked to saving money or time; the evaluation of these two factors resemble a cost benefit analysis. Poppo, Zhou, & Li (2015) define it as the simple calculation of benefits and costs where

uncertainties due to cheating, but also positive outcomes due to cooperation are taken into account. According to this, regulations and policies which are enforced by the government but also by the platform provider in order to prosecute potential fraud play an essential role (Möhlmann & Geissinger, 2018).

In the context of sharing, this sort of cost benefit analysis can be seen in the form of participating and therefore replacing exclusive ownership of assets by renting them. Advantages are, for instance, possible costs and time savings or no ownership duties. On the other hand, 'ownership' then means being dependent on others. Such economic evaluations are all part of the calculative trust process and finally define if the peers can trust each other or not.

2.4   Trust Increasing Measures/Digital Trues Cues

The following subchapters give some background information as well as the current state of research about trust increasing measures. Furthermore, they give an overview about ten trust increasing tools (2.4.3 to 2.4.12). Some of them are already established and commonly used on different sharing economy platforms. Tools which are new and not yet widely used are also mentioned.

2.4.1   Background Information

New technologies made it possible that the approach of how to build trust got disrupted. Originally, trust was something that was built over time; people trusted each other when they had repeated interactions combined with good experiences. However, due to different trust increasing measures, so-called digital truest cues or trust grids, peers now are able to instantly get information about each other and are therefore able to build an opinion whether to trust a specific individual without having these repeated interactions nor having the need to meet in real life. This can be compared with the invention of the telephone: People were suddenly able to communicate instantly with anyone and to get background information about the counterpart. The is also valid for digital trust grids which allow people to have a look at someone's trust capital with immediate effect. (Mazzella & Sundararajan, 2016)

Due to the fact that digital trust cues trigger relational as well as calculative aspects, such measures have the potential to increase interpersonal as well as institutional trust (Möhlmann & Geissinger, 2018). A common instrument is the establishment of rating systems that make

the assessment of the provider and consumer visible to all. Many platforms such as Airbnb, Uber, Sharoo etc. already use such mechanisms or plan to integrate them. Others rely on linking social media profiles such as LinkedIn or Facebook. The measures used depend strongly on the size of the sharing platforms, as well as its concept (what is shared).

The so-called signaling theory from Akerlof (1970) plays an essential role why peers on such platforms are motivated to use those tools. In this theory, market participants try to reduce the information asymmetry, meaning 'good' products/service providers have the interest to credibly distinguish themselves from 'bad' product/service providers, which means they use the available tools to distinguish themselves. However, it is important that the costs to produce this signal is lower than the advantages it entails (Akerlof, 1970). On the other hand, consumers build their perception towards the provider by relying on the received signals. Signaling especially takes place in online sales, this mainly due to lack of other significant clues and a higher perceived risk compared to real-life sales (Biswas & Biswas, 2004). It therefore also plays an essential role in the sharing economy.

But digital truest cues do not only increase trust within the community. Such virtual tools additionally provide more transparency. Thus, a taxi driver can easily reject a passenger of particular ethnicity or systematically refuse rides that do not fit his preferences. However, that does not work for an Uber driver. Data trails, as well as the increasing transparency which goes hand in hand with such mechanisms make it easier to identify and report misbehavior. Such measures therefore do not only increase trust, they also provide more transparency.

2.4.2   Current State of Research

It can be seen in multiple studies that such trust-increasing measures have an impact. Hawlitschek, Notheisen, & Teubner (2018) pointed out that reputation measures such as ratings, reviews or other features like insurances or refunding possibilities have a positive impact on trust. Shaheena et al. (2012) revealed that ratings, reviews, as well as operator screenings and selections are mechanisms to increase trust within peers. In their survey, Mazzella & Sundararajan (2016) asked members of the car sharing platform BlablaCar about their various level of trust towards different people such as family, friends, neighbors, social media friends, colleagues or to members of the platform with a full digital profile. Trust level for members of this platform were ranked third (88%), closely after family (94%) and friends

(92%). Users therefore trusted members nearly as much as their family and friends, whereas the trust level for colleagues (58%) and neighbors (42%) and social media contacts (16%) were much lower (Mazzella & Sundararajan, 2016).

Therefore, it can be said that digital trust cues definitely increase trust. Two ride-sharers who have never met in person trusted each other nearly as much as close friends and way more than colleagues who share the same office every day. Furthermore, Möhlmann & Geissinger (2018) argue that trust cues are cumulative in nature. This means the more trust increasing measures a sharing platform provides, the higher the likelihood that trust is growing.

It is uncontroversial that such measures have a positive effect on the trust within the community (Möhlmann & Geissinger, 2018). Since trust is a fundamental precondition for a sharing platform and is still seen as a barrier not to participate, platforms strive to invent new trust increasing measures.

2.4.3 Removing Offerors Anonymity

There are two reasons why we do not trust people. First, we do not know them. Second, we know them. In order to overcome the first reason, many sharing economy platforms strive to remove anonymity. BlablaCar, for instance, which is a platform that connects driver and passengers who will share the cost of long car journeys, realized that members want to see the name as well as a photo of the person they might spend time together in the car. A stranger with a name and with an idea of what he looks like is simply more trusted. Displaying one's full name, age and maybe a description of his skills his general interests, as well as picture or video can increase trust towards the peers. (Mazzella & Sundararajan, 2016)

Gebbia (2016) revealed that peoples are more willing to trust somebody who is like us. This natural social bias leads to the fact that the more different people are, the less we trust (Gebbia, 2016). A study from Fagerstøm et al. (2017) concluded that personal images on Airbnb increase trust between peers and impact the guest's willingness to pay more. Overall it can be said that the more information peers show about themselves and the more transparent they become, the higher is the perceived trust from the counterparty (Hoek, 2015). Creating profiles and giving some personal information can be seen like a CV, providing a first impression.

But removing anonymity can also bear disadvantages. The study by Edelmann & Luca (2014) identified a connection between reputation systems and various forms of discrimination. Black hosts on Airbnb, for example, earn significantly less than white hosts. Another study found evidence that guests on Airbnb with an African American name tend to be less accepted by hosts, as compared to identical guests with traditionally white names (Edelman, Luca, & Svirsky, 2017). Some platforms try to overcome this problem by not showing the profile picture, gender, ethnicity, age etc. until the end of the checkout process (Green, n.d.). This means that the host cannot discriminate based on how guests look or the other way around. Similar approaches can be seen in the application process where companies do not want to have pictures of the candidate in CVs, in order to prevent decisions based on ethnicity. To provide as much data as possible hence can increase trust, but it also gives people the possibility to discriminate according to gender, ethnicity, religion etc.

2.4.4 Verification of Information

Most platforms use a so-called verification system in order to verify the information that users provide when registering. Most platforms verify the users phone numbers, some of them go even further and offer the possibility to get a special ID verification status which can be achieved by sending a picture of the passport plus a utility bill (Hou, 2018). This verification is used to counter check the user's identity. Brosch & Sander (2016) stated that if people use their true identity and do not do business anonymously, they are more likely to be honest. Therefore, platforms not only make sure that the peer-to-peer relationship is real but also increase the possibility that it is a trustworthy one. Other platforms, mainly in the service section, offer special procedures to verify skills. This can be done, for instance, by sending in a diploma which proves that the provider possesses claimed skills. Uber and other platforms like Lyft require a vehicle inspection from Uber/Lyft itself or a certified third party, varying by country (Yaraghi & Ravi, 2017). It highly depends on the platforms and the goods/services which are shared, if only the phone number, or also the skills, the appropriateness of a product, or even the identity gets verified.

2.4.5 Background Checks

As it is already common practice when applying for some jobs or a rental apartment, also some sharing economy providers make certain background checks. Such background checks vary from company to company and from country to country. Some sharing economy platforms check the members criminal and business history as well as financial activity. For

instance, in the area of transportation, it is more or less a standard to ensure that drivers have a valid driver's license (Yaraghi & Ravi, 2017). TaskRabbit, a platform which connects freelance labor, has a four-step background screening approach (Parves, 2016) where an external company checks the users work history, social security number, educational achievements, certifications, driving records etc. (TaskRabbit, n.d.). Such background checks should, on the one hand, ensure quality and safety, and on the other hand, increase the commitment among the parties that participate on such platforms (Parves, 2016).

2.4.6   Linkage Social Media

An upcoming measure to increase trust is connecting the peer's profiles with other social media networks. Connecting their identity with their already existing online identity makes it possible to centralize all the digital social capital[1] which the user has generated on different platforms. With this approach, platforms make it possible that peers get access to more background information of possible counterparties (Newlands, Lutz, & Fieseler, 2017).

The connection of multiple social media as well as sharing economy platforms leverages a peer's online presence and creates therefore trust (Mazzella & Sundararajan, 2016), for instance if users can see if they have mutual friends on any social media platform.

2.4.7   Aggregated Trust Profiles

Trust tools are often isolated. This means that if an Uber driver has a five-star rating on Uber, but then wants to start driving for Lyft, he will have to start from scratch to get a good reputation on Lyft. A relatively new trust increasing tool, which addresses this challenge, are aggregated trust profiles. Such profiles combine the reputation that a peer has from multiple sharing economy platforms. Users can therefore use their reputation from other platforms in order to show that they are trustworthy.

2.4.8   Ratings

On a sharing economy platform, peers normally have no first-hand experience of a particular peer. Relying on others and social proof therefore plays an essential role. According to Cialdini (1993), people determine what is correct by finding out what others think is correct. The principle of social proof can be seen in the way that if the greater the number of people that say something is good, the more a given individual will think the same (Cialdini, 1993).

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[1] Social connections and the attendant norms and trust (Newlands, Lutz, & Fieseler, 2017)

Peer ratings therefore serve as a fundamental pillar in the trust building process. At Airbnb, for instance, users can rate the accommodation as well as the host after their stay. This also applies for the host to the user. This information is then publicly available for the whole community (Von Stokar, et al., 2018). Such ratings show how often transactions have happened, as well as if the majority of the society thinks it was good and therefore 'correct' to do it. Third parties therefore approve whether the user of the platform is trustworthy and worth doing business with, or not. Such ratings create more transparency and reduce information asymmetries. In addition, the evaluation system motivates both sides to meet the expectations of the counterparty (Von Stokar, et al., 2018).

Rating the counterpart after the business is a widely spread measure and can also be found on platforms such as TripAdvisor, booking webpages, or on different online stores where either the seller or the product itself can be rated.

On the one hand, such peer reputation measures motivate to offer a good product/service or being a good customer, and on the other hand participants do not have to prove their trustworthiness from scratch at each new exchange. The overall design and the criteria of the rating depends on the platform. Some platforms use stars, other grades, and some of them just thumbs. (Pettersen, 2017)

In recent years, sharing economy platforms have integrated so-called simultaneous reviews or two-way ratings, which means that the rating score that the peers give to the counterpart only becomes public after each party has reviewed the other (Bolton, Greiner, & Ockenfels, 2012). This approach makes sure that members can leave a completely honest rating without being afraid that the receiver will give a negative rating as a revenge. The overall accuracy of ratings can therefore be improved (Mazzella & Sundararajan, 2016).

2.4.9   Reviews

Additionally to just give ratings, users can also write comments about their counterparty and therefore give a bit more detailed feedback than just a rating or upload self-taken pictures of the good that has been rented. Aral (2017) revealed in his study that old positive ratings positively influence new ratings, which leads to so called "rating bubbles." He states that this effect is caused by a cognitive bias toward the prior positive opinions of others. Some platforms list the latest comments at the top by default. Others have algorithms which put

comments according to their quality or reliability on top, or hide comments which seem to not be reliable or trustworthy (Aral, 2017).

Yelp, which is a platform where users can write reviews and recommendations for restaurants, shopping, nightlife food etc. (Yelp, n.d.), got criticized for their approach how to decide which ratings are going to be displayed in which order, and which ones will be hidden. Yelps software sorted ratings not only by quality and reliability, but also by activity. This means that more active users were counted as more trustful and had therefore more visibility than those who were not that active (Pettersen, 2017).

But such tools can also get misused. A study showed that around one third of hotel reviews are fake (Schormann, 2012). Hotel reviews tend to be more negative then home-sharing recommendations (Schormann, 2012). Mayzlin et al. (2012) stated that this effect could be caused by the fact that there is a bigger incentive in the hotel industry due closer competition. Sharing economy platforms use special algorithms that identify fakes based on language and usage patterns of reviewers, as well as that a review can only be given if a transaction has really happened. Such algorithms get continuously adapted by the platform providers. However, providers and consumers are often not aware of such changes (Newlands, Lutz, & Fieseler, 2017).

The reviewer's credibility plays therefore an essential role. A study from Kusumasondjaja et al., (2012) confirmed that an online review with an identified source is considered to be more credible and leads to higher trust than a review from an unidentified source.

2.4.10 Certificates/Status

Another trust building element is the use of special statuses such as "trusted reviewer," "qualified driver" or "trusted provider." Airbnb, for instance, uses the status 'Super-host,' which hosts only get if they have a minimum of 4.8 out of 5 stars, 10 bookings in the last year without cancellations and 90% of their requests from potential interests had to be answered within 24 hours (Airbnb, n.d.).

2.4.11 Payment Process

The payment process can also play an essential role. Some platforms try to increase engagement from the peers by a pre-payment. This can, for instance, mean that the car driver already receives a certain amount of money, even before he picks up the customer. Such

mechanisms foster trust by engaging peers to honor their commitment (Mazzella & Sundararajan, 2016). But also a security system which withholds the money if the service is not provided as promised or expected can lead to more trust (Möhlmann & Geissinger, 2018).

2.4.12 Certification of the Platform

A relatively new approach of sharing economy platforms to increase trust is to be certified by third parties. These certifications set out minimum standards for sharing economy businesses in order to ensure that they maintain certain professional standards. In meeting these principles, companies get awarded with the certification. There are multiple studies in the food industry which revealed that having a credible certification has a positive effect on the consumers trust perception and can as well lead to a higher willingness to spend money (Liu, Chen, & Chen, 2019; Tonkin, 2015). TrustSeal, which is one of those sharing economy certification labels, was established by the Sharing Economy UK in partnership with Oxford University (Sharing Economy UK, n.d.). TrustSeal, certifying companies such as Airbnb, easyCar etc., analyzes platforms in the following areas (Sharing Economy TrustSeal, n.d.): ID verification, transparent communication and pricing, security in the area platform, payments and data protection, and peer reviews by checking ratings and feedback systems (Cane, 2018). TrustSeal states that their aim is to create a sense of trust for consumers and providers and a good standing in the market for the sharing platform (Sharing Economy TrustSeal, n.d.). The motivation for companies to be certified and receive such labels is simple: It is supposed to increase trust towards the platform, but also within the community. It is therefore supposed to proof that their concept and trust-increasing measures meet certain standards which are set by an independent third party.

2.4.13 Overview

The following table 4 gives an overview of the above-mentioned 10 trust increasing measures. Some of them, such as ratings and reviews, are already widely used; others, such as trust profiles and certifications of the platform, represent new methods and are therefore still rare.

Trust Cues	Description
Removing Offerors' Anonymity	Picture and/or video of the product/service provider, personal information
Verification of Information	Verify identity, phone number, product/skills

Background Checks	Check of criminal background, work history, driving record
Linkage Social Media	Linkage to Facebook, Instagram, LinkedIn, Xing etc.
Aggregated Trust Profile	Trust profile where offerors' ratings from different sharing platforms are displayed
Ratings	Average Rating, amount of ratings
Reviews	Content, amount, credibility and quality of reviews and photos taken by consumers
Certificates/Status	A special status such as trusted reviewer/trusted provider that the offeror has
Payment Process	Payment system that makes sure money does not get transferred before consumer receives service/item
Certification of the Platform	Check of trust increasing measures by 3rd party

Table 4: Overview trust cues (own table)

2.5 Research Gaps

It is undisputed that trust plays a crucial role in every relationship and therefore also in the sharing economy. However, the importance of trust has mainly been analyzed in the context of business to customer. The novelty which P2P platforms convey is the interaction between mainly anonymous peers. Based on the literature review in chapter 2, it can be said that the importance of trust between peers is paramount for a sharing platform. The research which has been conducted in the last few years mainly focuses on the importance of trust within the community; some studies examined how trust between peers can be increased. Most of the studies focused on specific measures in a specific context, for instance, how important ratings or reviews are for carsharing. However, little research has been done to analyze the big picture of trust-increasing measures. Furthermore, nearly no studies are available which analyzed the effectiveness for relatively new tools such as linkage to social media or certification by a 3rd party. Most studies were, moreover, conducted in the United States and did not distinguish between age classes. Those major gaps in existing research call for additional studies which then can provide a larger picture about the effectiveness of trust-increasing measures by assessing a wide selection of established and novel trust increasing tools.

3 Research Design and Methodology

This chapter further outlines the approach of the research design and methodology which has been used to answer the research questions that are stated in the subchapter 1.6, and either accept or decline the four specified hypotheses. As described in the subchapter 2.5 (research gaps), the existing literature is not sufficient to answer those research questions.

In order to analyze the importance of trust as well as the effectiveness of trust-increasing measures, both, primary and secondary data was used in this research. In a first step, a profound literature review was conducted to build a solid base, to identify the research gaps in this field and to define the research objective and questions. In a further step, an online survey was conducted in order to collect primary data.

The following subchapters provide further information on the applied process of the survey creation as well as the data collection.

3.1   Research Design

This thesis used a combination of primary and secondary research (see table 5). In order to identify already established and newly introduced trust increasing measures, multiple sharing economy platforms as well as secondary research in form of studies were analyzed, which can be seen in chapter 2 (literature review). In order to answer the research questions, the research was followed by a quantitative approach. Data was collected via a web-based survey. The use of this method helps to minimize social desirability biases due to an increased sense of privacy among the participants, and furthermore simplifies the analysis and evaluation of the collected data (Gnambs & Kaspar, 2016). In order to create the survey, the e-survey tool www.umfrageonline.com was chosen. To reach as many people as possible between 18 and 39 years of age, the survey was posted on platforms and forums such as RonOrp, Uniboard etc., where the target groups are typically active. In addition, various social media channels such as Instagram, Facebook, LinkedIn etc. were used to distribute the survey. Furthermore, the survey was sent via e-mail and WhatsApp to friends and family members.

Source	Secondary	Primary
Type	Databases	Quantitative
Objective	Identify importance of trust and trust increasing measures	Assessing the importance of trust in different scenarios and the effectiveness of the trust increasing measures
Instrument	Reports, research articles, studies	Online survey
Perspective/method		Nomothetic

Table 5: Research design table (own table)

The executed primary research pursued a nomothetic approach. Nomothetic research aims to describes general laws and tries to gain objective knowledge through scientific methods which are mainly of quantitative nature (Nichols, 2011). In order to do this, the group

averages of the survey were statistically analyzed in order to create predictions about people in general. The research did not focus on the individuals, which would be an idiographic approach. The idiographic approach suggests that everyone is unique and therefore everyone should be analyzed in detail (Nichols, 2011). Due to the fact that this thesis aims to provide insights how sharing economy platforms can increase trust from a consumer perspective, and trust increasing measures cannot be adapted individually for each consumer, this research did not focus on individuals and thus aimed rather to create predictions about people in general. The results are therefore only valid for the analyzed group in general and not applicable on individuals.

3.2 Methodology

3.2.1 Survey Platform

For the creation of the survey, the e-survey tool www.umfrageonline.com was chosen, due to the fact that it offers a free premium account for ZHAW-students. The premium access made it possible to use different types of questions, layouts, as well as special analysis tools. The tool therefore met all the requirements, which were essential to appropriately build and analyze the survey. The internet based conducted survey used a mixed method by using different types of questions such as categorical, matrix, ordinal etc. A detailed explanation of the questionnaire catalogue is given in subchapter 3.3.

3.2.2 Population

In order to identify the correct sample of the study, the first step was to detect the population for which the study should be representative. As already outlined in the subchapter 'research objective,' this study aims to provide insights for Swiss sharing economy platforms. The geographical focus is therefore set on Switzerland, with 8'484'100 inhabitants (see table 6) (Bundesamt für Statistik, n.d.). As identified in the literature review, mainly people between 18 and 39 use sharing economy offers. This age group also has the highest likelihood to take advantage of sharing economy offers in the future. The majority of the already existing and potential customers is therefore seen in this age class.

The thesis therefore sets its focus on the population in Switzerland between the age of 18 to 39. This age group accounts for around 27.5% of the population in Switzerland, which can be seen in Table 6 (Bundesamt für Statistik, n.d.).

Segmentation	Definition	Number
Geographical	Switzerland	8'484'100
Demographical	18–39 years	27.5%

Table 6: Overview geographical and demographical segmentation (own table)

With the above-mentioned information, the following population (N) results:

Calculation Population	
Total inhabitants Switzerland	8'484'100
Age group 18 to 39	27.5%
Total Population	**2'333'128**

Table 7: Calculation population (own table)

3.2.3   Sampling Size

As calculated in the subchapter before, the total population is (N) = 2'333'128.

In order to get a representative sampling size, the following calculation is applied:

$$\text{Sample size} = \frac{\frac{z^2 \times p\,(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p\,(1-p)}{e^2 N}\right)}$$

N=2'333'128 (population size)	e=5% (margin of error)	z=1.96 (z-score, confidence interval 95%)

The resulting sample size therefore is **<u>385</u>**

The higher the confidence interval, the higher the probability that the results are accurate. However, a higher confidence interval would dramatically increase the sample size. Therefore, a confidence interval of 95% is considered as a balance between confidence and achievable research goal. Furthermore, an alpha level of 0.05 was chosen, as most educational research studies use either a 0.05 or 0.01 level (Ary, Jacobs, & Sorensen, 1996). The 5% margin of error would therefore imply that the true mean of a five-point scale is within +/- 0.25 of the mean as calculated from the research sample.

3.2.4   Sampling Technique

In order to reach the calculated sampling size, the study used a non-probability sampling technique called snowball sampling, which is a type of convenience sampling (Goodman, 1961). This method of sampling is characterized by the fact that a single person or a group of people recommend potential participants for the study, those participants then recommend additional participants and so on (Goodman, 1961). It can be imagined as a snowball, rolling down the hill and getting bigger and bigger. By its nature, participants of the study tend to share similar characteristics (Biernacki & Waldorf, 1981). The chance that, for instance, a student who participates in the survey recommends other students or friends in his age class to participate, is seen as high. This approach is seen as suitable due to the fact that the study aims to reach people with similar characteristics, namely between the age of 18 and 39 and who are familiar with the concept of the sharing economy. On the other hand, this effect can lead to the result that a particular network of peers gets oversampled. This means that they represent a way higher percentage in the sampling than in the whole population. This can lead to a biased sampling.

3.2.5   Survey Reach

Since the survey was published internally and externally, a response rate of 5% was expected (Rutherford, n.d.). Studies have shown that a reminder can increase the response rate (Saleh & Bista, 2017). Therefore, a reminder was sent five days after the questionnaire was sent out. The 5% response rate is calculated conservatively, since response rates from social media channels are estimated to be in a low one-digit percentage (Basa-Martinez, et al., 2018). This means that the survey had to reach 3,850 people. Furthermore, it had to be considered that some people never used a sharing platform and could therefore not answer all questions. A study from 2015 pointed out that 18% of the 19- to 29-year-olds and around 36% of the 30- to 39-year-olds did not use a sharing platform offer in the last two years (PwC, 2015b).

The fact that this study is four years old and sharing platforms became much more popular in the last years, the percentage of people who never used a sharing platform in the age class between 19 and 39 was estimated to be around 20%. This leads to the assumption that the survey must reach at least 9,620 people to get at minimum of 385 completed surveys (see table 8).

Calculation completed surveys	
Reached people	9,620
5% response rate	481
20% uncompleted	-96
Completed surveys	**385**

Table 8: Calculation completed surveys (own table)

3.2.6   Publishing Approach

As described in subchapter 3.1, the survey was published on different social media networks like Facebook, Instagram, and LinkedIn. In order to reach more people, the survey was also published by friends and the family of the author. With this approach, the author wanted to make sure to reach the aim of 385 completed surveys.

In order to reach more people, the survey was also published in various internet forums mainly popular in Switzerland. A further criterion was that the majority of the active people should be in the relevant age class.

The following forums were selected (for screenshots of the posts see appendix 8.1):

RonOrp.ch	Service company based in Zurich with focus on electronic media. Its main activities are the organization of events and the operation of an internet portal (Ron Orp, n.d.). Mainly young and urban people are active in this forum.
Uniboard.ch	A forum where students in Switzerland can talk about their experiences in different areas such as university, jobs etc.
Beobachter.ch	A forum by a Swiss consumer and advice magazine with more than 800'000 subscribers who are 20 or older (Admeira, n.d.).

Table 9: Selected forums for publication (own table)

This non-list-based web survey approach, which is also known as web survey with general invitation, is an uncontrolled way of publishing, as everyone who notices the invitation or the post can complete the questionnaire (De Leeuw, Hox, & Dillman, 2008). This leads to

the fact that the survey pursued a non-probability approach, so no generalization can be made (see also subchapter 6.3). This way of solicitation is less expensive than a list-based survey where individuals get personally invited. It furthermore offers a higher chance that more people participate in a short period of time (De Leeuw, Hox, & Dillman, 2008).

3.3 Electronic Survey

This subchapter aims to provide detailed information about the survey and the rationale behind the questions. Furthermore, it provides information on how the questions are linked to the research questions and hypothesis. Additionally, it explains how the information from the literature review influenced the content of question catalogue.

3.3.1 General

Multiple studies have shown that anonymous survey methods can increase the disclosure of sensitive or stigmatizing information compared to non-anonymous approaches (Murdoch, Simon, A Polusny, & Bangerter, 2014). Due to the fact that the survey did not ask for sensitive or stigmatizing information, the collection of the survey was not anonymous. In order to make sure that people do not answer the survey multiple times, the participants' IP addresses were collected. The researcher could therefore partly identify if somebody participated in the survey more than once. The survey did not ask for the names or too many demographic variables of the participants, this conveyed a feeling of anonymity.

In addition, several studies found out that the completion of surveys decreases the longer a survey takes. Revilla & Ochoa (2017) came to the conclusion that the ideal online survey length is around 10 minutes and should never last longer than 20 minutes. Accordingly, the goal was to create a survey which takes no longer than 10 minutes to complete.

Multiple test runs indicated that the survey took around 6-9 minutes to finish. This information was then provided in the very beginning of the survey and already mentioned in the posts. Furthermore, a progress indicator was included showing the participants what percentage of the survey they had already filled out and giving a sense of orientation in the process.

The test runs which were used to measure how long it takes to complete were made by friends and family members of the researcher. This also made it possible to test the questionnaire for comprehensibility by third parties.

3.3.2 Likert Scale

The survey used a five-point Likert Scale, as it is more common in Europe than the seven-point scale and thus is less confusing and should increase the response rate (Bouranta, Chitiris, & Paravantis, 2007). Since most researches have also used a five-point scale for former surveys in this area, the comparability was a further reason for the choice.

3.3.3 Matrix Questions

When asking multiple questions which have the same set of responses, one can either use an item-by-item format, meaning that each question will be asked individually, or a researcher can group them into a matrix where all questions are presented together, the so-called grid questions (Liu & Cernat, 2016). Grids have the advantage to take less time to answer, as the respondents do not have to read the same information repeatedly. Furthermore, matrix questions require less keyboard and mouse action, because the survey is more condense (De Leeuw, Hox, & Dillman, 2008). In order to keep time to complete the survey as short as possible and make it as convenient as possible to answer, matrix questions were used in the form series of the Likert scale. A disadvantage that comes along with this approach is a higher probability that respondents answer the questions uniformly in order to decrease cognitive effort, as compared to questions listed separately (Gräf, 2002).

3.3.4 Questionnaire Catalogue

The following subchapter gives detailed information about the rationale behind the questionnaire catalogue. Since the complete catalogue of questions can be seen in the appendix 8.2, the questions/answers in this subchapter have been listed in an abbreviated form. The following table 10 gives an overview of how the questionnaire catalogue was structured. The subsequent subchapters then give a detailed explanation about each of the six sections.

Sections
3.3.4.1 Filter Questions
3.3.4.2 Demographic Questions
3.3.4.3 Questions Sharing Economy in General
3.3.4.4 Questions related to Importance of Trust and its Levels
3.3.4.5 Questions related to the Effectiveness of Trust increasing Measures
3.3.4.6 Control Questions

Table 10: Overview questionnaire (own table)

3.3.4.1   Filter Questions

Filter questions aim to qualify respondents if they are relevant for the study or not. It is advisable that such questions are asked in the very beginning of the survey in order not to waste the participants or researchers time by collecting meaningless data. (Knäuper, 1998)

The filter questions were therefore asked in the very beginning of the survey in order to make sure that only relevant people participate in the survey. Consequently, the two filter questions confirmed that the participants live in Switzerland and that they are in the age range between 18 and 39 years. Since the research was also interested in the answers of people under 18 or over 39 in order to determine possible age differences, only people who are not resident in Switzerland were excluded. When participants answered that they do not live in Switzerland, the survey automatically ended. In order to minimize the participation of non-relevant persons, it was repeatedly made clear that the survey is only relevant for people who live in Switzerland.

3.3.4.2   Demographic Questions

In order to gather information about the participants' background, demographic questions were used. The use of such questions made it possible to afterwards segment the audience based on who they are and what they do. This might identify correlations between a certain segment and responses (Allen, 2017). In order to create such segments and personas of the participants of this study, the following demographic questions were included:

- Age
- Gender
- Education

Those questions were either created as multiple drop down (age, gender) or as single choice question with the option of a text field (education). With this method the researcher fixed the information to be collected uniformly, either numerically or as text.

3.3.4.3   Questions Sharing Economy in General

The questions related to the sharing economy in general, were used in order to get information about the participants awareness, frequency of usage, their comfortability in different scenarios and the barriers not to participate. With this information, the researcher wanted to identify if the participants were aware of the sharing economy concept, their actual and future usage behavior, their comfortability level in different scenarios and the barriers which would keep them from participating in the sharing economy.

The following table 11 gives an overview of the questions which were asked in this section. The first column indicates which topic/variable the question should cover. The column 'Measurement' shows the variables which were used in order to measure the topic/variable. The column 'Literature' gives information on which literature/author from the literature review (chapter 2) the question is based on.

Topic/Variable	Measurement	Literature
Awareness of sharing economy business concepts	• Yes • No	(PwC, 2015b) (Bohlin & Tuyet, 2018)
Plan to **use sharing economy** in the **future**	• Yes • No	(PwC, 2015b)
Number of registrations on sharing economy platforms	• 0 • 1 • 2 • 3 • 4 • 5 or more	
Frequency of usage of sharing economy platforms	• Daily • Weekly • Monthly • Few times per year (quarterly) • Less than once per year • Never used it	(Ozcan, Möhlmann, & Krishnamoorthy, 2017)
Comfortability with sharing economy scenarios	Scenarios: • Rent apartment/house • Rent out your apartment/house • Rent drilling machine • Rent out your drilling machine • Rent car • Rent out your car Likert scale (1=very uncomfortable, 5=very comfortable)	(Veridu, 2016)
Barriers to participate in the sharing economy	Barriers: • Afraid that product / service is not available • Don't want to disclose personal information • Signing up too time consuming • Lack of trust towards person I share • Scared of undesirable social interactions • Certain things too personal • Things of others are unhygienic • Other people don't pay as much attention to things as I do • Afraid that borrowed things will break • Afraid that borrowed things will never come back Likert scale (1=strongly agree, 5=strongly disagree)	(Bohlin & Tuyet, 2018) (Frick, Hauser, & Gürtler, 2012) (Hawlitschek, Teubner, & Gimpel, 2016) (Spindeldreher, Fröhlich, & Schlagwein, 2018) (Tussyadiah, 2015) (Veridu, 2016)

Table 11: Questions related to sharing economy in general (own table)

3.3.4.4   Questions related to the Importance of Trust and its Levels

This section of the questionnaire served to identify if the importance of trust varies depending on which product/service is shared, as well as to identify the trust level to different people, and to which degree trust-increasing measures influence this level.

As already explained in chapter 2, the importance of trust depends on the question if a product or service affects the providers and/or consumers private sphere or not. In order to identify those differences, three products/services were chosen where the participant was put into the two roles of taking or giving. In both roles, the participant had to indicate the importance of trust.

Topic/Variable	Measurement	Literature
Importance of Trust	Scenario: • Rent an apartment • Rent out an apartment • Rent a drilling machine • Rent out a drilling machine • Get private transportation • Offer private transportation Likert scale (1=very important, 5=not at all important)	(Ert, Fleischer, & Magen, 2016)

Table 12: Questions related to importance of trust (own table)

A second matrix question was used in order to identify the trust level to different people, to what degree a trust-increasing measure (rating) can increase trust, and at what trust level this anonymous person is compared to friends, neighbors etc. Furthermore, it should be identified to what extent the number of stars as well as the number of ratings play a role.

Topic/Variable	Measurement	Literature
Level of trust if you share an apartment with	Different people: • Family member • Friend • Neighbor • Colleague / fellow student • Airbnb host 4.9 out of 5 stars (over 400 ratings) • Airbnb host 4.9 out of 5 stars (5 ratings) • Airbnb host 3.9 out of 5 stars (over 400 ratings) Likert scale (1=very high, 5=very low)	(Mazzella, Sundararajan, D'Espous, & Möhlmann, 2016)

Table 13: Questions related to level of trust (own table)

A third question was used to examine if a recommendation from a friend or neighbor is weighted more than ratings by qualified reviewers. In order to identify if the shared

product/service plays a role, the questions were then asked in the context of booking an apartment as well as renting a small personal item (drilling machine).

Topic/Variable	Measurement	Literature
Comparison **trust level** friend/neighbor and **social proof**	• Would book an apartment/rent small personal good (i.e. drilling machine) that a friend/neighbor recommended even though offeror has only 3.5 out of 5 stars (over 400 ratings, given by qualified reviewers) Likert scale (1=strongly agree, 5=strongly disagree)	(Cialdini, 1993)

Table 14: Questions related to comparison of trust level (own table)

3.3.4.5   Questions related to the Effectiveness of the Trust Increasing Measures

In this section of the questionnaire, the participants were asked about the effectiveness of the ten identified trust-increasing measures from the chapter 2 literature review. Since the results from these questions mainly contribute to answer the research questions, this part is seen as the actual core of the survey.

Topic/Variable	Measurement	Literature
Effectiveness of trust increasing **measures**	Trust increasing measures: • Information like age, name, gender, profile photo • Where he/she works • Text about themselves • Verified identity, phone number, offered/good service • Background check • Check of social media profiles • Common friends on social media • Overview of all their ratings/reviews from different platforms • Ratings from other customers • Written reviews with pictures from other customers • Labels such as qualified hosts/providers • Money transfer only after good/service is received • Trust tools certified and overview by independent 3rd party Likert scale (1=strongly agree, 5=strongly disagree)	Most authors from the subchapter 2.4

Table 15: Questions related to effectiveness of trust increasing measures (own table)

In a second step, questions about special features and constellations of some of the above-listed trust-increasing measures were included to get more detailed information how some of those tools would be most efficient or not.

Topic/Variable	Measurement	Literature
Special **features** and **constellations** of trust increasing measures	Statements: • Trust person more who has a rating 4.2 from 400 customers then 4.8 from 8 customers • Video of provider would increase my trust more than a photo • I trust pictures taken by customers more than pictures taken by product/service provider • I trust reviews from similar people more • I trust reviews from qualified customers more Likert-Scale (1=strongly agree, 5=strongly disagree)	(Gebbia, 2016) (Mazzella & Sundararajan, 2016) (Kusumasondjaja, Shanka, & Marchegiani, 2012)

Table 16: Questions related to features and constellations of trust increasing measures (own table)

3.3.4.6 Control Questions

In order to check whether the respondents have answered the questions truthfully or not, control questions were included. Such questions serve to identify who does not answer the survey consistently and would therefore exclude them from the data analysis (Vannette, 2017). The last part of the survey consequently contained multiple questions from the above-described areas but asked in a different wording. These quality-control questions were designed to measure the participants attentiveness and spot the ones who were not paying full attention. To keep the questionnaire as efficient as possible, only 5 control questions, which covered different topics of the survey, were included.

Topic/Variable	Measurement	Literature
Different variables from the above described topics	**Statements:** • The lack of trust reason why I do not make transaction • Trust towards private offeror of an apartment more important than offeror of a drilling machine • Lack of information about person makes me skeptical to share • Would increase trust know offeror has good ratings on other sharing economy platforms • Increases trust if I know where offeror works Likert scale (1=strongly agree, 5=strongly disagree)	Different authors which are listed in the topics above

Table 17: Control questions (own table)

3.4 Data Interpretation

This subchapter provides insights about the different techniques and coding methods that were used in order to arrange the data in a systematic order.

The data has mainly been interpreted using Excel. The E-Survey tool made it possible to export the data directly to Excel files. Excel was then used to calculate values such as the mean, median etc. The data processing with Excel made it possible to directly visualize the analyzed data as graphics and charts. For the bivariate analysis (the analysis of two variables), pivot tables were used. The usage of pivot tables makes it possible to quickly identify potential relationships between variables. In order to identify whether these relationships (difference between the mean values) of two samples are significant (not occurred by random chance), t-tests were used. T-tests were also used in order to answer the hypotheses which are stated in subchapter 1.7. Such a t-test, where mean values are compared, are useful to specify if a difference is significant or not (Universität Wuppertal, n.d.).

It is controversial what is most appropriate in order to test variables measured by Likert-scales. Vieira (2016) states that the usage of the t-test is a valid and well-established test to compare groups, even if the variable is measured by a Likert scale and the populations do not have a normal distribution. Last, to test the surveys reliability level, a Cronbach's Alpha test was applied. Such a test is a common instrument to measure the strength of reliability.

4 Analysis

This chapter presents the analysis of the results of the online survey. As mentioned in the previous chapter, the online survey was structured into six different sections. The results of 5 out of 6 sections will be analyzed in detail in the following subchapters. The sections filter question was created to survey the right target group, not in order to gain data. It is therefore not discussed in this chapter.

4.1 General Facts

As explained in chapter 3, the survey was published on multiple social media channels, forums, and sent via WhatsApp and E-Mail. The survey was available to be filled out for six days. In total, 344 people participated in the survey, of which 43 did not fully complete the survey. This results in 301 completed surveys and therefore a completion rate of 87.5%.

4.2   Exclusion from the Survey

Multiple participants had to be excluded from the data analysis, because they did either not fit the requirements (filter questions) or did not answer the survey consistently (control questions).

In total, 7 people answered that they do not live in Switzerland, which resulted that they could not participate in the survey. Another 23 participants were excluded, for other reasons: 5 because of an incomplete questionnaire and 18 because they did not fit the age range. Consequently, 25 (7+18) people were altogether excluded because they did not fit the set requirements. In addition, the control question match found 8 inconsistent answer sheets, which also led to an exclusion from the analysis. In total, 33 people had to be excluded due to the fact that they did not fit the requirements or their answers were not consistent.

This leads to 268 people within the target group that fully completed the survey (see table 18).

Number of Participants	
Total Participants	344
Not fully completed	-43
Subtotal	**301**
Do not live in Switzerland	7
Are not between 18 and 39 years	18
Inconsistent answer sheets	8
Total	**268**

Table 18: Calculation number of participants survey (own table)

4.3   Section 1: Demographic Analysis

The survey conducted three demographic factors: gender, age and education. Each of them is discussed below.

4.3.1   Gender

As shown in figure 5, the majority of respondents were male: 145 out of 268 participants (54%). 123 participants were female (46%). Because of the nature of the author's personal networks the snowball sampling approach used, a predominance of male participants was expected.
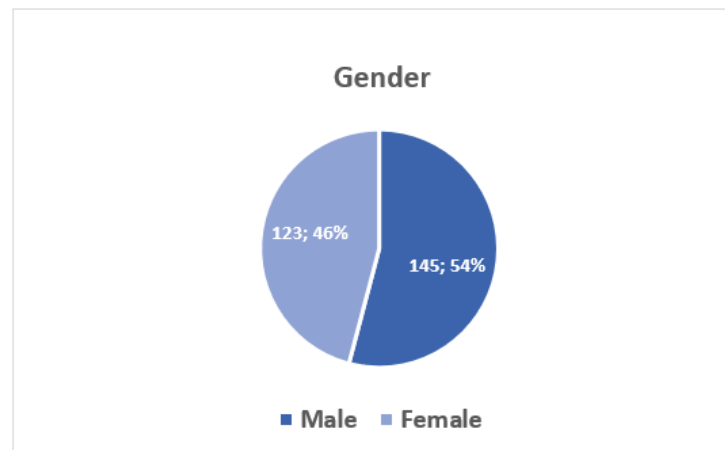

Figure 5: Gender of participants (own figure)

4.3.2   Age

As already explained, the target group was between 18 and 39 years old. The age group of 26 to 29 accounted for 109 participants or around 41% of the total participants; it therefore represents the largest group (see table 19). People between 22 and 25 represent 31% (n=84), followed by the group between 30 and 33 at 14%. The two smallest age groups were people between 18 and 21 (8%) and between 34 and 39 (6%). The average age of all respondents was 26.6 years.

Age	Number of Participants	Percentage
18 to 21	22	8%
22 to 25	84	31%
26 to 29	109	41%
30 to 33	38	14%
34 to 39	15	6%
Total	**268**	**100%**

Table 19: Participants age (own table)

As can be seen in figure 7, the data of the variable "age" shows a normal distribution, as most of the participants were between 24 and 29 years old. This might be an effect of the

snowball sampling approach, as mainly friends of the researcher participated and most of them are in this age class.
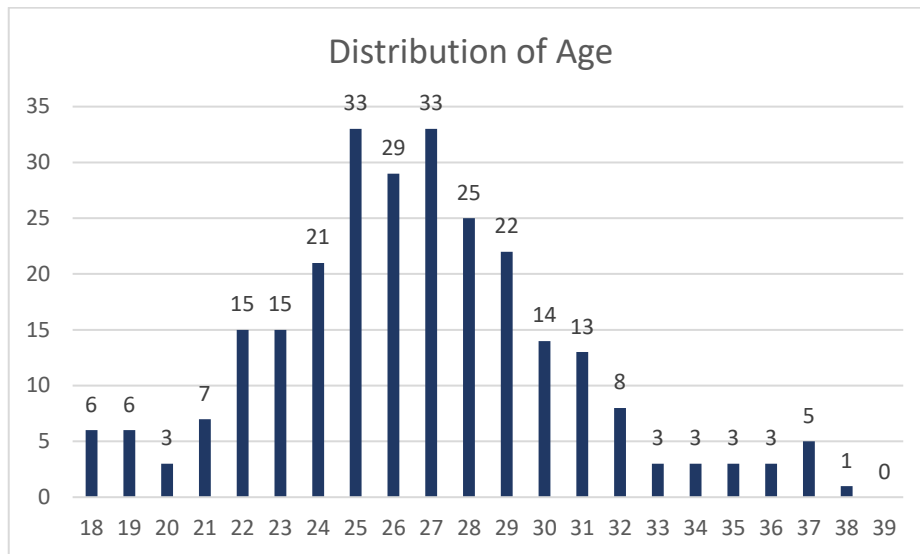
Figure 6: Distribution of age (own figure)

4.3.3   Educational Level

Of the 268 participants, 29% (79 individuals) stated to attend or having completed a master or doctoral degree. Additionally, 27% (73 individuals) stated to have completed a bachelor, and 21% (56 individuals) said they were attending a college or university. The participants with an academic background therefore accounted for more than 75%. This again can be a consequence of the snowball sampling, as the researcher sent the survey to many former and actual students and, in addition, posted the survey on a university forum. Figure 8 gives a complete overview of the distribution of the educational level of the participants.

Figure 7: Participant educational level (own figure)

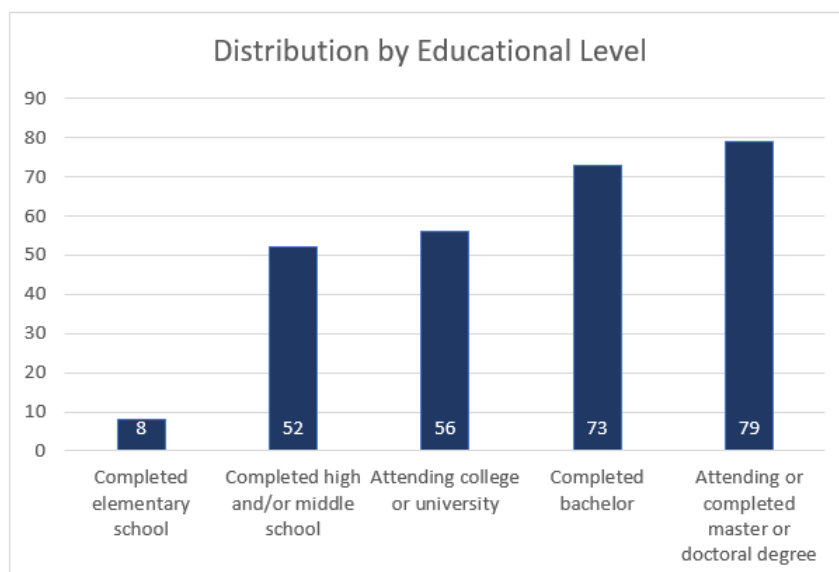## 4.4   Section 2: Sharing Economy in General

This subchapter analyzes the questions related to the sharing economy in general.

4.4.1   Awareness of the Sharing Economy

All of the 268 participants said that they are aware of the sharing economy business concepts such as, or similar to Airbnb, Uber, Sharoo or CouchSurfing. Only two respondents, which were already excluded from the survey since they do not live in Switzerland, answered that they are not aware of such concepts.

4.4.2   Future Usage Behavior

In order to identify the future usage behavior for the sharing economy, a five-point Likert scale had been used. Participants had to choose between a range from (1) strongly agree to (5) strongly disagree if they planned to use sharing economy services in the next two years.

Around 84% (n=225) of the people either agreed or strongly agreed to this statement and only 1.5% (n=4) disagreed or strongly disagreed to it. This results on average, people agreed with a rating of $\overline{x}$=1.65 to the statement (see table 20).

Statement	Average Rating (n=268)			
I plan to use sharing economy services in the next two years	1.65			
[0 – 1.4] Strongly agree	[1.5 – 2.4] Agree	[2.5 – 3.4] Neutral	[3.5 – 4.4] Disagree	[4.5 – 5.0] Strongly disagree

Table 20: Future usage behavior (own table)

An analysis of the data by age group revealed significant differences (see appendix 8.3.1). It could be overserved that younger participants are more likely to use sharing economy services in the future than the older generation. For instance, 18- to 22-year-olds have an average value of $\overline{x}$=1.32, which means they 'strongly agree' to the statement, whereas the age group 33 to 39 have an average value of $\overline{x}$=2.05, which means that they only 'agreed' to it.

4.4.3   Number of Registrations on Sharing Economy Platforms

With 48% (n=129), nearly half of the participants said that they are registered on two sharing economy platforms (see figure 9). More than a fifth (22%, n=60) said that they are registered

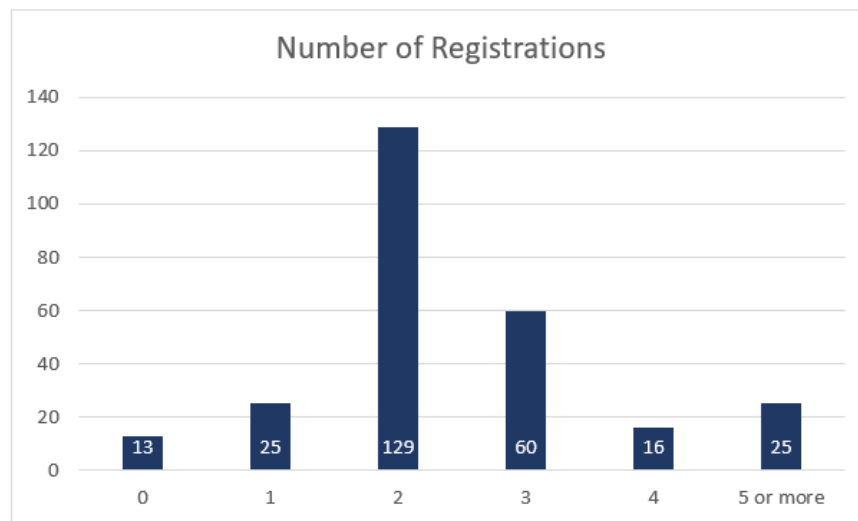on three platforms. Less than 5% indicated that they are not registered on any sharing economy platform.

Figure 8: Number of registrations (own figure)

On average, people between 18 and 39 years are registered on $\overline{x}$=2.43 (n=268) sharing economy platforms (considering the option 5 or more as '5'). When having a look at the data of the people who are older than 39 (excluded data), the mean registration is only $\overline{x}$=1.56 (n=23). The comparison of those two averages shows that people who are older than 39 years tend to be registered on fewer sharing economy platforms. In order to analyze whether this difference is significant or just has happened by coincidence, a t-test was used.

	18 – 39 years	Over 39y
Mean	2.43	1.56
Variance	1.407	2.256
Observations (=n)	268	23
degrees of freedom (df)	24	
t Stat	2.698	
P(T<=t) one-tail	0.0062	
t Critical one-tail	1.710	
P (P<=t) two-tail	0.012	
t Critical two-tail	2.063	

Table 21: T-Test for the registrations on sharing economy platforms (own table)

As can be seen in table 21, the t-value (2.698) is higher than the critical t-value (1.710), and p (0.0062) is smaller than 0.05. Therefore, it can be concluded that there is a significant difference between the two groups. People who are older than 39 years tend to be registered

on fewer sharing economy platforms than people between 18 and 39 years. However, no significant pattern could be overserved within the target group (18 to 39 years).

4.4.4   Frequency of Usage

Around 38% (n=103) of the surveyed people use the sharing economy a few times per year. Nearly 25% (n=65) use it on a monthly and around 20% (n=53) on a weekly basis (see figure 10). The average frequency is $\bar{x}$=3.44 (n=268), this means that people between 18 and 39 years use the sharing economy on average a bit more than a few times per year (4) but less than monthly (3).
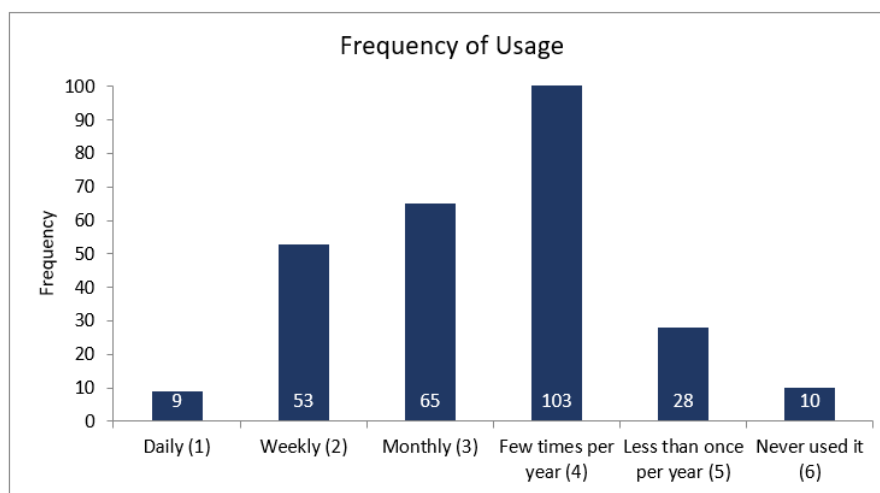

Figure 9: Distribution frequency of usage (own figure)

When dividing the sample in age groups, it can be seen that people between 18 and 30 years use the sharing economy with an average of $\bar{x}$=3.30 (n=215) more often than people between 31 and 39 years, who have an average of $\bar{x}$=4.28 (n=39). A t-test (see appendix 8.3.2) proved that this difference is significant. Additionally, the people who said that they never used a sharing economy were all between 32 and 39 years old (n=10).

4.4.5   Comfortability with sharing economy scenarios

As mentioned in the methodology chapter, six different scenarios in the context of participating in the sharing economy were assessed by using a five-point Likert-Scale.

Scenario	Average level of comfortability (n=268)	Rank
Rent out your apartment/house	1.83	2
Rent an apartment/house	3.24	4
Rent out your drilling machine	3.23	3

Rent a drilling machine		3.98		6
Rent out your car		1.70		1
Rent a car		3.30		5
[0 – 1.4] very uncomfortable	[1.5 – 2.4] somewhat uncomfortable	[2.5 – 3.4] Neither uncomfortable nor comfortable	[3.5 – 4.4] somewhat comfortable	[4.5 – 5.0] Very comfortable

Table 22: Average level of comfortability (own table)

As shown in table 22, the level of comfortability is lowest ($\overline{x}$=1.70) when people rent out their own car, followed by renting out their own apartment/house ($\overline{x}$=1.83). On the other side the level of comfortability is way higher if people are the renters themselves.

The same is valid for the levels of comfortability for renting an apartment ($\overline{x}$=3.24), a drilling machine ($\overline{x}$=3.98) and a car ($\overline{x}$=3.30), which are all around neither uncomfortable nor comfortable. An exception can be seen when people have to rent out their drilling machine with a comfortability level of $\overline{x}$=3.23, which is nearly as high as being the renter of an apartment ($\overline{x}$=3.24) or car ($\overline{x}$=3.30).

4.4.6 Barriers to Participate in the Sharing Economy

Table 22 shows the results of the analysis why people do not participate in the sharing economy. It became evident that the sentence 'certain things are too personal to share' ($\overline{x}$=2.06) is seen as the biggest barrier, followed by 'other people do not pay as much attention to things as I do' ($\overline{x}$=2.16) and 'afraid that the lent items will break or become defective' ($\overline{x}$=2.21). The 'lack of trust towards the private person who I share with' is seen as the fourth biggest barrier, with an average of $\overline{x}$=2.42. Being 'scared that the product/service is not available when I need it' ($\overline{x}$=3.13), being 'scared that undesirable social interactions with other platform members could occur' ($\overline{x}$=3.15) and 'signing up to sharing economy platforms is too time consuming' ($\overline{x}$=3.94) are with average ratings all above 3.0 (neutral), hence not really seen as barriers.

Barrier	Average Rating (n=268)	Rank
I am scared that the product/service is not available when I need it	3.13	8
I don't want to disclose personal information	2.65	6

Signing up to sharing economy platforms is too time consuming	3.94	9
Lack of trust towards the private person who I share with	2.42	4
Scared that undesirable social interactions with other platform members could occur	3.15	7
Certain things are too personal to share	2.06	1
The offered items of others may be unhygienic	2.42	4
Other people do not pay as much attention to things as I do	2.16	2
Afraid that the lent items will break or become defective	2.21	3
Being afraid that the lent things are not returned	2.51	5

[0 – 1.4] Strongly agree	[1.5 – 2.4] agree	[2.5 – 3.4] neutral	[3.5 – 4.4] disagree	[4.5 – 5.0] Strongly disagree

Table 23: Barriers to participate in the sharing economy (own table)

4.5   Section 3: Importance of Trust and its Levels

This subchapter analyzes the questions related to the importance of trust and its levels.

4.5.1   Importance of Trust

When having a look at the results of the questions related to the importance of trust (see table 24), it can be seen that trust towards the counterpart plays a 'very important' role when people have to rent out their own apartment ($\overline{x}$=1.37). In total, 91.5% (n=246) of the surveyed people indicated that trust towards the renter of an apartment plays either a 'very important' or 'important' role. On the other hand, when being a renter, trust towards the offeror of the apartment is on average seen as 'important' ($\overline{x}$=1.94). In the case of transportation, it does not play such a big role, as trust when offering or getting transportation is nearly seen as equally important with $\overline{x}$=2.06, respectively $\overline{x}$=1.94.

When people rent ($\overline{x}$=3.22) or rent out their own drilling machine ($\overline{x}$=2.79), trust towards the counterpart is seen as 'neutral' and therefore neither plays an important nor an unimportant role.

When looking at the data by age classes, a significant difference in the scenarios with the drilling machine can be observed. People between 18 and 28 years stated that trust plays on average a neutral ($\bar{x}$=3.03) role when renting a drilling machine, whereas participants between 29 and 39 years stated that trust has a low importance ($\bar{x}$=3.70) in this scenario. Also, when renting out their own drilling machine, the younger generation (18-28) sees trust as more important ($\bar{x}$=2.58) than the older generation (29-39), which had an average of $\bar{x}$=3.31. A t-test revealed that both differences are significant (see appendix 8.3.4).

Looking at the data by gender, it became apparent that trust plays a more important role for women ($\bar{x}$=1.18) when they have to rent out their own apartment than for men ($\bar{x}$=1.52). According to the t-test, which is shown in appendix 8.3.3, this difference is significant as well. However, in the scenario of renting an apartment, the level of trust for women ($\bar{x}$=1.93) and men ($\bar{x}$=1.95) were nearly on an identical level.

Scenario	Average Rating (n=268)	Rank
Rent her/his apartment	1.94	2
Rent out your own apartment	1.37	1
Rent her/his drilling machine	3.22	6
Rent out your own drilling machine	2.79	5
Get private transportation	2.12	4
Offer private transportation	2.06	3
[0 – 1.4] Very important	[1.5 – 2.4] Important	[2.5 – 3.4] neutral	[3.5 – 4.4] Low importance	[4.5 – 5.0] Not at all important

Table 24: Importance of trust (own table)

4.5.2   Different Trust Levels

The second question in the section 'importance of trust and its levels' included the different trust levels. When asking people how high their level of trust is if they have to share an apartment with different parties, it can be seen in table 25 that the level of trust is 'very high' if they have to share with a family member ($\bar{x}$=1.20) or a friend ($\bar{x}$=1.49). The third highest level of trust with the rating 'high' is then already seen towards an Airbnb host with 4.9 out of 5 stars (over 400 reviews) with an average rating of $\bar{x}$=2.22, therefore placed before a colleague/fellow student ($\bar{x}$=2.49) or a neighbor ($\bar{x}$=2.84). An Airbnb host with 4.9 out of 5 stars but only 5 ratings has a way lower level of trust as compared to one with over 400 ratings, which can be seen in the average rating of $\bar{x}$=3.26, more than one point less. An

Airbnb host with 400 ratings but only 3.9 out of 5 stars is seen with an average rating of $\overline{x}=3.36$, more or less on the same trust level as the one with only 5 ratings but 4.9 stars ($\overline{x}=3.26$).

Share apartment with	Level of Trust (n=268)	Rank
A family member	1.20	1
A friend	1.49	2
A neighbor	2.84	5
A colleague/fellow student	2.49	4
An Airbnb host with 4.9 out of 5 stars (over 400 ratings)	2.22	3
An Airbnb host with 4.9 out of 5 stars (5 ratings	3.26	6
An Airbnb host with 3.9 out of 5 stars (over 400 ratings)	3.31	7

[0 – 1.4] Very high	[1.5 – 2.4] High	[2.5 – 3.4] Medium	[3.5 – 4.4] Low	[4.5 – 5.0] Very low

Table 25: Different trust levels (own table)

When looking at the data by frequency of use of sharing economy services, it could be identified that people who use sharing economy services on either a daily or weekly basis have a significant (see appendix 8.3.7) higher trust level ($\overline{x}=1.92$) towards an Airbnb (good and many ratings) as compared to people who use it only on a monthly basis or less ($\overline{x}=2.34$).

Table 26 shows this correlation by comparing how much trust the different participants had towards an Airbnb host (4.9 out of 5 stars, over 400 ratings), depending on their frequency of use. As shown in table 26, users who often use such services have more trust than others who use sharing economy services less often. The level of trust also depends on how many sharing economy platforms a user is signed up. Users who were registered on 5 or more sharing economy platforms had more trust towards such a host than a user registered only on one platform.

Frequency of usage	Average level of trust towards Airbnb host (4.9 out of 5 stars, over 400 ratings)	N
Daily	1.67	9
Weekly	1.96	53
Monthly	2.29	65

Few times per year	2.28	103
Less than once per year	2.64	28

Table 26: Level of trust dependent of frequency of usage (own table)

When comparing between trusting a known person or the ratings on a sharing economy platform when getting a recommendation to rent/book something, it became apparent that this depends on the known person, but also on the recommended product to rent/book.

As table 27 illustrates, having recommendations from a friend show a higher value than a recommendation from a neighbor. With an average rating of $\bar{x}$=2.51, people neither agreed nor disagreed with the statement that they would book an apartment (only 3.5 out of 5 stars, over 400 ratings) that a friend recommended. 57% (n=152) of the respondents agreed/strongly agreed to that statement, whereas 20% (n=54) disagreed/strongly disagreed and 23% neither disagreed nor agreed (n=62). However, people 'agreed' ($\bar{x}$=1.94) to the statement that they would rent a small personal item (i.e. drilling machine) that a friend recommended, even though the offeror has a bad rating.

If a neighbor recommends an apartment which has bad ratings, only 23% (n=61) would book it, whereas 43% (n=114) disagreed/strongly disagreed with this statement. Recommendations from a neighbor have an average rating of $\bar{x}$=3.31 (apartment) and $\bar{x}$=2.72 (small personal item), which is about 0.8 points less weight than recommendations from a friend.

Scenario	Average Rating (n=268)
I would book an apartment that a **friend** recommended to me even though it has only 3.5 out of 5 stars (over 400 ratings, given by qualified reviewers)	2.51
I would rent a small personal item (i.e. drilling machine) from somebody that a **friend** recommended even though she/he has only 3.5 out of 5 stars (over 400 ratings, given by qualified reviewers)	1.94
I would book an apartment that a **neighbor** recommended to me even though it has only 3.5 out of 5 stars (over 400 ratings, given by qualified reviewers)	3.31
I would rent a small personal item (i.e. drilling machine) from somebody that a **neighbor** recommended to me even though it has only 3.5 out of 5 stars (over 400 ratings, given by qualified reviewers)	2.72

[0 – 1.4] Strongly agree	[1.5 – 2.4] Agree	[2.5 – 3.4] Neutral	[3.5 – 4.4] Disagree	[4.5 – 5.0] Strongly disagree

Table 27: Comparison recommendation friend/neighbor and ratings (own table)

4.6 Section 4: Effectiveness and Special Features of Trust-Increasing Measures

This subchapter analyzes the questions related to the effectiveness of trust increasing measures.

4.6.1 Effectiveness of Trust Increasing Measures

By analyzing the data to the question regarding the effectiveness of the trust increasing measures ('I trust provider on sharing economy platforms more + statement', see table 28), it became evident that nine out of ten trust-increasing measures have a positive effect on trust from a consumer perspective towards the private offeror of a good/service.

Tool/Measure	Statement	Average Rating (n=268)	Rank
Removing offerors anonymity	if they disclose information like age, name, gender, profile photo etc. of themselves.	2.03	7
Removing offerors anonymity	if I would know where they work	2.86	14
Removing offerors anonymity	if they would write a short text about themselves (their hobbies, interests etc.)	2.64	12
Verification of Information	if their identity was verified by the platform provider	1.69	1
Verification of Information	if their phone number was verified by the platform provider	2.25	10
Verification of Information	if their offered item/service or skills were verified by the platform provider	2.18	9
Background checks	if their background (i.e. criminal background, work history and or driving record) was checked by the platform provider	2.10	8
Linkage social media	if their social media profiles like Facebook, Instagram, LinkedIn etc. are linked on their profile	2.53	11
Linkage social media	if I would see that we have common friends on social media	2.71	13

Aggregated trust profiles	if I would see an overview of all their ratings and reviews from different sharing economy platforms on their profile (such as Uber, Airbnb etc.)	1.93	6
Ratings	if I would see ratings from other users of the platform	1.82	3
Reviews	if I see written reviews with pictures from other users	1.88	5
Certificates/status	if they are labelled as qualified hosts/providers (meets certain standards i.e. low cancelation rate etc.)	1.77	2
Payment process	if my money only gets transferred after I have confirmed to have received the service/item	1.83	4
Certification of the platform	if I know that all the tools such as rating system, reviews, qualification of members etc. are certified and overviewed by an independent 3rd party (like quality label)	1.93	6

[0 – 1.4] Strongly agree	[1.5 – 2.4] Agree	[2.5 – 3.4] Neutral	[3.5 – 4.4] Disagree	[4.5 – 5.0] Strongly disagree

Table 28: Effectiveness of trust increasing measures (own table)

As can be seen in table 28, the strongest positive effect (rank 1) to increase trust could be seen 'if the providers identity gets verified by the platform provider' (verification of the offeror, $\overline{x}$=1.69). The other two statements regarding 'verification of the offeror,' where the offeror gets verified via his/her phone number and where the offered item/service or skills get verified, are placed on rank 9 and 10 and are therefore way less effective than an identity verification.

The second strongest effect (rank 2) could be seen 'if the offeror is labelled as a qualified host/provider' (certificates / status, $\overline{x}$=1.77), followed by 'if I would see ratings from other users of the platform' (ratings, $\overline{x}$=1.82) and 'if my money only gets transferred after I have confirmed to have received the service/item' (payment process, $\overline{x}$=1.83).

The only trust-increasing measure where all statements had a rating of 'neutral' and the average respondent did not agree that it increases trust is 'linkage to social media.' The two statements for this tool got an average rating of $\overline{x}$=2.53 (rank 11) and $\overline{x}$=2.71 (rank 13) respectively. However, it has to be mentioned that 52% of the surveyed people (n=139) either 'strongly agreed' or 'agreed' to the statement that 'if their social media profiles like

Facebook, Instagram, LinkedIn etc. are linked to their profile,' it would increase their trust towards the offeror.

Two out of the three statements regarding 'removing the offerors anonymity,' namely showing where he/she works and providing a short text about themselves (hobbies, interests etc.) had only a 'neutral' impact on trust as well (with $\overline{x}=2.86$, respectively $\overline{x}=2.64$). Nevertheless, the third statement 'providing information of the offeror like age, name, gender profile photo etc.' got ranked as the 7th most effective measure, with an average of $\overline{x}=2.03$, and has therefore a positive effect on trust.

No significant difference could be observed when the data was aggregated by age classes (18-39), gender, education or the frequency of usage. However, when looking at the participants which are older than 39 years (not the target group), it became evident that all statements/tools were rated as having a less effective impact on trust, except:

- if they disclose information like age, name, gender, profile photo etc. of themselves (removing offerors anonymity)
- if they would write a short text about themselves (removing offerors anonymity)
- if my money only gets transferred after I have confirmed to have received the service/item (payment process)

However, the differences were only statistically significant for the following statements:

Statement	Difference 18-39y and 40y+
if their background (i.e. criminal background, work history and or driving record) was checked by the platform provider	0.79
if I their social media profiles like Facebook, Instagram, LinkedIn etc. are linked on their profile	0.53
if I would see an overview of all their ratings and reviews from different sharing economy platforms on their profile (such as Uber, Airbnb etc.)	0.55
if I would see ratings from other users of the platform	0.31
if I see written reviews with pictures from other users	0.37

Table 29: Effectiveness of trust increasing measures —age comparison (own table)

4.6.2 Special Features and Constellations of Trust Increasing Measures

The last dataset of the survey referred to special features and constellations of some of the above-listed trust increasing measures.

As shown in table 30, people agreed to the statement that they rather trust a person with a rating of 4.2 out of 5 stars of more than 400 customers, as compared to one with a rating of 4.8 from 8 customers ($\overline{x}$=1.84). In total, 82% (n=219) either strongly agreed or agreed to this statement, whereas not even 4% (n=10) disagreed (none of them strongly). A video of the provider would increase trust more than a photo, for 62% (n=166) of the surveyed people and only 10% (n=25) either disagreed or strongly disagreed with this statement, which results in $\overline{x}$=2.19 and this therefore results in an overall rating of 'agree'. Furthermore, pictures taken from former customers are perceived as more trustworthy than pictures that were taken by the product/service provider himself ($\overline{x}$=1.81). In total, around 83% (n=222) of the people either agreed or strongly agreed to this statement.

On average, the surveyed people also agreed to the statement that they rather trust reviews which were written by similar people (age, location). In total, 55% (n=148) of the 18- to 39-year-olds agreed to this statement. Around 34% (n=91) had a neutral opinion, and 11% (n=29) disagreed or strongly disagreed with it. With an average rating of $\overline{x}$=2.28, respondents also agreed that they trust reviews more if they come from customers who were qualified by the platform provider. In total, 65% (n=175) agreed or strongly agreed to this statement.

No significant difference could be obtained when processing the data according to age, gender etc.

Statement	Average Rating (n=268)
I trust a person more who has a rating of 4.2 out of 5 stars from more than 400 customers compared to one with a 4.8 from 8 customers	1.84
A video of the provider himself/herself would increase my trust more than a photo	2.19
I trust pictures taken from former customers more than pictures that were taken by the product / service provider himself	1.81
I trust more reviews that were written from people who are at the same age and live nearby compared to reviews from people who live abroad and are much older or younger.	2.46

I trust reviews more if they come from former customers who were qualified by the platform provider		2.28		
[0 – 1.4] Strongly agree	[1.5 – 2.4] Agree	[2.5 – 3.4] Neutral	[3.5 – 4.4] Disagree	[4.5 – 5.0] Strongly disagree

Table 30: Special features and constellations of trust increasing measures (own table)

4.7   Section 5: Control Questions

As already explained in subchapter 4.2, the control questions were used in order to identify incoherent data and exclude them from the analysis. Nevertheless, the control questions were not only implemented to identify inconsistent data sets, but also to gain additional data in important subject areas.

As illustrated in table 31, the participants agreed with an average rating of $\overline{x}=1.97$ that the lack of trust towards the offeror and his/her offering is a reason why they sometimes do not make a transaction/book something on a sharing economy platform.

Furthermore, 90% (n=239) agreed or strongly agreed to the statement that trust towards the private offeror of an apartment plays a more important role than trust towards the offeror of a drilling machine. None of the surveyed people disagreed or strongly disagreed with this statement, which leads to an average rating of $\overline{x}=1.57$. A significant difference (t-test, see appendix 8.3.6) could be seen in the age classes of 18 to 28 years and 29 to 39 years. People between 18 and 28 years rated the statement with $\overline{x}=1.66$, whereas people between 29 and 39 years rated it with $\overline{x}=1.33$. The older generation therefore strongly agreed to the statement, whereas people between 18 and 28 years only agreed to it.

The lack of information about the person who somebody shares something with makes around 84% (n=226) of the asked people skeptical to share, which results in an average rating of $\overline{x}=1.90$. Knowing that the service/product provider has good ratings on other sharing economy platforms increases trust for 80% of the surveyed people and was on average rated with $\overline{x}=1.95$. A significant difference (see t-test, appendix 8.3.12) can be observed when comparing the results of participants who use sharing economy services daily and weekly and the ones who use it only monthly, a few times per year or less. People who use the sharing economy daily or weekly agreed stronger to the statement (with an average rating of $\overline{x}=1.63$) than people who use the sharing economy less often (monthly, few times per year or less) with an average rating of $\overline{x}=2.08$.

When looking at the data of the statement 'if knowing where the provider is working increases trust,' it became apparent that this information only marginally increases trust, with an average rating of x̄=2.72. Only 40% (n=106) of the participants agreed or strongly agreed to this statement and around 44% (n=117) had a neutral opinion.

Statement	Average Rating (n=268)
The lack of trust towards the offeror and his/her offering is a reason why I sometimes do not make a transaction/book something on a sharing economy platform.	**1.97**
Trust towards the private offeror of an apartment plays a more important role for me than the trust towards the offeror of a drilling machine	**1.57**
Lack of information about the person whom I share with makes me skeptical to share	**1.90**
It would increase my trust if I know that the service/product provider has good ratings on other sharing economy platforms	**1.95**
It increases my trust if I know where the offeror of the product/service works	**2.72**

[0 – 1.4] Strongly agree	[1.5 – 2.4] Agree	[2.5 – 3.4] Neutral	[3.5 – 4.4] Disagree	[4.5 – 5.0] Strongly disagree

Table 31: Data from control questions (own table)

5 Discussion

The following chapter entails the discussion of the results. The subsequent chapters present the summary of findings and show how they relate to prior research in this field. Furthermore, the quality of the thesis is evaluated by having a look at the reliability, objectivity, and validity of this paper.

5.1 Summary of Findings and Relation to the Literature

Primary research in the form of an online survey revealed that 100% of the participants (target group: 18 to 39 years old) are aware of sharing economy business concepts such as, or similar to: Airbnb, Uber, Sharoo or CouchSurfing. A study from PwC (2015a), which was executed in 2014, pointed out that only 44% of US citizens were familiar with the sharing economy. Another study, which was carried out by Bohlin & Tuyet (2018) in 2018, came to the result that roughly 97% of Swedish people were aware of the sharing economy. Both studies therefore came to lower numbers. However, it has to be considered that the studies

are 1, respectively 5 years old and also included people who were over 39 years old, which can explain the lower percentage.

When looking at the at the future usage, 99% of the 18- to 29-year-olds and 95% of the 30- to 39-year-olds indicated that they plan to use sharing economy services during the next two years. Another study from PwC (2015b), which was carried out in Germany in 2015, asked the same question and came to result that 88% of the 18- to 29-year-olds and 79% of the age group 30-39 plan to use sharing economy services in the next two years. When comparing the numbers of both studies, it can be seen that the percentage in Switzerland is much higher. However, it must be taken into account that 4 years have passed between the two studies and thus the percentage in Germany has probably increased in the meantime as well.

On average, people are registered on 2.43 sharing economy platforms. Nearly half of the polled people said that they are registered on two platforms. The frequency of usage indicated that around 38% of the people use the sharing economy a few times per year, and around 44% either use it on a monthly or weekly basis. On average, people use it a bit more than a few times per year, but less than monthly. Furthermore, it could be identified that younger people (18-29) use the sharing economy more frequently than the older generation (30-39). A study which supports this result comes from Frick et al., (2012), who found out that younger people are more willing to share. Furthermore, a consumer survey from 2017, which was executed in the UK, came to the results that around 29% use the sharing economy a few times per year, a bit more than 21% on a monthly or weekly basis, and 38% said that they never used it (Ozcan, Möhlmann, & Krishnamoorthy, 2017). Comparing those results with the ones from this thesis, it can be noted that the frequency of usage in Switzerland is much higher. However, it has again to be highlighted that the survey from the UK is two years old, and that all age groups were surveyed.

The results of the question regarding the level of comfortability in different scenarios revealed that people feel more comfortable when they take the role of the renter instead of renting out their own property. They feel most uncomfortable when they have to rent out their car, followed by renting out their apartment. As already mentioned in the literature review, it plays a decisive role if the shared product or service affects the private sphere or not. However, the fact that people feel more uncomfortable when they have to rent out their car than renting out their apartment, which is seen as affecting more the private sphere, shows that affecting the private sphere is not the only factor which has an impact. This phenomenon could also be observed in a study from Veridu (2016), where people indicated

that they feel more uncomfortable when they have to let someone they do not know borrow their car than letting someone they have never met rent their apartment. Therefore, it can be said that not only the factor of affecting the private sphere plays a crucial role. Which other factors have an influence, however, has not been investigated. A possible factor could be financial risks which come with renting out an item. The surveyed people felt most comfortable when they had to rent a drilling machine, which is seen as a product which does not affect the private sphere, nor is it associated with high financial risks. Overall, it can be said that the level of comfortability depends of the product/service which is shared, as well as whether people take the role of the renter or have to rent out their product.

Research furthermore revealed that the lack of trust towards the private person who people share with is still a reason why they do not participate in the sharing economy, even though many sharing economy platforms use trust increasing measures nowadays. However, the largest barrier to not participate is that certain things are too personal to share, which was also identified as being the largest reason by Frick et al., (2012). Nevertheless, trust plays a crucial role which is still seen as a big barrier and a major reason why people sometimes do not make a transaction on a sharing economy platform.

The study furthermore exposed that the importance of trust, on the one hand, depends on whether one is an offeror or a consumer, and on the other hand, on the product/service that is shared. As already identified when asking about the level of comfortability, it was also determined that trust is more important when sharing an apartment than a drilling machine.

Trust is also seen as more important in all scenarios when acting as an offeror of a product/service. However, the difference when comparing the importance of trust between offering and getting private transportation was minimal. Reasons for this phenomenon were not analyzed. A possible reason could be that the offeror (driver) is present when offering transportation and thus still has control over his good, which is not the case when renting out an apartment or drilling machine.

The effectiveness of trust-increasing measures can be seen in the different trust levels people have when they have to share an apartment. The level of trust is highest if they have to share an apartment with a family member, followed by a friend. The third highest level of trust is enjoyed by an Airbnb host with many good ratings, before a colleague/fellow student or neighbor. A similar result can be observed in Mazzella et al. (2016), who figured out that the level of trust when sharing a ride is highest when people have to share with a family

member, followed by a friend. In the study of Mazzella et al. (2016), a member of a sharing economy platform with a completed profile was also perceived as more trustworthy than a work colleague or a neighbor. The study from this master thesis went a bit more into detail and found out that that not only the level of rating, but also the number of ratings is decisive to increase trust, which can be seen in the much lower level of trust towards an Airbnb host with the same number of stars, but much fewer ratings. The level of trust towards an Airbnb host with good but only a few ratings was on a similarly low level as the one with rather poor but many ratings.

The effectiveness of trust-increasing tools can also be seen in the fact that ratings on sharing economy platforms can replace recommendations from friends and neighbors. Only 57% of the polled people would book an apartment which a friend recommended if it had many rather low ratings. This number significantly decreases to 23% if such an apartment gets recommended by a neighbor. However, the ratings seem to be less important in the context of renting a small personal item (i.e. drilling machine). More people were willing to rent a small personal item with bad ratings that a friend/neighbor recommended.

The question therefore arises why is there such a big difference? Reasons for this were not analyzed in this thesis. However, a reason could be that in the case of renting a drilling machine, consumers have a lower involvement due to the fact that a rather bad provider induces no significant negative consequences. But booking a bad apartment would mean spending several days in an unsatisfactory accommodation, whereas a bad drilling machine/provider would only mean that you may not be able to drill a hole.

When looking at the data of the effectiveness of trust-increasing measures, it becomes evident that nine out of ten trust-increasing measures have a positive effect on trust from a consumer perspective. It also became apparent that the identification of the identity of the offeror of the product/service by the platform provider had the strongest positive effect on trust. Conventional trust increasing measures such verification of the identity, certificates which the offeror can get (i.e. trusted host), ratings, reviews etc. had a strong positive effect on trust as well. The smallest effect was seen on linking of social media accounts. However, this approach also increases trust for more than half of the participants of the survey. A detailed list of the different levels of effectiveness of the measures can be seen in subchapter 4.6.1. Such results could also be observed by Friesen (2017), where the verification of the authenticity of the online profile was rated as being the most effective trust-increasing measure on a sharing economy carpooling platform, which also exactly reflects the results

of this thesis. Reviews as well as ratings were as well identified to be some of the most effective tools in the study of Friesen (2017). A study which analyzed the importance of different trust-increasing tools in the context of room sharing also confirmed that ratings and reviews are seen as some of the most important tools for consumers, whereas the linkage of social media had the lowest impact (Wiencierz & Röttger, 2017).

However, it should be noted that the effectiveness of such trust increasing measures also depends on certain characteristics and features. A video of the provider would increase trust more than a photo, and consumers trust reviews more if they come from qualified customers. Furthermore, it also plays a role whether the author of the review has similarities with the reader of the review in certain respects (age and geographical location). People believe reviews from users with similarities more than reviews from people who are, for example, much older or live in another country.

The gender, education and the frequency of use of sharing economy services has no significant influence on the effectiveness of such trust-increasing measures. However, a significant difference between the two age groups 18-39 and over 39 years could be identified. Multiple trust increasing measures are less effective for the older generation (over 39 years) as compared to the younger generation between 18 and 39 years. A detailed list can be seen in subchapter 4.6.1.

Overall, it can be said that sharing economy business concepts are well known in the generation between 18 and 39 years. On average, this generation uses such services almost on a monthly basis. However, a lack of trust is still seen as a reason why sometimes a transaction is not done, and this is also true for the younger generation which uses the sharing economy services more frequently. Nine out of ten analyzed trust-increasing measures showed that they have a positive impact on trust building. However, the effectiveness of those measures varies considerably and is furthermore dependent on their features and characteristics.

5.2 Evaluation of Quality Criteria/Critical Evaluation

There are multiple criteria to which a research project can be evaluated for its quality. Berekoven, Eckert, & Ellenrieder (2009) state that the three criteria reliability, objectivity and validity are the most common which contribute significantly to the quality of a research project. In this subchapter, these three criteria will be reviewed in order to assess the quality of this master thesis.

5.2.1   Reliability

A research project or measuring instrument is considered reliable if the results of the measures are reproducible with repeated measurements (Berekoven, Eckert, & Ellenrieder, 2009). In other words, the results have to be almost identical in case of repeated measurement.

In order to test the surveys reliability level, a Cronbach's Alpha test was applied. A Cronbach's Alpha is a common instrument to measure the strength of reliability. A Cronbach Alpha value can be between -1.0 and +1.0. A value of 0.70 or higher is considered "acceptable" in most social science research situations (UCLA, n.d.).

The following table 32 shows the calculation of the Cronbach's Alpha value of the gathered data:

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*	*F crit*
Rows	857.487283	267	3.211562858	4.74525461	1.0849E-121	1.148320986
Columns	3407.791806	48	70.99566263	104.8998604	0	1.358739485
Error	8673.80003	12816	0.676794634			
Total	12939.07912	13131				
	1-(3.211562858/0.676794) =		**0.789263152**	**Cronbach's Alpha**		

Table 32: Calculation Cronbach's Alpha (own table)

As the Cronbach's Alphas remained above the acceptable level of 0.70 with the value of 0.789, the internal consistency is seen as acceptable and the surveys reliability therefore given.

5.2.2   Validity

Literature distinguishes between internal and external validity. They are concepts which reflect whether results of a study are trustworthy and meaningful or not (Berekoven, Eckert, & Ellenrieder, 2009). In order to check if validity is given, both, internal and external validity are assessed in the next subchapters.

Internal Validity

Internal validity is given if an investigation really measures what it is supposed to measure, and thus provides credible results. It checks if the questions asked can really analyze the phenomena in focus of the research (Mora, 2011). Questions on a questionnaire are thus

valid if they measure what they are supposed to. Birnberg, Shields, & Young (1990) see internal validity as a prerequisite to achieving external validity.

In this thesis, the researcher has derived many questions from the questionnaire of former renowned studies. This, as well as the fact that the questions were often asked to the participant directly about his perception of the dependent variable (e.g. level of trust), are both indications of a high internal validity. Another essential prerequisite is the willingness of the participants to give accurate answers. In order to ensure this, the researcher, on the one hand, made sure that the questionnaire was understandable to the target group by running multiple test-runs and including control questions which made sure that inconsistent answers were excluded from the analysis. Furthermore, the questionnaire entailed no shameful, personal or other questions that could have induced the participant to give socially acceptable answers. Also, the researcher guaranteed to treat the data confidentially, which increased the likelihood that respondents give honest answers. Additionally, the participants IP-addresses were tracked in order to make sure that people do not participate twice in the survey.

Consequently, it was assured that on the one hand, the questions measured what they were supposed to, and on the other hand, it was ensured that participants answered as truthfully as possible and that only consistent answers were included in the analysis.

External Validity

External validity, on the other hand, refers to the validity of the results outside research. The results of the research should be applicable to the entire population or similar situations, groups or persons. In other words, how applicable are the findings to the real world and to which extent can they be generalized? (Shadish, Cook, & Campbell, 2002)

Due to the fact that snowball sampling was applied, the results of this research cannot be generalized. The reason is that this approach cannot guarantee that the sample represents the entire population accurately. Indications for this are that 75% of the polled people have an academic background, which does not reflect the overall population and can therefore lead to a distorted result. In addition, other demographic factors such as age and gender of the sample do not proportionally reflect those of the whole population. Moreover, a large proportion of the participants probably live in the canton of Zurich, which means that other cantons within Switzerland are not represented (cultural differences). Additionally, the target of 385 surveys was missed, which means that the target values (5% margin of error, 95% confidence interval) were not achieved.

Therefore, the sample did not include a necessary proportion of the entire population and the number of participants was not big enough. The results of the research can consequently not be used in generalizations pertaining to the entire population.

Overall, it can be said that the study may provide insights to specific areas such as the importance of trust and effectiveness of certain measures, but the given timeframe made it impossible to make a truly representative survey which would accurately represent the whole population. Nevertheless, the results provide insights on how important trust is within the sharing economy and how trust from a consumer perspective towards the offeror can be increased.

5.2.3   Objectivity

Berekoven, Eckert, & Ellenrieder (2009) say that objectivity is given when multiple people independently from each other collect data and end up with the same result. The contents of scientific work should therefore be objective, free of prejudice and as neutral as possible. Personal emotions and preferences of the author should not influence the results (Heesen, 2014).

Berekoven, Eckert, & Ellenrieder (2009) state that objectivity can be measured in three areas, namely the execution, evaluation and interpretation. In order to test the objectivity of this paper, the following sections discuss each of those areas:

Objectivity of Execution

Berekoven, Eckert, & Ellenrieder (2009) say that the less influence a research puts on the participants and the less interaction between them exists, the more objective is a given test. For instance, research methods were an interviewer is present can be biased through the so called interviewer-effect, where the presence of an interviewer induces socially desired answers (Wiersma, n.d.).

Due to the fact that people only received the link to the survey along with a little intro what the survey was all about, no interaction or possible influence was possible, so the objectivity of execution of the survey is given.

Objectivity of Evaluation

A test is valued more objective if it entails standardized questions and items. This assures that the researcher has little freedom in the evaluation of the results (Berekoven, Eckert, &

Ellenrieder, 2009). The questionnaire of this thesis was mainly built based on already existing research. Furthermore, a five-point Likert-scale, which is a common and reliable instrument, was used. Consequently, the objectivity of evaluation is given.

Objectivity of Interpretation

The smaller the range of freedom when interpreting the results, the more objective a test will be (Berekoven, Eckert, & Ellenrieder, 2009). In order to interpret the data rationally and objective, multiple statistical tests were used. The researcher's freedom in the interpretation of the results was therefore small and the interpretive objectivity was met.

6   Conclusion

This chapter entails the conclusion of the thesis by answering the research questions and either accepting or rejecting the hypotheses which are stated in subchapter 1.6. Furthermore, this chapter provides the recommendations and implications based on the findings of this thesis. Last, the limitations of this study are discussed and directions for further research are suggested.

6.1   Answering Research Questions and Hypotheses

Answering the research questions and if the hypotheses get accepted or not is based on the data of the online questionnaire.

6.1.1   Research Questions

Regarding the first research question:

"Is the lack of trust between the offeror and consumer a reason why consumers do not participate in the sharing economy?"

The analysis of the results shows that the lack of trust is, next to other reasons such as "other people do not pay as much attention to things as I do" or "certain things are too personal," a major reason why people do not participate in the sharing economy.

Regarding the second research question:

"Does a lack of trust prevent transactions?"

People agree that the lack of trust towards the offeror and his/her offering is a reason why they sometimes do not make a transaction/book something on a sharing economy platform.

Therefore, it can be said that the lack of trust hinders transactions on sharing economy platforms.

Regarding the third research question:

"Is the importance of trust dependent on the product/service that is shared?"

The results show that the importance of trust is highly dependent on the product/service that is shared. The importance of trust in the context of renting out an apartment or renting an apartment is seen as higher than when renting or renting out a drilling machine or offering private transportation.

Regarding the main research question of this paper:

"Which measures have the highest positive impact on trust from a consumer perspective towards the offeror of a service/product?"

The analysis showed that the effectiveness of trust increasing measures varies to a large extent. The highest positive impact on trust from a consumer perspective towards the service/product provider is to be determined as follows (descending order):

Tool/Measure	Statement	Average Rating (n=268)	Rank
Verification of Information	if their identity was verified by the platform provider	1.69	1
Certificates / status	if they are labelled as qualified hosts/providers (meets certain standards i.e. low cancelation rate etc.)	1.77	2
Ratings	if I would see ratings from other users of the platform	1.82	3
Payment process	if my money only gets transferred after I have confirmed to have received the service/item	1.83	4
Reviews	if I see written reviews with pictures from other users	1.88	5
Certification of the platform	if I know that all the tools such as rating system, reviews, qualification of members etc. are certified	1.93	6

	and overviewed by an independent 3rd party (like quality label)		
Aggregated trust profiles	if I would see an overview of all their ratings and reviews from different sharing economy platforms on their profile (such as Uber, Airbnb etc.)	**1.93**	**6**
Removing offerors anonymity	if they disclose information like age, name, gender, profile photo etc. of themselves.	**2.03**	**7**
Background checks	if their background (i.e. criminal background, work history and or driving record) was checked by the platform provider	**2.10**	**8**
Verification of Information	if their offered item/service or skills were verified by the platform provider	**2.18**	**9**
Verification of Information	if their phone number was verified by the platform provider	**2.25**	**10**
Linkage social media	if their social media profiles like Facebook, Instagram, LinkedIn etc. are linked on their profile	**2.53**	**11**
Removing offerors anonymity	if they would write a short text about themselves (their hobbies, interests etc.)	**2.64**	**12**
Linkage social media	if I would see that we have common friends on social media	**2.71**	**13**
Removing offerors anonymity	if I would know where they work	**2.86**	**14**

[0 – 1.4] Strongly agree	[1.5 – 2.4] Agree	[2.5 – 3.4] Neutral	[3.5 – 4.4] Disagree	[4.5 – 5.0] Strongly disagree

Table 33: Effectiveness of trust increasing measures (own table)

However, the effectiveness of those trust-increasing measures significantly varies depending on their features and characteristics. A video of the provider, for instance, would be more effective than a photo.

6.1.2   Hypothesis

In this chapter, the four hypotheses, which were stated in the subchapter 1.7, are tested concerning their statistical significance. In order to test the hypotheses, null hypotheses were defined for each hypothesis and a t-test with a 0.05 significance-level was applied.

H1: Younger people are more likely to use sharing economy services in the future than the older generation.

$H_0$1: Younger people are not more likely to use sharing economy services in the future than the older generation.

The analysis shows that younger participants are more likely to use sharing economy services in the future than the older generation. A t-test (see appendix 8.3.1), which analyzed if there is a significance difference between the age groups 18-22 years and 33-39 years shows that the t-value (2.626) is higher than the critical t-value (1.717) and p (0.007) is smaller than 0.05. Therefore, it can be said that the there is a significant difference between the two analyzed groups. Consequently, H1 is supported by the collected data and H01 can be rejected.

H2: The lack of trust is seen as a bigger barrier not to participate in a sharing economy as compared to the reason that certain things are too personal to share.

$H_0$2: The lack of trust is not seen as a bigger barrier not to participate in a sharing economy as compared to the reason that certain things are too personal to share.

The analysis in chapter 4 showed that the lack of trust towards the private person who somebody has to share with is seen as a major reason why people do not participate in the sharing economy. However, the reason that certain things are too personal to share was identified as being the number one reason to not participate in the sharing economy. In order to check if the difference is significant, a t-test was conducted. The t-test (see appendix 8.3.3) shows that the reason that certain things are too personal is seen as a significantly larger barrier to participate in the sharing economy than the lack of trust. H2 is therefore not supported by the underlying data, and H02 is accepted. Consequently, it can be said that the lack of trust is seen as a smaller barrier to participate in the sharing economy than the reason that certain things are too personal to share.

H3: Trust towards the private offeror of an apartment is seen as being more important than the trust towards the offeror of a drilling machine.

H₀3: Trust towards the private offeror of an apartment is not seen as being more important than the trust towards the offeror of a drilling machine.

The data shows that the importance of trust is seen way higher if people have to rent an apartment than when they have to rent a drilling machine. This can be seen in the fact that people agreed to the statement that trust towards the private offeror of an apartment plays a more important role than the trust towards the offeror of a drilling machine when people had to say how important trust is in each of the two scenarios. However, in order to analyze if there is a statistically significant difference, a t-test was used (see appendix 8.3.5). From the fact that the t-value (15.355) was higher than the critical t-value (1.648) and p (0.000) was smaller than 0.05, it can be concluded that there is a significant difference. Consequently, trust towards the private offeror of an apartment plays a more important role than trust towards the private offeror of a drilling machine, which means that H3 can be accepted and H03 rejected.

H4: Ratings increase trust more than linkage to social media.

H₀4: Ratings do not increase trust more than linkage to social media.

The analyzed data showed that ratings are the 3rd most effective measure to increase trust, whereas the linkage to social media was ranked on the 11th, respectively 13th place. In order to check if this difference is significant, a t-test (see appendix 8.3.9) was conducted. The t-test showed that ratings from other users of the platform significantly increase trust more than if the offeror links social media profiles like Facebook, Instagram, LinkedIn etc. on his/her profile. Consequently, H4 can be accepted and H04 rejected.

6.2   Recommendations and Implications

As the results show, the lack of trust is still seen as a major reason why people do not participate in the sharing economy or sometimes do not make a transaction. It is therefore essential that platform providers use the most efficient tools possible in order to increase trust. However, the importance of trust is dependent on the product/service which is shared. A high level of trust is particularly important when offering a product/service which opens

the private sphere or is associated with high financial risks. In these situations, one should always try to achieve high levels of trust.

This thesis has examined the effectiveness of ten different tools and identified that nine of them significantly contribute to the trust building process. It is doubtful whether the most efficient tool in this study is really the most efficient for any sharing economy platform, as its effectiveness most probably depends on multiple variables such as on the peers registered on the platform or which product/service is being shared. Nevertheless, it is advisable for startups as well as for already established sharing economy platforms to check whether the tools identified as being effective should be implemented and if so, whether adjustments are necessary.

In order to create as much trust as possible, the most efficient tools should be implemented. The more tools, the greater the trust. The marginal utility might diminish with each additional tool implemented, so at some point the benefit might be only marginal. However, the implementation of certain tools is associated with almost no costs. It could make sense to offer the possibility that users can link their social media on their profile, even though the analysis showed that this tool has the lowest effect on trust. But providing an URL field where users can link their social media accounts is hardly a large expense. Also, side effects of certain tools should be taken into account. A positive side effect of displaying a peer's reputation from multiple sharing economy platforms (aggregated trust profile) would be that new users do not have to start from scratch if they register on a sharing platform. But negative side effects such as discrimination through transparency have to be considered as well.

It is furthermore recommended to check if there are appropriate external service providers who offer ready-to-use solutions for such trust-increasing tools. For instance, jumio.com, which takes over the whole process of user identification, or deemly.com, which offers access to trust profiles. Instead of developing and implementing all trust-increasing tools inhouse, it might make sense to outsource them.

The effectiveness of the tools is also dependent on what features they have, i.e. what and how is the tool being implemented. Many sharing economy platforms nowadays only offer the possibility to upload a picture. However, it would make sense that a provider of a service/product could also upload a video of him/herself, as it was identified to increase trust more than a picture. Furthermore, consumers trust reviews more if they come from similar people or from qualified ones. For this reason, it is recommended that an algorithm

prioritizes those reviews and ratings of people who are similar and/or were qualified by the platform provider are listed on the top. With this approach, the sharing economy platform can make sure that reviews from people who are, for instance, much older or live in another canton or country and are considered as being less trustworthy for this user, are listed at the end.

Trust-increasing tools are only effective if they are really being used. It is useless if a platform provides a tool that is not used or not clearly visible to the users. Consequently, it is recommended that sharing economy platforms, on the one hand, explain the logic behind the tools. That can be, for instance, why a provider gets a special status (i.e. trusted host) by showing the requirements that he/she had to fulfill in order to get the status, but also how the tools can be used most efficiently. On the other hand, the tools which are not directly used by the community should still be visible for the them. For instance, a certification of the platform by a 3rd party or background checks of the users are useless if the community does not know that such a certification exists or that such checks are performed.

Trust is an elementary precondition for sharing, and technology made it possible that trust can be built between peers who are in a completely anonymous relationship to each other. Century-old social structures and believes on what trust is based on have become superseded. Together, sharing economy platforms can create a new digital trust ecosystem where an increase in trust leads to more trust in the entire sharing economy, thanks to the spill-over effect. More trust will ease the hesitations of the skeptics and make it possible for people to better leverage the resources available in a society through sharing. Ownership will be replaced by shared usage and strangers become trusting and trusted individuals. The so-called trust age will lead to a social shift in society, which will change the way we live.

6.3   Limitations

The largest limitation of this thesis is the usage of a snowball sampling approach, which is a non-probability sampling. The reason for using this approach instead of probability sampling was that non-probability sampling is very cost- and time-efficient, whereas using probability sampling would have required every person from the population to have the same chances to be sampled. Nevertheless, on the other hand, the usage of non-probability sampling means a high likelihood that the population is not well represented. This can be seen in the fact that the participants of the survey mainly had an academic background and that age in the sample was distributed differently as compared to the distribution in the population. This means that

people with a non-academic background or different age classes were underrepresented in the sample. Therefore, the results cannot be generalized and are consequently not representing all Swiss people between 18 and 39 years. A second limitation is the fact that even though a large number of people participated in the survey, the goal of reaching 385 participants was not achieved. Nevertheless, the results can still be seen as reliable, with a confidence level of 95% and a confidence interval of 6% (instead of 5%). To sum up, it can be said that the snowball sampling approach caused the results not to be representative and the significance of the data to be on a lower level than expected.

A further limitation is the fact that there is no reference value that was used in order to test the significance of certain results. It was, for instance, determined that a measure is effective if a value between 1.0 and 2.5 is reached. Assigning a 1.0 means that the participant strongly agreed that the tool increases trust, a 2.0 means 'agreed.' However, to determine if the 2.5 limit is really appropriate, it would have been useful to establish a control reference value in order to identify the rating which represents no effect.

6.4   Further research

This thesis provides insights into the importance of trust in the sharing economy and the effectiveness of different trust-increasing measures. Further research could analyze the willingness to use the ten trust-increasing measures via an eye-tracking method. This would show which trust-increasing measures really receive attention when using a sharing economy platform.

Also, the study focused on trust from a consumer perspective towards the offeror of a product/service. In future research, one could analyze the effectiveness of the trust increasing measures from an offeror's perspective, as both perspectives most likely entail differences. After all, it has been shown that trust is seen as more important for an offeror of a product/service.

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8   Annex

8.1   Survey Promotion

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kursbewertung• file exchange kalender marktplatz studi-rabatte versicherungen wohntipps wg- und wohnungsbörse

⌂ Forum → Forenbereiche für Studierende aller Hochschulen → Umfragen & Studien → Vertrauen innerhalb der Sharing Economy (Uber, Airbnb etc.)

Antworten ⊕

Thema: Vertrauen innerhalb der Sharing Economy (Uber, Airbnb etc.)

PascalZH
Wirtschaftswissenschaften
ZHAW

🛑 **Vertrauen innerhalb der Sharing Economy (Uber, Airbnb etc.)**

Hallo liebe Uniboard Community

Im Rahmen meiner Masterarbeit führe ich eine Umfrage (zirka 8min) zum Thema Vertrauen innerhalb der Sharing Economy (Airbnb, Uber etc.) durch. Falls du momentan in der Schweiz wohnst oder Schweizer bist, wäre ich extrem dankbar, wenn du an der Umfrage teilnehmen würdest 🙂

Link: https://www.umfrageonline.com/s/SharingEconomyCH

Vielen herzlichen Dank & beste Grüsse
Pascal

Artikel & Aktivitäten

274 Follower   **Follower verwalten**

Trust in the Sharing Economy

Pascal Rueff
Auf LinkedIn veröffentlicht

Hallo liebe LinkedIn-Freunde Im Rahmen meiner Masterarbeit führe ich eine Umfrage (zirka 8min) zum Thema Vertrauen innerhalb der Sharing Economy durch. Wohnst du momentan in der Schweiz? Falls ja, wäre ich über eine Teilnahme äusserts dankbar :) Link zur Umfra ... mehr anzeigen

👍 Gefällt mir   💬   ➡ Teilen

#sharingeconomy #survey #trust
Pascal Rueff hat das geteilt

Alle Aktivitäten anzeigen

8.2   The Survey

The Role of Trust in the Sharing Economy   `0 %`

Thank you very much for taking your time to participate in my study.

The survey is part of my master thesis at the Zurich University of Applied Sciences about the role of trust in the sharing economy and how it can be increased. The data gathered through the survey is treated confidentially and will only be used for scientific purposes. It takes only 5 to 8 minutes to complete the survey.

Thank you very much for participating! :)

Do you live in Switzerland? *

◯ yes

◯ no

Age *

| Please choose... ▾ |

Gender *

| Please choose... ▾ |

Education *

◯ Completed elementary school

◯ Completed high and/or middle school

◯ Attending college or university

◯ Completed bachelor

◯ Attending or completed master or doctoral degree

◯ [   ]

Are you aware of the sharing economy business concepts such as, or similar to: Airbnb, Uber, Sharoo or CouchSurfing? *

◯ yes

◯ no

On how many sharing economy platforms (like Airbnb, Uber, Sharoo) are you registered? *

◯ 0

◯ 1

◯ 2

◯ 3

◯ 4

◯ 5 or more

How often do you use the sharing economy (Uber rides, bookings on Airbnb etc.)? *

◯ Daily

◯ Weekly

◯ Monthly

◯ Few times per year (quarterly)

◯ Less than once per year

◯ Never used it

[Next]

(Text ändern)

How comfortable are you with each of the following sharing economy scenarios? *

	very uncomfortable	somewhat uncomfortable	neither uncomfortable nor comfortable	somewhat comfortable	very comfortable
Renting your house/apartment to someone you have never met	○	○	○	○	○
Renting an apartment/house from someone you have never met	○	○	○	○	○
Renting your drilling machine to someone you have never met	○	○	○	○	○
Renting a drilling machine from someone you have never met	○	○	○	○	○
Renting your car to someone you have never met	○	○	○	○	○
Renting a car from someone you have never met	○	○	○	○	○

Please rate the following statements that could be considered barriers to participating in the sharing economy. *

	strongly agree	agree	neutral	disagree	strongly disagree
I am scared that the product/service is not available when I need it	○	○	○	○	○
I don't want to disclose personal information	○	○	○	○	○
Signing up to sharing economy platforms is too time consuming	○	○	○	○	○
Lack of trust towards the private person who I share with	○	○	○	○	○
Scared that undesirable social interactions with other platform members could occur	○	○	○	○	○
Certain things are too personal to share	○	○	○	○	○
The offered items of others may be unhygienic	○	○	○	○	○
Other people do not pay as much attention to things as I do	○	○	○	○	○
Afraid that the lent items will break or become defective	○	○	○	○	○
Being afraid that the lent things are not returned	○	○	○	○	○

Prev   Next

Please indicate how important trust towards your counterpart (the person who offers/rents) on a sharing economy platform is, when you *

	very important	important	neutral	low importance	not at all important
Rent her/his apartment	○	○	○	○	○
Rent out your own apartment	○	○	○	○	○
Rent her/his drilling machine	○	○	○	○	○
Rent out your own drilling machine	○	○	○	○	○
Get private transportation	○	○	○	○	○
Offer private transportation	○	○	○	○	○

How high is your level of trust if you have to share an apartment with: *

	very high	high	medium	low	very low
A familly memeber	○	○	○	○	○
A friend	○	○	○	○	○
A neighbour	○	○	○	○	○
A colleague / fellow student	○	○	○	○	○
An Airbnb host with 4.9 out of 5 stars (over 400 ratings)	○	○	○	○	○
An Airbnb host with 4.9 out of 5 stars (5 ratings)	○	○	○	○	○
An Airbnb host with 3.9 out of 5 stars (over 400 ratings)	○	○	○	○	○

Please indicate how much you agree to the following actions/statements: *

	strongly agree	agree	neutral	disagree	strongly disagree
I would book an apartment that a *friend* recommended to me even though it has only 3.5 out of 5 stars (over 400 ratings, given by qualified reviewers)	○	○	○	○	○
I would rent a small personal item (i.e. drilling machine) from somebody that a *friend* recommended even though she/he has only 3.5 out of 5 stars (over 400 ratings, given by qualified reviewers)	○	○	○	○	○
I would book an apartment that a *neighbour* recommended to me even though it has only 3.5 out of 5 stars (over 400 ratings, given by qualified reviewers)	○	○	○	○	○
I would rent a small personal item (f.e. drilling machine) from somebody that a *neighbour* recommended to me even though it has only 3.5 out of 5 stars (over 400 ratings, given by qualified reviewers)	○	○	○	○	○

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How much do you agree with the following statements?

I trust providers (the one who offers a good/service) on sharing economy platforms more… *

Term definition:
*platform provider = company which offers the infrastructure / owns the homepage (i.e. Airbnb itself)
**provider = the individual which offers the product/service on the sharing economy platform

	strongly agree	agree	neutral	disagree	strongly disagree
if they disclose information like age, name, gender, profile photo etc. of themselves.	○	○	○	○	○
if I would know where they work	○	○	○	○	○
if they would write a short text about themselves (their hobbies, interests etc.)	○	○	○	○	○
if their identity was verified by the platform provider*	○	○	○	○	○
if their phone number was verified by the platform provider*	○	○	○	○	○
if their offered item / service or skills were verified by the platform provider*	○	○	○	○	○
if their background (f.e. criminal background, work history and or driving record) was checked by the platform provider*	○	○	○	○	○
if I their social media profiles like Facebook, Instagram, LinkedIn etc. are linked on their profile	○	○	○	○	○
if I would see that we have common friends on social media	○	○	○	○	○
if I would see an overview of all their ratings and reviews from different sharing economy platforms on their profile (such as Uber, Airbnb etc.)	○	○	○	○	○
if I would see ratings from other users of the platform	○	○	○	○	○
if I see written reviews with pictures from other users	○	○	○	○	○
if they are labelled as qualified hosts / providers** (meets certain standards i.e. low cancelation rate etc.)	○	○	○	○	○
if my money only gets transferred after I have confirmed to have received the service / item	○	○	○	○	○
if I know that all the tools such as rating system, reviews, qualification of memebers etc. are certified and overviewed by an independent 3rd party (like quality label)	○	○	○	○	○

How much do you agree with the following statements? *

provider = the individual which offers the product/service on the sharing economy platform (the offeror)

	strongly agree	agree	neutral	disagree	strongly disagree
I trust a person more who has a rating of 4.2 out of 5 stars from more than 400 customers compared to one with a 4.8 from 8 customers	○	○	○	○	○
A video of the provider himself/herself would increase my trust more than a photo	○	○	○	○	○
I trust pictures taken from former customers more than pictures that were taken by the product / service provider himself	○	○	○	○	○
I trust more reviews that were written from people who are at the same age and live nearby compared to reviews from people who live abroad and are much older or younger.	○	○	○	○	○
I trust reviews more if they come from former customers who were qualified by the platform provider	○	○	○	○	○

Thank you for taking time to complete my survey.

Please indicate how much you agree with the following actions/statements: *

	strongly agree	agree	neutral	disagree	strongly disagree
The lack of trust towards the offeror and his/her offering is a reason why I sometimes do not make a transaction / book something on a sharing economy platform.	○	○	○	○	○
Trust towards the private offeror of an apartment plays a more important role for me than the trust towards the offeror of a drilling machine	○	○	○	○	○
Lack of information about the person whom I share with makes me sceptical to share	○	○	○	○	○
It would increase my trust if I know that the service / product provider has good ratings on other sharing economy platforms	○	○	○	○	○
It increases my trust if I know where the offeror of the product/serivce works	○	○	○	○	○
I plan to use sharing economy services in the next two years	○	○	○	○	○

8.3   Significance Tests

8.3.1   Future Usage Behavior

Age class 18-22 and 33-39y

	Variable 1	Variable 2
Mean	2.055555556	1.32432432
Variance	1.232026144	0.33633634
Observations	18	37
Hypothesized Mean Difference	0	
df	22	
t Stat	2.626049118	
P(T<=t) one-tail	0.007713751	
t Critical one-tail	1.717144374	
P(T<=t) two-tail	0.015427502	
t Critical two-tail	2.073873068	

8.3.2   Frequency of Usage

Age class 18-30 and 31-39y

	Variable 1	Variable 2
Mean	4.28205128	3.29302326
Variance	1.47098516	1.10532493
Observations	39	215
Hypothesized Mean Difference	0	
df	49	
t Stat	4.77737724	
P(T<=t) one-tail	8.2625E-06	
t Critical one-tail	1.67655089	
P(T<=t) two-tail	1.6525E-05	
t Critical two-tail	2.00957524	

8.3.3   Barriers to not participate

Lack of trust and certain things are too personal

	Variable 1	Variable 2
Mean	2.418	2.060
Variance	0.783498	0.767958
Observations	268.000000	268.000000
Hypothesized Mean Difference	0.000000	
df	534.000000	
t Stat	4.707974	
P(T<=t) one-tail	0.000002	
t Critical one-tail	1.647712	
P(T<=t) two-tail	0.000003	
t Critical two-tail	1.964416	

8.3.4   Importance of Trust 1

Rent his/her drilling machine, age class 18-28 and 29-39y

	Variable 1	*Variable 2*
Mean	3.706666667	3.03108808
Variance	1.642522523	1.05111183
Observations	75	193
Hypothesized Mean Difference	0	
df	113	
t Stat	4.08531165	
P(T<=t) one-tail	4E-05	
t Critical one-tail	1.658450216	
P(T<=t) two-tail	8.25641E-05	
t Critical two-tail	1.981180359	

8.3.5   Importance of Trust 2

Rent drilling machine, rent apartment

	Variable 1	*Variable 2*
Mean	3.220149254	1.94402985
Variance	1.303412712	0.54741741
Observations	268	268
Hypothesized Mean Difference	0	
df	458	
t Stat	15.35590547	
P(T<=t) one-tail	1.57674E-43	
t Critical one-tail	1.648187415	
P(T<=t) two-tail	3.15348E-43	
t Critical two-tail	1.965157098	

8.3.6   Importance of Trust 3

Offeror apartment and offeror drilling machine, 18-28y and 29-39y

	Variable 1	*Variable 2*
Mean	1.66321244	1.33333333
Variance	0.48494171	0.33333333
Observations	193	75
Hypothesized Mean Difference	0	
df	161	
t Stat	3.95494831	
P(T<=t) one-tail	0.000057	
t Critical one-tail	1.65437306	
P(T<=t) two-tail	0.00011446	
t Critical two-tail	1.97480809	

8.3.7 Trust Level Airbnb Host

Frequency of usage

	Variable 1	*Variable 2*
Mean	2.33673469	1.91935484
Variance	0.69628467	0.50158646
Observations	196	62
Hypothesized Mean Difference	0	
df	119	
t Stat	3.86818222	
P(T<=t) one-tail	8.9685E-05	
t Critical one-tail	1.65775928	
P(T<=t) two-tail	0.00017937	
t Critical two-tail	1.98009988	

8.3.8 Rent out own Drilling Machine

Age class 18-28 and 29-39y

	Variable 1	*Variable 2*
Mean	3.306666667	2.58549223
Variance	1.296576577	1.12937176
Observations	75	193
Hypothesized Mean Difference	0	
df	127	
t Stat	4.740942654	
P(T<=t) one-tail	0.0000028	
t Critical one-tail	1.656940344	
P(T<=t) two-tail	5.61621E-06	
t Critical two-tail	1.978819535	

8.3.9 Rent out Apartment

Male and Female

	Variable 1	*Variable 2*
Mean	1.52413793	1.17886179
Variance	0.72337165	0.24643476
Observations	145	123
Hypothesized Mean Difference	0	
df	238	
t Stat	4.12910951	
P(T<=t) one-tail	2.5211E-05	
t Critical one-tail	1.65128116	
P(T<=t) two-tail	5.0422E-05	
t Critical two-tail	1.96998153	

8.3.10 Effectiveness 1

Linkage to social media and ratings

	Variable 1	Variable 2
Mean	2.52985075	1.81716418
Variance	0.8567835	0.55446084
Observations	268	268
Hypothesized Mean Difference	0	
df	511	
t Stat	9.82120698	
P(T<=t) one-tail	2.8522E-21	
t Critical one-tail	1.64784101	
P(T<=t) two-tail	5.7045E-21	
t Critical two-tail	1.96461722	

8.3.11 Effectiveness 2

Ratings 18-39y and 40y

	Variable 1	Variable 2
Mean	2.25	1.81716418
Variance	0.6	0.55446084
Observations	16	268
Hypothesized Mean Difference	0	
df	17	
t Stat	2.17593689	
P(T<=t) one-tail	0.02197655	
t Critical one-tail	1.73960673	
P(T<=t) two-tail	0.04395311	
t Critical two-tail	2.10981558	

8.3.12 Control Questions

Ratings on other platforms (frequency of usage)

	Variable 1	Variable 2
Mean	2.08163265	1.62903226
Variance	0.61894296	0.43389741
Observations	196	62
Hypothesized Mean Difference	0	
df	121	
t Stat	4.49106076	
P(T<=t) one-tail	8.15E-06	
t Critical one-tail	1.65754432	
P(T<=t) two-tail	1.6302E-05	
t Critical two-tail	1.97976376	