Sharewash in the Sharing Economy: A first look on the phenomenon and effects of Sharewash

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Abstract

With the rising acceptance of the sharing economy, more and more platforms are motivated to present themselves under the umbrella of the sharing economy to profit from its sustainable image. In fact, this phenomenon is not completely new. In the last decades, green marketing of companies led to the term ”greenwashing”. With sharing practices becoming a global phenomenon, a new term “sharewashing” was introduced to describe the misuse of words such as “sharing”, “community” and “resource-efficient”.

The objective of this paper is to shed first light on sharewash in literature within the sub-domain of peer-to-peer rental and sharing (P2PS). Based on the research of Chen and Chang (2012b) regarding the effects of greenwash, this study aims to adapt their research framework into a sharing economy context. The contribution of this work is twofold. Firstly, this paper aims to suggest a working definition of sharewash. Secondly, we investigate the impacts of sharewash on sharing trust and explore the mediation effects of sharing consumer confusion and sharing perceived risk. Within the scope of this study, an empirical study by means of a structural equation model was conducted. The research object of this study focuses on young German consumers with an affinity for electronic products and the Internet.

The results of this study show that sharewash has a significant negative effect on sharing trust. In addition, the findings show that sharing consumer confusion and sharing perceived risk mediate the negative relationship between sharewash and sharing trust. This implies that if platforms wanted to enhance their sharing trust, they should reduce their sharewash practices due to the direct and indirect negative influences on sharing trust through sharing consumer confusion and sharing perceived risk.

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List of Abbreviations

AVE	Average Variance Extracted
CMV	Common Method Variance
IS	Information System
KD2Lab	Karlsruhe Decision and Design Lab
NFI	Normed Fit Index
P2PS	Peer-to-Peer Rental and Sharing
PLS	Partial Least Squares
SEM	Structural Equation Modeling
SRMR	Standardized Root Mean Square Residual

1. Introduction

In recent years, a broad variety of Internet platforms facilitated the exchange of products and services between private peers. Such schemes have experienced tremendous growth and attracted attention from both the public and scientific press. The growing platform landscape is often referred to as part of the so-called sharing economy. While the general public awareness of this term is increasing, it has been almost impossible to give the sharing economy a precise and uniform definition that would accurately represent its variable usage. Thus, recent research (Teubner, Hawlitschek, and Gimpel (2016); Hamari, Sjoeklint, and Ukkonen (2013)) describes the sharing economy as an umbrella term that subsumes different concepts and phenomena such as "crowd-based capitalism" (Sundararajan, 2016), "collaborative consumption" (Botsman & Rogers, 2010), "access-based consumption" (Bardhi & Eckhardt, 2012), "the mesh" (Gansky, 2010), "product-service systems" (Mont, 2002) or "commercial sharing systems" (Lamberton & Rose, 2012). Concepts that might have been commonly associated with the sharing economy include the sharing, bartering, renting, gifting, swapping, lending or trading of products and services among peers on electronic platforms (Botsman & Rogers, 2010). Among the most prominent examples are platforms such as *Airbnb*, *BlaBlaCar*, and *Uber* that cover concepts of peer-to-peer rental and sharing (P2PS).

On one hand, the sharing economy is appealing to its stakeholders, as it creates a win-win situation (Ernst & Young, 2015), is claimed to be highly sustainable and enjoys a positive image (Schor, 2014). According to a PwC (2015) report, 19% of the total US adult population were engaged in sharing economy practices and transactions. The motives to participate in the sharing economy are various and also differ among the many different platforms (Schor, 2014). While some participants are motivated by the novelty or trendiness of these platforms, most participants seem to be motivated by the environmental, social and economic factors (Schor, 2014). Some of the positive aspects of sharing in this context include the resource-efficient way of consumption, possibilities of meeting new people, engaging in communities or lower perceived costs as compared to traditional competitors.

On the other hand, critics argue that positive aspects such as "sharing", "resource-efficiency" and "community" are often overstated and used for marketing purposes as a "label" (Bergt, 2015). Many business models operating under the sharing economy umbrella are in fact primarily profit-oriented (Baumgaertel, 2014). Often, platforms in the sharing economy realm advertise themselves as sustainable, present their green credentials and illustrate sharing as a way to reduce carbon footprint (Schor, 2014). Counter arguments claim that money earned by sharers of used products may result in the consumption and purchase of high-impact products. Furthermore, by making travelling more affordable through accommodation and ridesharing platforms, more people, who would have not travelled otherwise, are now encouraged to travel (Schor, 2014). These effects would instead increase ecological and carbon footprint (Schor, 2014). While *Couchsurfing* is one of the best social examples that lead to new friendships (Sundararajan, 2016), many other sharing platforms fail to

do so (Schor, 2014). Studies found out that users of *Turo* (formely *RelayRides*), a peer-to-peer car rental platform, described their interaction as "sterile" and "anonymous" whereas time bank participants, who give and receive "time credits", are disappointed of the degree of social connection they gained (Schor, 2014).

While there surely are many platforms contributing to a lower ecological footprint and bringing people together, there are also platforms that are motivated to place themselves under the "tent" of the sharing economy in order to profit from its positive symbolic meaning and sustainable image (Schor, 2014). Certain platforms do not "involve any actual *sharing* per se" (Kalamar, 2013) and hence falsely claim and market themselves to be part of the sharing economy (Meelen & Frenken, 2015). In addition, Business Insider claims in an article that "a lot what is called sharing is not really sharing" and that "companies like Uber and Airbnb aren't really *sharing* anything" (Killick, 2015). The public press has coined this aspect with respect to peer-to-peer platforms as "sharewashing" and described it as "the new greenwashing" (Kalamar, 2013). The Macmillan Dictionary refers to sharewashing as "a marketing strategy which deceives people by trying to suggest that a business is motivated by principles of sharing rather than conventional profits" (Marxwell, 2016). Although this phenomenon has grown in terms of practical importance, scientific literature addressing the issue of sharewashing in the context of the sharing economy is still scarce.

However, in the context of green marketing, the phenomenon of greenwashing has been widely investigated. In 2012 Chen and Chang developed a research framework to investigate the influence of greenwashing on green trust and to explore the mediation effects of green consumer confusion and green perceived risk. To shed first light on the issue of sharewashing in a sharing economy context, we adapted the framework developed by Chen and Chang (2012b). The contribution of this work is twofold. Firstly, a working definition and a description of the sharewashing phenomenon is provided. Secondly, this study incorporates and adapts a research framework developed by Chen and Chang (2012b) into a sharing economy context to explore how sharewashing is impeding sharing trust (in the platform providers' integrity), through the potential mediating effects of sharing consumer confusion and sharing risk.

This study adopts an existing theoretical research framework and applies an empirical study to verify the model. This paper aims to develop a framework that can help platforms to increase their sharing trust based on its three determinants: sharewash, sharing perceived risk and sharing consumer confusion. Moreover, this paper would like to extend the literature on the sharing economy and encourage further research on sharewash. The structure of this paper is organised as follows. In section 2 some theoretical background and terminology regarding the sharing economy, sustainability and sharewash is outlined. In section 3 hypotheses are developed and a theoretical model is derived. Section 4 then describes the methodology, sample and measurement of the constructs. The empirical results are presented in section 5. Finally, section 6 will conclude with a discussion and possible implications.

2. Theoretical Background

To clarify the scope of this research and to illustrate the foundation that the research model will be based on, this chapter introduces some background knowledge. The following sections describe definition approaches of the so-called sharing economy, display sustainable aspects of the sharing economy and eventually suggest a definition for sharewashing.

2.1. Defining the Sharing Economy

"The sharing economy lacks a shared definition" - Botsman (2013)

Due to the broad usage of the term sharing economy by the press, media and public, it is increasingly challenging to present a precise and solid definition. There are many other terms such as "peer economy", "collaborative economy", "gig economy" or "collaborative consumption" that reflect the core idea behind the sharing economy and that are often used synonymously (Botsman, 2013). This section reviews the most common descriptions and definitions.

Sundararajan (2016) describes the sharing economy as an economic system that has the following five characteristics: (1) largely market-based, (2) high-impact capital, (3) crowd-based networks rather than "hierarchies" or centralized institutions (4) blurring lines between the personal and the professional and (5) blurring lines between fully employed and casual labour. The author prefers the term 'crowd-based capitalism' but keeps using the term 'sharing economy', because "it maximizes the number of people who seem to get what [he is] talking about" (Sundararajan, 2016).

Botsman and Rogers (2010) mainly use the term "collaborative consumption" and describe it as enabling people "to realize the enormous benefits of access to products and services over ownership" while saving money, space or time and making new friends. The authors divided collaborative consumption into the three subsystems: collaborative lifestyles (e.g. *Neighborrow*), redistribution markets (e.g. *Freecycle*) and product service systems (e.g. *Zilok*). All these systems share the following underlying essential principles: critical mass, idling capacity, belief in the commons and trust between strangers.

Recent IS Research (Teubner and Hawlitschek (2016),Hamari et al. (2013)) considers the sharing economy as an umbrella term that often subsumes concepts and phenomena such as "collaborative consumption" (Botsman & Rogers, 2010), "access-based consumption" (Bardhi & Eckhardt, 2012), "the mesh" (Gansky, 2010), "product-service systems" (Mont, 2002) or "commercial sharing systems" (Lamberton & Rose, 2012).

Stephany (2015) defines the sharing economy as "the value in taking underutilized assets and making them accessible online to a community, leading to a reduced need for ownership of those assets". The definition includes five limbs:

1. *Creating economic value*: The platform creates reciprocal economic value and has the potential to be revenue-generating, even though the revenue motives appear incidental or exist only to ensure the sustainability of the service.

2. *Underutilized assets*: The value of assets is their so called ”idling capacity”: The periods of time when extra value could be extracted.

3. *Online accessibility*: Assets need to be made accessible - a process that happens once assets are listed online.

4. *Community*: Assets need to move within a community, where communities of users engage with each other beyond their transactional needs. The author considers this point as *the* decisive difference between a sharing economy business and a traditional rental one.

5. *Reduced need for ownership*: the accessibility to assets within communities leads to a reduced need to own those assets.

(Stephany, 2015)

Teubner and Hawlitschek (2016) suggest a taxonomy in order to locate business models of the sharing economy landscape depending on two dimensions: the *type of resource* (product, product-service, service) and the *degree of commerciality* (private/ professional). Further they differentiate within the ”product” category, if a transfer of ownership is facilitated. To narrow down the broad field of the sharing economy and to define the scope of this research, this paper focuses particularly on the concept of peer-to-peer rental and sharing (P2PS). Based on the taxonomy model proposed by Teubner and Hawlitschek (2016), this study considers that P2PS includes private and professional providers, who offer reimbursed products or services online to a community. In our observation, we exclude business models that are free of charge (e.g. *Couchsurfing*) and platforms that facilitate a transfer of ownership (e.g. *ebay*). Famous examples among P2PS platforms are ridesharing platform like *Uber* or *BlaBlaCar* or the popular accommodation platform *Airbnb*. Figure 2.1. locates P2PS within the taxonomy.

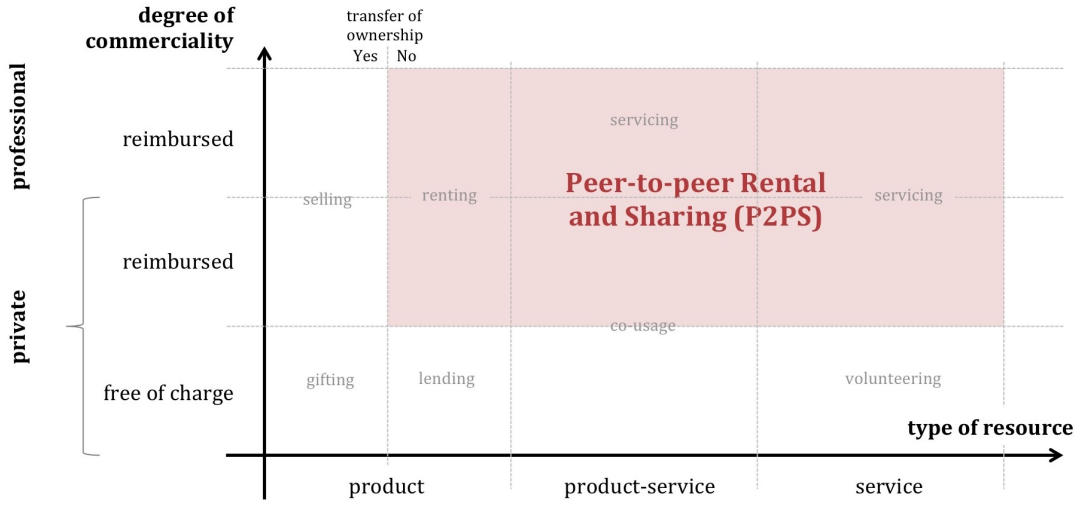

Figure 2.1.: P2PS Taxonomy

2.2. Sustainability in the Sharing Economy

One of the earliest instances of the term sustainability in its current connotation was found in a study from 1972, where the authors discuss a desirable state of ecological and economic stability that is "sustainable far into the future" (Meadows, Meadows, Randers, & Behrens, 1972). In addition, a UN-commissioned study published by the World Commission on Environment and Development (WCED) in 1987 associates sustainability and sustainable development with the ability to satisfy the needs of the present without compromising the needs of future generations (WCED, 1987). The United Nation General Assembly (UNGA) identified in their 2005 World Summit *economic development*, *social development* and *environmental protection* as the objectives of sustainable development (UNGA, 2005). These three goals are also known as the three pillars of sustainability. This concept extended the initial environmental dimension by a social and economic dimension of sustainability.

The sharing economy is claimed to be a new and more sustainable way of consumption. Heinrichs (2013) describes the sharing economy as a "potential new pathway to sustainability". Especially the environmental and social sustainability of the sharing economy can be emphasized. Many products being produced are underutilized. Often the usage duration of a product isn't used to its full technical potential. By using products to their full technical potential, the level of good production could be reduced while maintaining the same level of usage. The French National Institute of Statistics and Economic Studies (INSEE) found out that shareable goods account for 25% of the average French household budget and account for one third of the household waste. Sharing and redistribution practices of these shareable products enable to extend the usage time closer to its "technical lifetime" resulting in a positive environmental impact such as reduction of waste and energy (Demailly & Novel, 2014). In its social dimension the sharing economy enables opportunities to increase social interactions, meet new people and engage in a community. 78% of US adults, who are familiar with the sharing economy, agree that it builds a stronger community (PwC, 2015).

In the following, this paper considers sustainability in the sharing economy compared to traditional green companies as the extension of the environmental aspect by the social dimension.

2.3. Sharewashing

Sharewashing is considered as a mash-up based on the terms sharing economy, whitewash and greenwash (Marxwell, 2016). Whitewash describes the act of organizations covering up negative facts such as vices, crimes or scandals by means of a perfunctory investigation or through biased presentation of data (EncyclopaediaBritannica, 2003). Greenwash is defined as the "act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service" (Parguel, Benoi-Moreau, & Larceneux, 2011). Now that greenwash has been around for years, critics observed a similar phenomenon in the sharing economy: *sharewash*.

Sharewashing is being described as the ”new greenwashing” (Kalamar, 2013). Companies classify themselves as part of the sharing economy even though they don't fulfil the ecological and social promises of the sharing economy. These platforms ”adopt the new buzzword *sharing* for their products” (Kalamar, 2013) and enjoy the positive and sustainable image of the sharing economy. The Macmillian Dictionary defines sharewashing as ”a marketing strategy which deceives people by trying to suggest that a business is motivated by principles of sharing rather than conventional profits” (Marxwell, 2016). Light and Miskelly (2015) describe sharewashing as a case, where ”the language of sharing is used to promote new modes of selling”. Netter (2016) refers to sharewashing as a situation, where commercial businesses make use of the positively connoted communal sharing terminology ”to masquerade their intentions”. Huang (2016) suggested the synonymous term ”wewashing” for organizations that ”refer to renting and selling services as sharing and/or use terms like community in misleading ways”.

Based on Parguel et al. (2011) and the understanding of sustainability specified in the previous section in terms of social and ecological dimensions, this study defines sharewashing as ”the act of misleading consumers by claiming to be part of the sharing economy and being motivated by the social and ecological principles of sharing rather than conventional profits”.

3. Hypothesis Development

The following development of hypotheses is mainly established upon the work of Chen and Chang (2012b), where the researcher investigated the effects of greenwash on green trust and explored the mediation roles of green perceived risk and green consumer confusion. Based on their study, the literature used in that study and the theoretical background illustrated in the previous chapter, the following sections aim to adapt the research framework into a sharing economy context.

3.1. The Positive Effect of Sharewash on Sharing Consumer Confusion

Sharewash is applied to explain misleading claims of a company's platform, its products or services as being part of the sharing economy and being socially sustainable (e.g. socially benevolent or community enhancing) or ecologically sustainable (e.g. green, environmental friendly or resource-efficient). Sharewash can damage the market demand by confusing its consumers. Consumers agree that it is often a marketing strategy when firms label their product as green and they would mistrust the green claims (Lyon & Maxwell, 2011). The same may apply if firms label their products as socially responsible or community enhancing. The perception of sharewash can damage the consumers' attitude towards a company, which is advocating its environmental or social efforts. Thus, sharewash can cause consumers to be suspicious of sharing platforms and its products or services.

Consumer confusion is defined by Turnbull, Leek, and Ying (2000) as "consumer failure to develop a correct interpretation of various facets of a product or service during the information processing procedure". Consumer confusion can lead to misinterpretation and misunderstanding of the market. Consumer confusion settings often arise in situations where too similar, too complex, too ambiguous, and too much information about products or services are communicated (Chen & Chang, 2012b). Due to consumers' restricted cognitive abilities, the more information they try to process, the more the chance of an experienced information overload occurs (Mitchell, Walsh, & Yamin, 2005). Hence, the effect of information overload is consumer confusion (Langer, Eisend, & Kub, 2008). According to Mitchell and Papavassiliou (1999), the three main sources of consumer confusion are overchoice of products and stores, similarity of products and unclarity of information.

This study refers to Turnbull et al. (2000) to define "sharing consumer confusion" as "consumer failure to develop a correct interpretation of environmental or social features of a platform, product or service during the information processing procedure". Sharewash would flood consumers with information that they can't process at once. This would make it difficult for consumers to evaluate platforms and their products or services. Thus, sharewashing would cause consumer confusion with respect to social and environmental claims. This study argues that sharewash would positively affect sharing consumer confusion and proposes the following hypothesis:

Hypothesis 1 (H_1): Sharewash is positively associated with sharing consumer confusion.

3.2. The Positive Effect of Sharewash on Sharing Perceived Risk

Purchases of products or services are often perceived by consumers with risk, especially if the purchase consequences involve uncertainty. Peter and Ryan (1976) defined perceived risk as the "expectation of losses associated with purchase and, as such, acts as an inhibitor to purchase". Cunningham (1967) conceptualised perceived risk in two components: "the amount that would be lost [...] if the consequences of an act were not favourable" and "the individual's subjective feeling of certainty that the consequences will be unfavourable" (as cited in Mitchell (1999)). Jacoby and Kaplan (1972) suggested that perceived risk consists of the five components performance, physical, psychological, social and financial risk. As perceived risk is influenced by negative consequences and uncertainty (Peter & Ryan, 1976), it would also affect purchase decisions of customers (Aaker, 1996). In a context of greenwash, Chen and Chang (2012a) proposed the term green perceived risk and defined it as "the expectation of negative environmental consequences associated with purchase behavior".

Due to the increase in public environmental awareness, companies wanted to make their products appear "greener" (Chen, 2008). Recently, with the increasing acceptance for sharing models, companies want to promote their products or services as ecologically *and* socially motivated. However, misleading marketing messages and communication of sharewash practices may result in suspicion and uncertainty. The higher the uncertainty of a purchase decision, the higher is the perceived risk of a consumer, which could negatively affect the purchase intention (Mitchell, 1999). Wood and Scheer (1996) indicate in their research a negative relationship between perceived risk and purchase probability - the lower the perceived risk, the higher the purchase probability. Thus, analogically to greenwash, sharewash would also positively affect consumer perceived risk.

This paper proposes the novel construct "sharing perceived risk" and refers to Peter and Ryan (1976) and Chen and Chang (2012a) to define it as "expectation of negative environmental consequences or negative social impact associated with purchase behavior". If green or social claims cannot be discerned by consumers, sharewash could increase the perceived risk. This study argues that sharewash would positively impact sharing perceived risk and proposes the following hypothesis:

Hypothesis 2 (H_2): Sharewash is positively associated with sharing perceived risk.

3.3. The Negative Effect of Sharewash on Sharing Trust

Greenwash can be a burden for firms to act sustainably. Developing green marketing strategies and environmental engagements can make consumer skeptical of sustainability actions (Chen & Chang, 2012b). Seeing sharewash as an extension of greenwash, the same may apply to sharewash. Misleading claims regarding environmental and social features may result in difficulties to differentiate between deceptive and true claims. This prevents consumers from recognizing the impact of their purchase decisions. Sharewash can lead

to skepticism and suspicion about social and green promises. This could make consumer distrust social engagements and environmental efforts of platforms, companies and their marketers.

Trust is defined as the expectation that another person someone chooses to trust "will not behave opportunistically by taking advantage of the situation" and will behave in a socially appropriate and dependable manner (Gefen & Straub, 2003). Ganesan (1994) describes trust as the willingness to rely on a partner based on his reliability, ability and benevolence. Rousseau, Sitkin, Burt, and Camerer (1998) refer to trust as the intention to take vulnerability coming from positive expectations of the behavior or intention of the other party. Hart and Saunders (1997) define trust as the amount of confidence that the trusted other party would behave as expected. Trust in an ecological context is defined by Chen (2010) as green trust, the "willingness to depend on a product or service based on the belief or expectation resulting from its credibility, benevolence, and ability about environmental performance".

Exaggerating and overstating the environmental functionality of one's product can negatively affect trust and result in consumers' distrust (Kalafatis & Pollard, 1999). Greenwash practices can lead to negative word-of-mouth and publicity that would result in a decrease of consumer trust (Ramus & Montiel, 2005). Also Chen and Chang (2012b) showed in an empirical study that greenwash has a negative influence on green trust. By applying sharewash and overstating both environmental *and* social performance, trust would be negatively affected at least as bad as in an exclusive greenwash situation.

This study refers to Ganesan (1994) and Chen (2010) to introduce the novel construct "sharing trust" as the "willingness to depend on a platform based on the belief or expectation resulting from its credibility, benevolence, and ability about environmental and social performance". If companies apply sharewash and use misleading claims, consumers will get skeptical and might feel cheated. Hence, the perceived sharewash will lead to a decrease in customers' sharing trust, which results into the following hypothesis:

Hypothesis 3 (H_3): Sharewash is negatively associated with sharing trust.

3.4. The Negative Effect of Sharing Consumer Confusion on Sharing Trust

Consumer confusion is positively related to misleading information and information overload. Too complex, too ambiguous and too many information are often responsible for information overload (Chen & Chang, 2012b), which often leads to consumer confusion (Mitchell & Papavassiliou, 1999). Consumer confusion can result in poor decision making (Oezkan & Tolon, 2015). The state of confusion is associated with emotions such as anxiety, irritation and anger, which can make the purchasing decision frustrating and inefficient (Mitchell et al., 2005). Hence, the probability of a rational purchase decision is lower compared to a non-confused consumer (Mitchell & Papavassiliou, 1999).

Consumer confusion has a negative impact on consumer trust (Matzler, Stieger, & Fueller, 2011). Consumer confusion is associated with negative consequences such as decreased loyalty and trust (Mitchell et al., 2005). Consumers being confused by misleading marketing claims will become skeptical and start losing their trust in a company or product (Singh & Sirdeshmukh, 2000). Confused consumer, who can't process all the information of a marketplace, can feel less trusting and demotivated, because of the fear to miss important information (Walsh & Mitchell, 2010). The confusion caused by the similarity of different products and brands is likely to reduce consumers' trust towards them (Mitchell et al., 2005).

Sharing platforms, which are using confusing and misleading claims, might harm consumers' trust towards the platform. Hence, this study argues that sharing consumer confusion negatively affects sharing trust, which leads to the following hypothesis:

Hypothesis 4 (H_4): Sharing consumer confusion is negatively associated with sharing trust.

3.5. The Negative Effect of Sharing Perceived Risk on Sharing Trust

Perceived risk represents the expected losses and negative consequences associated with a wrong purchase decision (Peter & Ryan, 1976). Perceived risk is a crucial factor for consumers, who consider purchasing a product or service in an online environment (Kim, Ferrin, & Rao, 2008). In the sharing economy context, perceived risk is also discussed as a barrier for providers, as goods and properties such as flats on *Airbnb* need to be returned after the usage (Mittendorf & Ostermann, 2017). Risk affects the consumer's choice whether to trust or not to trust a certain party (Harridge-March, 2006). In the sharing economy, trust can be categorised among trust towards a peer, a platform or a product (Hawlitschek, Teubner, & Weinhardt, 2016). Previous research already discussed and indicated a negative relationship between perceived risk and trust within an electronic commerce setting (Harridge-March (2006);Kim et al. (2008)). For example a purchase, where a lot of risk is involved, makes it hard for the consumer to trust the vendor. Moreover, consumers' perceived risk regarding ecological concerns is shown to be negatively associated with trust towards green claims (Chen & Chang, 2012b).

Extending this thought to the sharing economy, negative social and environmental consequences that are associated with sharing platforms might lead to a lower trust towards the social and green claims of the platform. Hence, high sharing perceived risk regarding ecological and social features can be perceived by consumers as a barrier to believe in the trustworthiness and integrity of the platform. Thus, this paper suggests that sharing perceived risk has a negative effect on sharing trust and comes to the following hypothesis:

Hypothesis 5 (H_5): Sharing perceived risk is negatively associated with sharing trust.

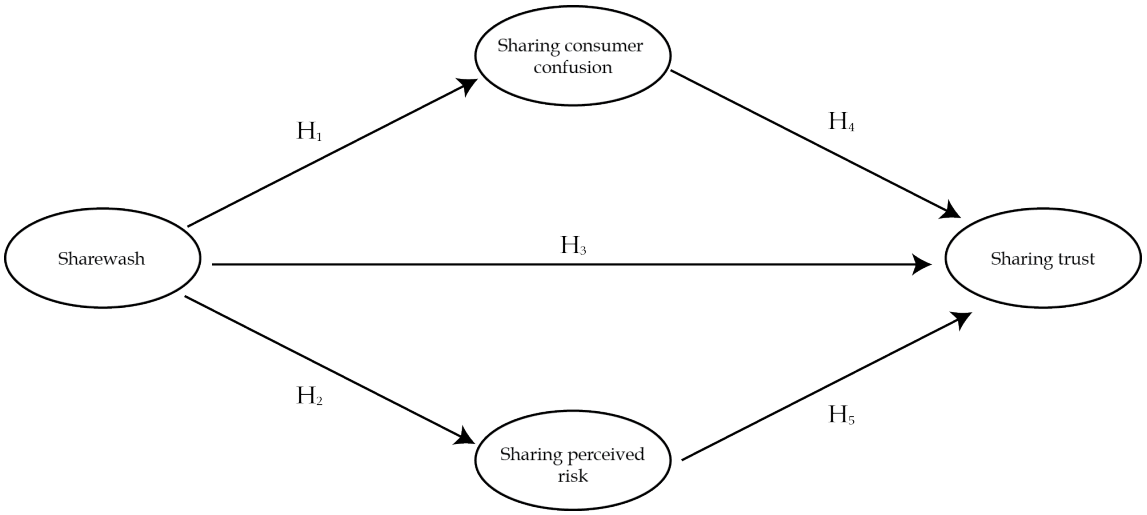

Figure 3.1.: Theoretical Research Framework

This study argues that sharewash has a negative effect on sharing trust, while sharing perceived risk and sharing consumer confusion mediate the negative relationship between sharewash and sharing trust. The antecedent of this research framework is sharewash and the consequent is sharing trust, while sharing perceived risk and sharing consumer confusion are two partial mediators in this framework.

4. Methodology and Measurement

Besides proposing a definition in literature for sharewash, the main aim of this study is to determine the effects of sharewash on sharing consumer confusion, sharing perceived risk and sharing trust. In this respect, a survey with focus on peer-to-peer rental and sharing (P2PS) was designed and conducted in order to test the hypotheses and the relation between the constructs. This methodology section describes the survey design, the investigated sample and the measurement of the constructs.

4.1. Survey Design

This study applies a questionnaire survey to verify the developed research framework and its hypotheses illustrated in the previous chapter. The design of the survey scales and questionnaire items is based on previous literature. The measurements of the research model constructs are adapted based on the work of Chen and Chang (2012b). Firstly, the questionnaire items from that study were revised and evaluated for applicability. Selected items were then adapted into a sharing economy context. The adapted items were originally designed in English and translated to German afterwards. After the item design, an item-sort task with five participants was conducted to get feedback regarding the consistency of the items, which led to the modification of one item. Also prior to mailing the survey to the respondents, two scholars and experts in the field of Information Systems (IS) were asked to modify the survey within a pretest. Eventually, these modifications led to the final research model that contained four constructs with four items each.

The survey was built with the open source platform *LimeSurvey* and comprised of two logical parts: an introduction part and the measurement of the constructs. Firstly, the scope and context of the survey were explained and a brief explanation of peer-to-peer rental and sharing (P2PS) was given. The welcome text also illustrated some positive and negative aspects of P2PS platforms, which can lead to an area of conflict between economic and social / ecological objectives. Then, general questions regarding demographics and behavior such as age, gender, education, risk aversion, frequency of Internet usage and Internet affinity were surveyed. Moreover, participants were asked, if they have ever heard of the sharing economy and if they have ever used a service of the sharing economy.

The second part consists of the measurement of the constructs sharewash, sharing perceived risk, sharing consumer confusion and sharing trust. Besides the four constructs of the research model, a further construct *familiarity with the sharing economy* adopted from Gefen and Straub (2004) was measured. The questionnaire items were measured by means of a five-point Likert scale with levels from *strong disagreement* to *strong agreement*. In order to control for common method variance (CMV), a marker variable technique (Lindell & Whitney, 2001) was applied. Therefore, two unrelated items by Gimpel, Nißen, and Görlitz (2013) illustrating the construct of self-healing were also included. To control for biases such as priming effects or item-context induced mood states (Teubner et al., 2016), all items were randomly assigned in the conceptualisation phase to one of four question

blocks. In the survey, these four question blocks were presented to each participants in a random order. Furthermore, two control questions were implemented to assess the honesty and attention of the participants.

4.2. Sample

Sharing economy participants mainly use the services via electronic platforms, are largely part of a younger audience and well-educated (PwC, 2015). Especially Millenials, the generation born between the early 1980s and the early 2000s, are described to be native to the sharing economy (Godelnik, 2017). As students are often Internet-affine and part of that younger audience, a sample of 144 Millenials from the student pool at the Karlsruhe Institute of Technology was taken in order get a representative sample of sharing economy users.

Voluntary participants of the Karlsruhe Decision & Design Lab (KD2Lab) mailing list were recruited and offered prize draws in form of 15 x 20 EUR as an incentive. The online survey was sent out via email to 600 persons and it was accessible for six days. In total, 168 started questionnaires were received, from which 149 were completed. This results into a response rate of 25%. Of the completed questionnaires, five participants, who didn't pass the control questions regarding honesty and attention, were excluded from the sample. Eventually, 144 observations were considered for further analysis.

Of the 144 participants, 75% were male and 25% were female. The age was ranging from 19 - 34 years with an average of 24.3 years (median 24 years). 99% of the participants have at least the Abitur as educational background and 45% at least a Bachelor degree. With 98%, the majority of the sample uses the Internet on a frequent daily basis. 79% of the participants regard themselves as very Internet-affine, indicating a score of eight or higher on a scale from zero to ten. With 94%, almost everyone has already heard of the sharing economy and 88% have already used sharing economy services. Hence, we regard this as a well-suited sample for a survey in the domain of the sharing economy.

4.3. The Measurement of the Constructs

Each of the four main constructs sharewash, sharing consumer confusion, sharing perceived risk and sharing trust were measured by four items that were adopted from Chen and Chang (2012b). The following sections illustrate the definitions of the constructs and the questionnaire items used to measure the constructs.

4.3.1. Sharewash

This study refers to Parguel et al. (2011) to define sharewash as "the act of misleading consumers by claiming to be part of the sharing economy and being motivated by the social and ecological principles of sharing rather than conventional profits". In addition, this study refers to Chen and Chang (2012b) to measure sharewash and its measurement includes four items: (a) P2PS platforms mislead with words regarding the positive aspects

of sharing; (b) P2PS platforms mislead with visuals or graphics regarding the positive aspects of sharing; (c) P2PS platforms often possess claims suggesting positive aspects of sharing, that are vague or seemingly unprovable; (d) P2PS platforms often overstate the positive aspects of sharing.

4.3.2. Sharing Consumer Confusion

This study refers to Turnbull et al. (2000) to define sharing consumer confusion as "consumer failure to develop a correct interpretation of environmental or social features of a platform, product or service during the information processing procedure". Moreover, this study refers to Chen and Chang (2012b) to measure sharing consumer confusion and its measurement includes four items: (a) due to the great similarity of P2PS platforms, it is often difficult to detect a platform with exclusively positive aspects of sharing; (b) it is difficult to recognize the differences between P2PS platforms with respect to positive aspects of sharing; (c) when purchasing an offer on P2PS platforms you rarely feel sufficiently informed with respect to the positive and negative aspects of sharing; (d) when purchasing an offer on P2PS platforms you feel uncertain about the positive and negative aspects of sharing.

4.3.3. Sharing Perceived Risk

This paper refers to Peter and Ryan (1976) and Chen and Chang (2012a) to define sharing perceived risk as "expectation of negative environmental consequences or negative social impact associated with purchase behavior". Furthermore, this paper refers to Chen and Chang (2012b) to measure sharing perceived risk and its measurement includes four items: (a) there is a chance that something will be wrong with the positive aspects of sharing on P2PS platforms; (b) there is a chance that negative aspects of sharing occur on P2PS platforms; (c) there is a chance that negative aspects of sharing will be realised when using P2PS platforms; (d) there is a chance that using P2PS platforms will drive negative consequences of the sharing economy.

4.3.4. Sharing Trust

This study refers to Ganesan (1994) and Chen (2010) to define sharing trust as the "willingness to depend on a platform based on the belief or expectation resulting from its credibility, benevolence, and ability about environmental and social performance". Also this study refers to Chen and Chang (2012b) to measure sharing trust and its measurement includes four items: (a) you feel that the positive reputation of P2PS platforms is generally reliable; (b) you feel that the positive aspects of sharing on P2PS platforms are generally dependable; (c) you feel that the positive claims of P2PS platforms are generally trustworthy; (d) P2PS platforms keep promises and commitments regarding the positive aspects of sharing.

5. Empirical Results

This study applies partial least squares (PLS) structural equation modeling (SEM) and utilizes the software *SmartPLS 3* in order to test the research model. PLS-SEM was chosen over a covariance based approach as sharewash is still a new and recent phenomenon that lacks to date an extensive and fundamental theory base (Gefen, Rigdon, & Straub, 2011).

5.1. Results of the Measurement Model

Before having a deeper look on the structural model, the reliability and validity of the constructs were tested. Several measures were taken into account in guidance with J. F. Hair, Ringle, and Sarstedt (2011) to do so. Just three out of the four construct's Cronbach's α values show a sufficient value greater than 0.7 (J. Hair, Anderson, Black, & Babin, 1998). But as composite reliability is considered as more suitable for PLS-SEM (J. F. Hair et al., 2011), the reliability of the constructs was primarily assessed through the composite reliability (see Table 5.1). The smallest observed value for composite reliability arises for sharing perceived risk with 0.778. Hence, all values exceed the minimum threshold value of 0.7 (Nunnally & Bernstein, 1994) and indicate a sufficient level of reliability.

Construct	Item	Item's loading	Cronbach's α	Composite Reliability	AVE	Square root of AVE
Sharwash	SW01	0.798**	0.739	0.836	0.560	0.748
	SW02	0.741**				
	SW03	0.687**				
	SW04	0.764**				
Sharing Consumer Confusion	SCC01	0.645**	0.618	0.798	0.570	0.755
	SCC03	0.796**				
	SCC04	0.813**				
Sharing Perceived Risk	SPR01	0.750**	0.739	0.836	0.560	0.749
	SPR02	0.717**				
	SPR03	0.773**				
	SPR04	0.753**				
Sharing Trust	ST01	0.797**	0.770	0.849	0.585	0.765
	ST02	0.783**				
	ST03	0.797**				
	ST04	0.674**				

** $p < 0.01$

Table 5.1.: Item's loadings, Cronbach's α, Composite Reliability and AVEs

Furthermore, the validity of the model was checked with focus on convergent validity and discriminant validity. For convergent validity the average variance extracted (AVE) was examined in Table 5.1. Item SCC02 of the construct sharing consumer confusion was dropped because its low major loading and the expectancy of a substantial increase in AVE. With the lowest AVE of 0.56 all constructs fulfil the critical value of 0.5 (J. F. Hair et al., 2011) and explain more than half of their item variance. To check for discriminant validity, each item's factor loading was compared to their cross loadings. Table 5.2 shows that each item's loading with its construct is significantly higher than the loading with the other remaining constructs. Besides that, also the Fornell-Larcker criterion (Fornell, 1982) was utilized in order to check for discriminant validity. To satisfy this criterion, the square root of each construct's AVE has to exceed the correlation values with other constructs.

Construct	Item	Sharing Consumer Confusion	Sharing Perceived Risk	Sharing Trust	Sharewash
Sharing Confusion	SCC01	**0.645**	0.316	-0.242	0.361
	SCC03	**0.796**	0.313	-0.383	0.364
	SCC04	**0.813**	0.352	-0.377	0.348
Sharing Perceived Risk	SPR01	0.260	**0.750**	-0.280	0.343
	SPR02	0.256	**0.717**	-0.277	0.349
	SPR03	0.358	**0.773**	-0.379	0.342
	SPR04	0.418	**0.753**	-0.328	0.287
Sharing Trust	ST01	-0.344	-0.345	**0.797**	-0.387
	ST02	-0.414	-0.393	**0.783**	-0.503
	ST03	-0.317	-0.332	**0.797**	-0.347
	ST04	-0.257	-0.158	**0.674**	-0.221
Sharewash	SW01	0.326	0.362	-0.428	**0.798**
	SW02	0.350	0.364	-0.310	**0.741**
	SW03	0.458	0.274	-0.444	**0.687**
	SW04	0.239	0.320	-0.288	**0.764**

Table 5.2.: Loadings and Cross-Loadings of Measurement Items

All square roots of AVE, with the smallest value of 0.748, are greater than the cross-correlation for all constructs, which is shown in Table 5.3. Hence, it indicates adequate discriminant validity. Thus, both reliability and validity in this study are considered as acceptable.

Construct	Sharewash	Sharing Consumer Confusion	Sharing Perceived Risk	Sharing Trust
Sharewash	**0.748**			
Sharing Consumer Confusion	0.472	**0.755**		
Sharing Perceived Risk	0.442	0.432	**0.749**	
Sharing Trust	-0.503	-0.448	-0.425	**0.765**

Table 5.3.: Construct Correlation Matrix; Square root of AVE shown on diagonal

5.2. Results of the Structural Model

The results and the path coefficients of the structural model are reported in Table 5.4. All five estimated paths of the model are significant. The results indicate that all hypotheses are supported in this study.

Hypothesis	Direction	Proposed effect	Path coefficient	Results
H_1	SW→SCC	+	0.472**	supported
H_2	SW→ SPR	+	0.442**	supported
H_3	SW→ ST	-	-0.259**	supported
H_4	SCC→ ST	-	-0.216**	supported
H_5	SPR→ ST	-	-0.191*	supported

**: p<0.01 *:p<0.05

Table 5.4.: Results of the Structural Model

Figure 5.1 depicts the full results of the theoretical model. To evaluate the fit of the model, different measures were taken into account in guidance with Hooper, Coughlan, and Mullen (2008) and compared to critical thresholds. The standardized root mean square residual (SRMR) of 0.099 for the estimated model exceeds 0.08 and thus cannot be considered as an optimal fit. Also the normed fit index (NFI) with 0.672 doesn't reach the threshold value of 0.95 for an acceptable fit. Moreover, only RMS_theta values below 0.12 indicate well-fitting models, which also is not reached by our model (RMS_theta=0.188). Overall there might be evidence about a lack of fit in the model. The R^2 values of the constructs range from 0.195 to 0.338. As J. F. Hair et al. (2011) note, the judgment of R^2 highly depends on the specific research discipline. In the domain of international marketing Henseler, Ringle, and Sinkovics (2009) propose R^2 values of 0.75, 0.50 and 0.25 to be substantial, moderate and weak. As sharewash can be a result of marketing efforts, we refer to the mentioned scale. Hence, the explanation of variance for sharing perceived risk ($R^2 = 0.195$) and sharing consumer confusion ($R^2 = 0.222$) is considered as weak. The variance in sharing trust is moderately explained with an R^2 of 0.338.

In summary, all hypothesized effects are supported by significant paths even though there might be concerns regarding the fit of the model. This means that sharewashing seems to have a negative effect on sharing trust. Furthermore, it appears that, sharing consumer confusion and sharing risk mediate the negative relationship between sharewashing and sharing trust. Also this study shows that sharewash has a positive effect on sharing consumer confusion and sharing perceived risk.

Figure 5.1.: Structural Equation Model Results

6. Discussion

In summary, this work makes two core contributions. First, this paper sheds first light on the phenomenon of sharewash in the sharing economy. By reviewing existing literature from the context of green marketing and the sharing economy, this paper analyses and approaches the phenomenon of sharewash. In this context, a scientific working definition based on green literature and thoughts on the web (e.g. blogs or Twitter) is proposed.

Second, this study contributes to existing theories and develops a research model that was adapted from literature on greenwashing. By adapting constructs, which are already widely accepted in the field of IS research, to a specific sharing economy context, four novel constructs were introduced within the proposed research framework. Building on this theoretical framework, survey data from 144 Millenials were used to support the model. In addition, this work extends the research of consumer trust, consumer confusion and perceived risk into the field of the sharing economy.

6.1. Theoretical Implication

Within the scope of this study, literature from multiple disciplines such as sharing economy, green marketing and consumer behavior was synthesized to build a theoretical fundament to investigate sharewashing. In contrast to prior research, this work specifically addresses sharewash in the sharing economy context. The study results indicate that all five hypothesized effects can be confirmed by the empirical data. The empirical results are also in line with existing literature addressing the effects of greenwash (Chen & Chang, 2012b). It is also to be mentioned that our proposed model shows a noteworthy lower model fit compared to Chen and Chang (2012b).

This study shows that sharewashing negatively affects sharing trust. This means that the perception of sharewashing practices can harm the trust in the platform providers' integrity. Furthermore, the negative relation of sharewash and sharing trust is partly mediated by sharing consumer confusion and sharing trust. Also the results show that sharewash positively influences sharing consumer confusion and sharing trust. This means that by reducing the perception of sharewash, sharing consumer confusion and sharing perceived risk, trust in a platform's integrity can be enhanced.

6.2. Practical Implications

In online environments, particularly in peer-to-peer marketplaces, trust plays a crucial role and is often referred to as its "currency" (Botsman, 2012). Knowing that sharewash has a direct and indirect negative influence on trust, platforms and firms in the sharing economy landscape should become aware of this issue. Previous research has already highlighted that trust positively affects the intention to use a sharing economy platform (Hawlitschek et al., 2016). If platforms want to attain participation in the long run, building a solid trust base cannot be disregarded. The following practical implications can be drawn from the findings of this study.

As a negative driver of sharing trust, sharewash should be actively addressed by platforms in the realm of the sharing economy. Platforms should become aware of the way they communicate and market themselves. Using unconsciously socially or ecologically motivated claims, which can't be confirmed, can impede trust and hence the participation in P2PS platforms. Marketing planners have to reconsider, if aspects such as "sharing" or "community" are truly represented by their platform. In contrast to misleading claims, this research wants to encourage and suggest a conscious, authentic and honest communication strategy with consumers.

Next, following our research framework, sharing consumer confusion and sharing perceived risk are also determinants of trust in the sharing economy. They are both positively related to sharewash and both mediate the negative effect of sharewash on sharing trust. This means that enhancing trust by reducing sharing consumer confusion and sharing perceived risk can be addressed to a certain extent by efforts to reduce sharewashing practices. In addition, platforms systematically need to detect sources of consumer confusion and perceived risk, such as e.g information overload (Langer et al., 2008) or poor usability (Matzler et al., 2011), in order reduce them and increase overall trust.

6.3. Limitation and Future Research

Certainly, there are limitations in this study that need to be addressed and discussed. First, it has to be mentioned, that the sample was exclusively taken from the student pool of the Karlsruhe Institute of Technology. Even though most of the survey participants indicated to have used a service of the sharing economy before and also other sources describe sharing economy users as young (PwC, 2015) and part of the Millenial generation (Godelnik, 2017), there is still the chance that the sample is not representative for the population. Further research could examine, if the results detected in this study also apply to a broader sample regarding educational background, geographical residence or age group.

Second, the participation of the survey was on a voluntary base. Even though efforts were made to control for biases, participants might have already taken part in a sharing economy survey and / or might have already been biased regarding certain aspects of the sharing economy. Thus, inherent response bias cannot be ruled out. Further research should test for response bias by estimating response bias in alignment with Armstrong and Overton (1977). Also further research should control for common method variance (CMV). There are different possibilities to check for CMV such as implementing a marker variable technique with a topically unrelated marker variable (Lindell & Whitney, 2001) or conducting the Harman's single factor test (Harman, 1960). Even though a marker variable has been included within our survey, common method bias hasn't been analyzed yet.

Third, the sharing economy landscape is a broad concept. Therefore, taking a first look on sharewashing, this research focuses on P2PS as a subclass of the sharing economy. This means that the results and implications are not generalizable to other classes and concepts

of the sharing economy. Additional research will be necessary to extend sharewash research into further sub-domains of the sharing economy.

Fourth, in order to present the context and a short introduction on P2PS to survey participants, a welcome text and examples were presented. The welcome text pictured the popular P2PS platforms *Airbnb*, *BlaBlaCar* and *Uber* as examples. Also while measuring the constructs, the logos of these three platforms were displayed within the questions. This could lead participants to conduct the survey based on these specific three platforms or refer exclusively to accommodation / ridesharing platforms rather than the general class of P2PS platforms.

Furthermore, having just shed a first light on sharewash, there is definitely additional research needed to get an extensive understanding of this phenomenon and the effects it has on consumers and platforms. The proposed theoretical model within this study comprises of four constructs and five hypothesized paths making it comparably simple. Further research could extend the proposed model by additional constructs in the domain of Marketing, Consumer Behavior and Information System and explore more complex relationships with additional constructs.

6.4. Conclusion

While P2PS platforms in the sharing economy have already attracted the attention of the scientific and public press for several years, sharewash is still a novel and unexposed phenomenon. Although in the context of Marketing, greenwashing has been already extensively researched, scientific literature addressing the issue of sharewashing in the context of the sharing economy is still scarce. Hence, this paper seeks to exclusively investigate sharewashing and its effects. By confirming the proposed research framework, this study shows that sharing trust is negatively associated with its three determinants sharewash, sharing consumer confusion and sharing perceived risk. Understanding the role of sharewash in the sharing economy, this work can guide practitioners to align their marketing and communication strategy. By approaching sharewash in its early research phase, this study hopes to encourage future work to further explore sharewash and extend the IS literature in the field of the sharing economy.

7. Declaration

Ich versichere hiermit wahrheitsgemäß, die Arbeit selbstständig verfasst und keine anderen als die angegebenen Quellen und Hilfsmittel benutzt, die wörtlich oder inhaltlich übernommenen Stellen als solche kenntlich gemacht und die Satzung des Karlsruher Instituts für Technologie (KIT) zur Sicherung guter wissenschaftlicher Praxis in der jeweils gültigen Fassung beachtet zu haben.

Karlsruhe, den 08.03.2017 _____

Duy Patrick Tu

Appendix

A. Survey Introduction

Herzlich Willkommen und gleich vorab vielen Dank für Ihre Teilnahme an dieser Umfrage. Die Befragung dauert ca. 5-7 Minuten. Wenn Sie an der Verlosung teilnehmen möchten, geben Sie bitte am Ende dieser Umfrage Ihre E-Mail-Adresse an. Diese wird ausschließlich zur Benachrichtigung über den Gewinn in der Verlosung verwendet.

Es geht in dieser Befragung um die sogenannte Sharing Economy. Die Sharing Economy ist ein relativ neuer, sich ständig weiterentwickelnder Wirtschaftszweig, dessen Geschäftskonzepte darauf basieren, Ressourcen mittels einer Internetplattform gemeinsam zu nutzen bzw. (ggf. gegen Bezahlung) miteinander auszutauschen. Es gibt eine erhebliche Anzahl an Plattform-Anbietern, die sich auf Vermietungs- bzw. Servicekonzepte von privat an privat spezialisiert haben – sogenannte Peer-to-Peer Rental & Sharing (P2PS) Plattformen. Beispiele sind Airbnb, BlaBlaCar und Uber.

Die Anbieter solcher P2PS Plattformen profitieren in vielen Fällen von der positiven öffentlichen Wahrnehmung der Nachhaltigkeit ihres Geschäftsmodells und stellen sich entsprechend dar. Positive Aspekte, die hierbei häufig betont werden, sind beispielsweise ökologische Nachhaltigkeit durch Ressourcenschonung, zusätzliche Verdienstmöglichkeiten für Privatpersonen, oftmals günstigere Preise für Konsumenten als bei traditionellen Anbietern, Zugehörigkeit zu einer Wertegemeinschaft sowie positive soziale Interaktionen (z.B. neuen Bekanntschaften).

Der „Claim“ der Plattformen für solche positiven Aspekte von P2PS wird allerdings auch zunehmend kritisch betrachtet, wobei ein Vorwurf lautet, diese Aspekte übermäßig zu betonen oder sogar ganz ohne Grundlage zu nennen. Auch werden negative Aspekte herausgestellt. Dazu zählen unter anderem das Unterlaufen von Arbeitsstandards, Mindestlöhnen und Rechtsvorschriften, das Ausnutzen altruistischer Einstellungen der Teilnehmer, Mehrkonsum durch gespartes Geld sowie die Kommerzialisierung menschlicher Beziehungen und vormals marktferner Lebensbereiche. Somit bewegen sich P2PS Plattformen in der Sharing Economy häufig in einem Spannungsfeld zwischen ökonomischen Zielen und sozialer sowie ökologischer Nachhaltigkeit. Die Plattformbetreiber sind natürlich daran interessiert, vor allem die positiven Aspekte ihres Angebots besonders hervorzuheben, was zu einer verzerrten Wahrnehmung in der Öffentlichkeit führen kann.

In dieser Umfrage möchten wir Sie darum bitten, uns einige Fragen zu Ihrer Wahrnehmung dieses Spannungsfeldes zwischen positiven und negativen Aspekten von P2PS Plattformen wie Airbnb, BlaBlaCar und Uber zu beantworten. Sollten Sie selbst keine Erfahrungen mit P2PS Plattformen in der Sharing Economy haben, beantworten Sie die Fragen bitte einfach aus hypothetischer bzw. allgemeiner Sicht. Bitte beantworten Sie alle Fragen in jedem Fall so ehrlich und intuitiv wie möglich. „Falsche“ Antworten gibt es nicht. Vielen Dank für Ihre Teilnahme – und los geht‘s!

B. Survey Invitation

Subject: Onlineumfrage – Sharing Economy

Lieber Experiment-/ Studienteilnehmer,

wir möchten Sie heute zu einer Umfrage des Instituts für Informationswirtschaft und Marketing (IISM) zum Thema Sharing Economy einladen.

Diese ist bis einschließlich Sonntag, 26.02.2017 online verfügbar. Somit ist keine Anwesenheit im Experimentlabor nötig. Die Umfrage dauert etwa 5-7 Minuten.

Unter allen Teilnehmern, die den Fragenbogen vollständig ausfüllen, verlosen* wir insgesamt 15 x 20 EUR in Form von Bargeld-Auszahlungen. Bitte beachten Sie, dass wir Fragebögen, die einfach irgendwie angekreuzt oder durchgeklickt wurden, dabei natürlich aussortieren. Bitte nehmen Sie sich also die Zeit, und füllen Sie den Fragebogen gewissenhaft aus. Sie helfen uns damit bei der Forschung zu einem aktuellen und spannenden Thema.

Wenn Sie sich für die Ergebnisse interessieren, kontaktieren Sie uns ganz einfach per Mail. Am Ende der Umfrage besteht auch die Möglichkeit, direktes Feedback in einem Freitextfeld zu geben. Um die Umfrage zu starten, klicken Sie bitte auf folgenden Link:

{SURVEYURL}

Vielen Dank

Dr. Timm Teubner | Florian Hawlitschek | Patrick Tu

C. Items

Construct	ID	Measurement item	Source
Sharewash	SW01	P2PS Plattformen täuschen in ihren Angebotsbeschreibungen häufig positive Aspekte von sharing vor.	(Chen & Chang, 2012b)
	SW02	P2PS Plattformen täuschen häufig mit Hilfe visueller Darstellungen positive Aspekte von sharing vor.	(Chen & Chang, 2012b)
	SW03	P2PS Plattformen nutzen häufig einen Claim, der positive Aspekte von sharing suggeriert, aber nur schwer bestätigt werden kann.	(Chen & Chang, 2012b)
	SW04	P2PS Plattformen überbetonen häufig die positiven Aspekte von sharing.	(Chen & Chang, 2012b)
Sharing Consumer Confusion	SCC01	Aufgrund der großen Ähnlichkeit vieler P2PS Plattformen, ist es schwierig diejenigen mit überwiegend positiven Aspekten zu identifizieren.	(Chen & Chang, 2012b)
	SCC02	Es ist schwierig die Unterschiede zwischen verschiedenen P2PS Plattformen im Hinblick auf positive Aspekte von sharing zu erkennen. (item dropped)	(Chen & Chang, 2012b)
	SCC03	Wenn man auf P2PS Plattformen bucht, fühlt man sich bezüglich der positiven und negativen Aspekte des Angebots kaum informiert.	(Chen & Chang, 2012b)
	SCC04	Wenn man auf P2PS Plattformen bucht, sind die positiven und negativen Aspekte des Angebots häufig nicht klar ersichtlich.	(Chen & Chang, 2012b)
Sharing Perceived Risk	SPR01	Es besteht das Risiko, dass die negativen Aspekte von sharing auf P2PS Plattformen manchmal zutreffen.	(Chen & Chang, 2012b)
	SPR02	Es besteht das Risiko, dass einige negative Aspekte von sharing auf P2PS Plattformen zum Tragen kommen.	(Chen & Chang, 2012b)
	SPR03	Es besteht das Risiko, dass sich durch die Nutzung von P2PS Plattformen negative Aspekte der sharing Economy realisieren.	(Chen & Chang, 2012b)
	SPR04	Es besteht das Risiko, dass durch die Nutzung von P2PS Plattformen nachteilige Entwicklungen in der sharing Economy gefördert werden.	(Chen & Chang, 2012b)

(continued on next page)

Table C.1.: Measurement Model - Constructs and Items

Construct	ID	Measurement item	Source
Sharing Trust	ST01	Ich habe den Eindruck, dass der positive Ruf von P2PS Plattformen glaubwürdig ist.	(Chen & Chang, 2012b)
	ST02	Ich kann mich darauf verlassen, dass die positiven Aspekte von sharing auf P2PS Plattformen tatsächlich existieren.	(Chen & Chang, 2012b)
	ST03	Ich habe den Eindruck, dass der positive Claim der meisten P2PS Plattformen vertrauenswürdig ist.	(Chen & Chang, 2012b)
	ST04	P2PS Plattformen halten in der Regel ihre Versprechen bezüglich Ihres Einsatzes für die positiven Aspekte von sharing.	(Chen & Chang, 2012b)
Familarity with the Sharing Economy	FAM01	Ich bin mit der Suche von Produkten oder Dienstleistungen auf P2PS Plattformen vertraut.	(Gefen & Straub, 2004)
	FAM02	Ich bin mit dem Erwerb von Produkten oder Dienstleistungen auf P2PS Plattformen vertraut.	(Gefen & Straub, 2004)
	FAM03	Ich bin mit P2PS Plattformen vertraut.	(Gefen & Straub, 2004)
	FAM04	Ich bin damit vertraut, mich auf P2PS über Produkte oder Dienstleistungen zu informieren.	(Gefen & Straub, 2004)
Self-Healing	CMV01	Ich verlasse mich nicht ausschließlich auf die klassische Medizin.	(Gimpel et al., 2013)
	CMV02	Ich möchte nicht ausschließlich von traditioneller Medizin abhängig sein.	(Gimpel et al., 2013)

Table C.2.: Measurement Model - Constructs and Items (continued)

D. Adaption of Constructs

Original definition	Construct adapted in a green marketing context by Chen and Chang (2012b)	Construct adapted in a sharing Economy context used in this study
Whitewash: An attempt to stop people discovering the truefacts about something, in order to prevent someone in authority from being criticized (**?**).	**Greenwash:** The act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service (Parguel et al., 2011).	**Sharewash:** The act of misleading consumers by claiming to be part of the sharing economy and being motivated by the social and ecological principles of sharing rather than conventianal profits.
Consumer Confusion: Consumer failure to develop a correct interpretation of various facets of a product or service during the information processing procedure (Turnbull et al., 2000).	**Green Consumer Confusion:** Consumer failure to develop a correct interpretation of environmental features of a product or service during the information processing procedure. (Chen & Chang, 2012b).	**Sharing Consumer Confusion:** Consumer failure to develop a correct interpretation of environmental or social features of a platform, product or service during the information processing procedure.
Perceived risk: A subjective expectation by consumers connected with possible consequences of wrong decisions (Peter & Ryan, 1976).	**Green Perceived Risk:** The expectation of negative environmental consequences associated with purchase behavior (Chen & Chang, 2012b).	**Sharing Perceived Risk:** Expectation of negative environmental consequences or negative social impact associated with purchase behavior.
Trust: The extent of the willingness to believe another party based on the expectation about the party's ability, reliability, and benevolence Ganesan (1994).	**Green Trust:** The willingness to depend on a product or service based on the belief or expectation resulting from its credibility, benevolence, and ability about environmental performance (Chen, 2010).	**Sharing Trust:** The willingness to depend on a platform based on the belief or expectation resulting from its credibility, benevolence, and ability about environmental and social performance.

Table D.3.: Adaption of Constructs

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E. Item Correlation

	SCC01	SCC03	SCC04	SPR01	SPR02	SPR03	SPR04	ST01	ST02	ST03	ST04	SW01	SW02	SW03	SW04
SCC01	1	0.247	0.311	0.251	0.214	0.191	0.301	-0.176	-0.249	-0.182	-0.085	0.231	0.377	0.274	0.182
SCC03	0.247	1	0.492	0.154	0.115	0.284	0.379	-0.346	-0.305	-0.259	-0.250	0.321	0.217	0.329	0.190
SCC04	0.311	0.492	1	0.197	0.258	0.325	0.265	-0.244	-0.377	-0.270	-0.230	0.185	0.221	0.427	0.171
SPR01	0.251	0.154	0.197	1	0.466	0.409	0.394	-0.226	-0.282	-0.205	-0.079	0.295	0.255	0.203	0.278
SPR02	0.214	0.115	0.258	0.466	1	0.336	0.373	-0.173	-0.265	-0.255	-0.113	0.335	0.296	0.192	0.214
SPR03	0.191	0.284	0.325	0.409	0.336	1	0.507	-0.299	-0.358	-0.291	-0.152	0.261	0.305	0.245	0.201
SPR04	0.301	0.379	0.265	0.394	0.373	0.507	1	-0.332	-0.263	-0.238	-0.124	0.194	0.231	0.176	0.272
ST01	-0.176	-0.346	-0.244	-0.226	-0.173	-0.299	-0.332	1	0.426	0.569	0.439	-0.365	-0.233	-0.290	-0.251
ST02	-0.249	-0.305	-0.377	-0.282	-0.265	-0.358	-0.263	0.426	1	0.424	0.371	-0.417	-0.313	-0.451	-0.288
ST03	-0.182	-0.259	-0.270	-0.205	-0.255	-0.291	-0.238	0.569	0.424	1	0.501	-0.300	-0.224	-0.290	-0.203
ST04	-0.085	-0.250	-0.230	-0.079	-0.113	-0.152	-0.124	0.439	0.371	0.501	1	-0.142	-0.122	-0.291	-0.068
SW01	0.231	0.321	0.185	0.295	0.335	0.261	0.194	-0.365	-0.417	-0.300	-0.142	1	0.469	0.330	0.581
SW02	0.377	0.217	0.221	0.255	0.296	0.305	0.231	-0.233	-0.313	-0.224	-0.122	0.469	1	0.296	0.481
SW03	0.274	0.329	0.427	0.203	0.192	0.245	0.176	-0.290	-0.451	-0.290	-0.291	0.330	0.296	1	0.329
SW04	0.182	0.190	0.171	0.278	0.214	0.201	0.272	-0.251	-0.288	-0.203	-0.068	0.581	0.481	0.329	1

Table E.4.: Empirical Item Correlation Matrix

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F. Marker Variable Technique

Correlation	Self-Healing	Sharewash	Sharing Consumer Confusion	Sharing Perceived Risk	Sharing Trust
Self-Healing	1				
Sharewash	-0.023	1			
Sharing Consumer Confusion	0.236	0.472	1		
Sharing Perceived Risk	0.099	0.441	0.434	1	
Sharing Trust	-0.019	-0.503	-0.447	-0.425	1

Table F.5.: Correlation Matrix with Marker Variable

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