

Article

# How Corporate Sharewashing Practices Undermine Consumer Trust

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**Abstract:** Sharewashing describes a platform’s act of misleading consumers by purposely portraying an image of social and ecological principles while the platform’s business model does not necessarily involve them. Drawing on Corporate Social Responsibility and Green Marketing literature, we propose and evaluate a research model for investigating the impact of sharewashing perceptions on consumer trust. Based on survey data from 145 millennials, our results reveal a significant negative effect of sharewashing perceptions on consumer trust, partially mediated by perceptions of risk and confusion. We discuss our findings in view of their practical and strategic relevance to sharing economy platform operators.

**Keywords:** sharewashing; sharing economy; trust

## 1. Introduction

“In some of the theory and research surrounding ‘the sharing economy,’ sharing is so blurred with traditional marketplace exchanges as to be indistinguishable. Or more accurately, the concepts often remain distinct, but a ‘sharewashing’ effort is made to blur them to the extent that marketplace exchange is touted as sharing.” [1] (p. 193)

In recent years, a broad variety of Internet platforms has set out to facilitate the exchange of products and services between private individuals [2]. Such schemes have experienced tremendous growth and attracted attention from both public and scientific press. The growing platform landscape is often subsumed under the broad umbrella term of the sharing economy, that is, “consumers granting each other temporary access to under-utilized physical assets (‘idle capacity’), possibly for money” [3]. Among the most prominent examples are platforms such as Airbnb and BlaBlaCar, covering concepts which we will refer to as peer-to-peer sharing in the following. Also platforms such as Uber have often been ascribed a “sharing” business model—and there exists a heated and yet unsettled debate about what the sharing economy actually is [4]. One description refers to sharing economy business models as allowing for “extended use patterns” [5] (p. 133), meaning that resources experience higher (i.e., more efficient) utilization rates. While this does not necessarily imply less consumption per se, it reduced resource expenditure for a given level of consumption. In this sense, sharing economy platforms that enable access to otherwise idle capacity (e.g., empty seats on long distance car rides;

BlaBlaCar) have the potential to save resources and hence may contribute to the UN's 12th Sustainable Development Goal (Responsible Consumption and Production [6]).

It is hence not surprising that, on the one hand, the sharing economy enjoys a positive and sustainability-related image [7]. Consequently, different types of sharing practices are perceived as a promising way of consumption that may drive a transition towards sustainability [8]. On the other hand, critics argue that many profit-oriented "sharing" models should rather be characterized as *pseudo-sharing* or not as sharing at all [9]. Consumer perceptions of how businesses use the notion of sharing are hence of utmost interest to both researchers and practitioners in the fields green marketing, corporate social responsibility (CSR) and correspondingly to corporate sustainability [10]. So far, the potential dual role of CSR reporting, either for signaling social and environmental performance or for manipulating consumer perceptions of firms' concerns about social and environmental issues through greenwashing, has been extensively discussed [11]. However, the positioning of companies under the sharing economy umbrella for either signaling or manipulation, has only been sparsely addressed in the literature.

Certain platforms do not "involve any actual *sharing* per se" [12], and hence falsely claim and market themselves to be part of an idealistic sharing movement [4]. The press coined this aspect of peer-to-peer platforms as *sharewashing* [12]. In this sense, sharewashing is a mash-up based on the terms sharing and greenwashing [13]. Drawing on the greenwashing definition applied by Parguel et al. [14], sharewashing can be defined as a platform operator's efforts of misleading consumers by purposely portraying an image of social and ecological principles while the platform's business model is actually centered around delivering utilitarian value. Other scholars employ similar conceptions. Light and Miskelly [15], for instance, describe sharewashing as using "the language of sharing [ . . . ] to promote new modes of selling" (p. 49). Netter [16] refers to sharewashing as a situation in which commercial businesses make use of the positively connoted communal sharing terminology "to masquerade their intentions" (p. 11). In a similar vein, Huang [17] suggested "wewashing" for organizations that "refer to renting and selling services as sharing and/or use terms like community in misleading ways." The term sharewashing was also used by Tu [18] and Hawlitschek et al. [19] forming the basis of the present article.

While greenwashing has been extensively investigated in the context of corporate communication and marketing [20,21], scientific literature addressing the issue of sharewashing is scarce. Importantly, platform operators presumably make use of sharewashing (deliberately or unconsciously) to blur the commercial character of their platforms [22] in an attempt to improve brand image, attract customers, and hence, to increase revenues [1]. Recent literature, however, has pointed out that such efforts may be wasted since often consumers simply do not seek sustainability or sense of community.

Based on the literature on greenwashing [20], we provide first evidence that beyond marketing budget misallocation, sharewashing practices can also undermine consumer trust towards the associated platform, which can be defined as the consumers' willingness to depend on a platform based on the beliefs or expectation resulting from its credibility, benevolence, and ability associated with environmental and social performance [23,24]. Trust, however, is deemed as one of, if not the most important factor for companies operating in the realm of peer-to-peer platforms [25–27]. Moreover, consumer trust towards the platform operator was found to exert important transfer effects onto trusting beliefs among providers and consumers on the platform [28,29]. Our study thus focuses on the following research question: How does the perception of sharewashing impact consumer trust?

The contribution of our work is twofold. First, drawing on extant research on CSR and greenwashing, we provide a concise definition and description of the sharewashing phenomenon. Second, we shed light on how consumer perceptions of sharewashing undermine consumer trust through the pathways of confusion and perceptions of risk. In doing so, we extend the growing body of literature on trust in the sharing economy and shed light on a thus far barely discussed antecedent of trust [25–27,30–32].

## 2. Theoretical Background

### 2.1. Sustainability in the Sharing Economy

One of the earliest appearances of the notion of sustainability in its current connotation dates back to Meadows et al.'s [33] seminal work describing “The Limits to Growth”, in which the authors sketch out a desirable state of ecological and economic stability that is “sustainable far into the future” (p. 24). In their 2005 World Summit, the United Nation General Assembly (UNGA) identified “economic development, social development and environmental protection” as the main objectives of sustainable development [34] (p. 12). These goals are also known as the three pillars of sustainability.

The sharing economy is often associated with a novel and sustainable way of consumption. Heinrichs [35], for instance, describes it as a “potential new pathway to sustainability” (p. 228) and especially environmental and social aspects are emphasized. One line of argumentation is that many products are underutilized, and thus, their life span often falls short of their actual technical potential [36]. In this regard, the French National Institute of Statistics and Economic Studies (INSEE) found that shareable goods account for 25 percent of the average French household budget and for one third of the household waste [37]. Sharing and redistribution practices of these products could extend their usage lifetime towards their technical lifetime, resulting in positive environmental impacts such as reduction of energy consumption and waste [37]. With regard to the social dimension, sharing-based consumption models enable opportunities to increase social interactions, to meet new people, to engage with others, and thus, to build social capital [38,39]. In this sense, a majority of the 78 percent of sharing-acquainted adults agrees that the sharing economy can build stronger communities [40]. In line with Böcker and Meelen [41], we refer to sustainability in the three dimensions of economic, environmental, and social sustainability. Importantly, the actual impact of the sharing economy in these dimensions largely depends on the specific design and use of a particular platform. Murillo et al. [42] raise serious concerns about whether in general, the positive social and environmental claims of sharing platforms should be taken for granted. Especially when platforms are close to the commercial end of the “sharing/exchange continuum,” recent research recommends managers to focus on efficiency and utilitarian benefits rather than on efforts of sustainability or social responsibility [43] (p. 119).

In the following, we provide a brief overview of relevant literature on greenwashing and corporate social responsibility and illustrate motives and potential downsides of greenwashing practices as a theoretical foundation for the concept of sharewashing.

### 2.2. Corporate Social Responsibility, Greenwashing, and Sharewashing

Today, CSR reporting represents an integral part of most business activities which is exemplified, for instance, by the fact that the share of S&P companies that published sustainability reports rose from just 20 percent in 2011 to over 80 percent in 2016 [44]. This also signifies organizations' desire to express their commitment towards sustainability [45]. Recently, it is argued that CSR may not be a sufficient term and/or business approach and that responsible corporate strategies should consider further dimensions of sustainability such as the businesses' ethical, environmental, cultural, and economic spheres (e.g., through transparency and employee development) [46]. However, environmental studies show that, whilst corporations might embrace sustainability outwardly, the actual figures remain dire: inequality and poverty do still represent severe problems, and also limiting global warming to no more than 2 °C requires substantial enhancements in actions to reduce greenhouse gas emissions [47,48]. Companies today not only acknowledge that “business as usual” approaches bear the risk of reputational damage, they also understand that the potentially resulting regulation and reduced attractiveness for talent and consumers threaten their long-term survival (e.g., [49–51]). However, in practice these insights still fail to positively impact the state of affairs on a larger level [45].

An explanation of this disconnect between firms' reporting narratives and their actual policies can be found in the reputational benefits that accrue from corporate responsibility reporting [52]. Firms have an incentive to exaggerate their role for sustainability and thus enjoy a “reputation

that is higher than warranted by [their] actual CR outcomes" [52] (p. 543). This gap between green marketing narratives and actual firm policies is referred to as greenwashing, that is, the "disinformation disseminated by an organization so as to present an environmentally responsible public image" [53] (p. 673–674). Even though monitoring schemes that publicize firm-level CSR performance exist, gaps between reporting and actual behavior are still possible where companies have the "freedom to fabricate it" [54] (p. 182). Moreover, pressure from stakeholders and a lack of legislative requirements facilitate overly positive CSR communication. Managers are thus provided with an incentive to report the good and leave out the bad [55]. Interested parties have no choice but to trust that the content in CSR reports are objective [56]. As Rivera et al. [57] put it, "purely voluntary initiatives that lack specific performance based standards, third-party oversight, reward exceptional behavior, and/or sanctions for poor performance" (p. 215) are bound to fail. More bluntly put, without transparency and monitoring, self-reported CSR claims are meaningless and aid and abet greenwashing practices [53]. Without adequate information, it is hard for stakeholders to evaluate the worthiness of CSR claims and to take sustainable reporting into consideration when making decisions [53,58]. Greenwashing practices have already hampered consumer trust in corporations, with only 20 percent of consumers trusting their environmental claims [59].

In view of sharewashing perceptions, there exist distinct parallels and overlaps between the greenwashing practices of large corporations and the claims made by online platforms for sharing. First, the actual social, environmental, and economic impacts of sharing platforms are widely unknown and transparency on the side of the big players is lacking [3]. To assess their impacts, researchers, monitoring institutions, and governments would need more insight into their data. However, platforms are unwilling to share such data, for instance with reference to their users' privacy [60]. As a result, claims such as Airbnb [61]'s statement to be environmentally more friendly than staying at a hotel are hardly ascertainable. Quite to the opposite, it is argued that rebound effects afford additional consumption [62,63]. In a similar vein, ride-hailing companies such as Uber have promoted the idea that by reducing reliance on privately owned cars, carbon emissions in urban areas are decreasing [64]. A recent report, however, demonstrates that car mileage and fuel consumption in New York City have actually increased since 2014 [65]. Furthermore, Schaller Consulting [66] demonstrates that the popularity of these services coincides with an all-time low of subway usage, suggesting that people substitute public transit with ride hailing, which may have attributed to an overall seven percent increase in congestion.

Hence, we argue that while many online platforms are presenting sharing as a core value of their business, in reality the service they offer has little to do with sharing and may also not be perceived as such by well-informed consumers. Habibi et al. [67] for example, have demonstrated that platforms differ in their ability to deliver social benefits alongside more utilitarian benefits. One example that the authors elaborate on is Zipcar (a business-to-consumer car sharing scheme in which consumption tends to be anonymous and private). Zipcar users do typically not interact with one-another and view the service similar to renting a hotel room rather than sharing a car within a community of neighbors [68]. Other examples include platforms that facilitate a service online, such as hiring a taxi through Uber, gaining access to cleaning service through Helpling, or finding a local handy man through Taskrabbit. Whilst these platforms make our lives more convenient, in no way do we expect cleaners to provide this service out of a communal ideal, rather it is an effective way to find new "gigs" on the supply side and labor on the demand side. Not surprisingly, consumers do not view these activities as sharing and have little interest to get to know other users [67,68]. Yet, some platforms position themselves as "sharing platforms" in order to gain relational benefits from this positive "sharing rhetoric". Thus, we argue that alongside greenwashing, online platforms now engage in a new form of consumer deception through sharewashing, which could potentially be harmful to the sharing sector as a whole.

This article considers the relation between consumer perceptions of sharewashing and consumer trust. To this end, we draw upon the theoretical concepts of risk perception and consumer confusion, which we outline in the following paragraph.

### 2.3. Perceived Risk Theory and Consumer Confusion

In this paper, we draw upon the theoretical conception provided by Chen and Chang [18] who investigate the impact of corporate greenwashing practice on consumer trust through the theoretical lens of consumers' perceptions of confusion and risk. Perceived risk theory, in this regard, argues that consumers attempt to minimize the risks associated with their behaviors and purchase decisions as a primary objective rather than maximizing expected outcomes, that is, assuming high efficacy of risk aversion [69]. In fact, a large majority of research recognizes consumers as risk averse rather than risk seeking (e.g., [70]). For the context of this study, perceived risk can be defined as a consumer's expectation of negative environmental consequences or negative social impact associated with purchase behavior [71]. This "dark side" of the sharing economy has experienced some attention in recent academic literature [72,73]. Beyond concerns with regard to ecological and social sustainability, potential concerns also include legal questions [74,75] and issues of discrimination [76,77].

Similarly, consumer confusion can be defined as consumer failure to develop a correct interpretation of environmental or social features of a platform, product or service during the information processing procedure [78]. In this sense, this construct captures the consumers' (in)ability to make sense of how a platform provider operates, how platforms can be differentiated, and which associated aspects may have positive or negative external effects. It is thus a misunderstanding or misinterpretation of the market.

### 3. Constructs, Measurements, and Research Model

Building on established literature from the context of green marketing, we draw on the relation between greenwashing and trust which we adapt for the scenario of sharewashing and consumer trust [20] (see Figure 1). Our model includes the four constructs sharewashing (SHW), consumer confusion (CNF), perceived risk (RSK), and consumer trust (TRU) and conceptualizes consumer trust as a consequence of sharewashing perceptions, the effect of which may be exerted through the paths of consumer confusion and risk perceptions. Note that we use sharewashing or SHW as a synonym for sharewashing perception. All constructs, their context-specific definitions, and measurement items are provided in Table 1. In the following, we develop our hypotheses.

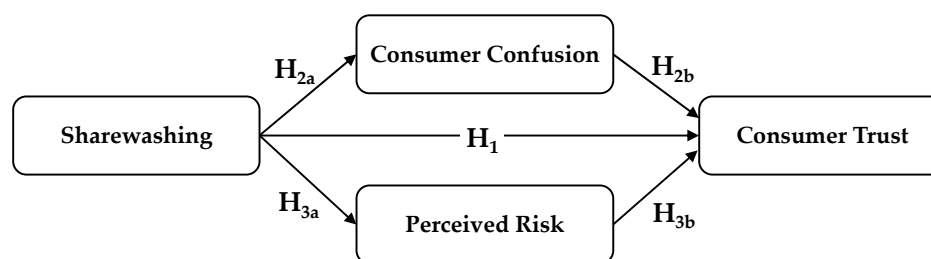


Figure 1. Research Model.



**Table 1.** Constructs and measurement items (P2PS = peer-to-peer sharing, pls = platforms). English translation adapted from Chen and Chang [20].

<p><b>Sharewashing (SHW):</b> A consumer's perception that a platform is misleading by purposely portraying an image of social and ecological principles while the platform's business model is actually lefted around delivering utilitarian value.</p>
<ol style="list-style-type: none"> <li>1 P2PS pls often feign positive aspects of sharing within their product and service descriptions.</li> <li>2 P2PS pls often mock positive aspects of sharing by means of visual and graphic design.</li> <li>3 P2PS pls often claim positive aspects of sharing that are vague or difficult to verify.</li> <li>4 P2PS pls often overstate the positive aspects of sharing.</li> </ol>
<p><b>Consumer Confusion (CNF):</b> A consumer's perception of failure to develop a correct interpretation of environmental or social features of a platform, product or service during the information processing procedure.</p>
<ol style="list-style-type: none"> <li>1 Due to the great similarity of many P2PS pls, it is difficult to identify those that actually facilitate the positive aspects of sharing.</li> <li>2 It is hard to identify differences between P2PS pls with respect to the positive aspects of sharing.</li> <li>3 When booking through P2PS pls, you rarely feel informed about the positive and negative aspects of sharing.</li> <li>4 When booking through P2PS pls, the positive and negative aspects of sharing are hardly evident.</li> </ol>
<p><b>Perceived Risk (RSK):</b> A consumer's expectation of negative environmental consequences or negative social impact associated with using a platform.</p>
<ol style="list-style-type: none"> <li>1 There is a risk that P2PS pls promote the negative consequences of sharing.</li> <li>2 There is a risk that negative aspects of sharing occur on P2PS pls.</li> <li>3 There is a risk that negative aspects of sharing are realized through using P2PS pls.</li> <li>4 There is a risk that using P2PS pls drives negative consequences of the sharing economy.</li> </ol>
<p><b>Consumer Trust (TRU):</b> A consumer's willingness to depend on a platform based on the beliefs or expectation resulting from its credibility, benevolence, and ability associated with environmental and social performance.</p>
<ol style="list-style-type: none"> <li>1 I have the impression that the positive reputation of P2PS pls is credible.</li> <li>2 I have faith that the positive aspects of sharing actually exist on P2PS pls.</li> <li>3 I have the impression that the positive claims of P2PS pls are generally trustworthy.</li> <li>4 P2PS pls generally keep their promises regarding their commitment to foster positive aspects of sharing.</li> </ol>

### 3.1. The Association of Sharewashing and Consumer Trust (H1)

In the context of peer-to-peer sharing, a key facet of consumer trust is the belief in the ability, integrity, and benevolence of a platform provider [27,79]. Expectations about the environmental and social performance of a platform may thus well influence the perception of trustworthiness. Similar to greenwashing, exaggerating and overstating the environmental functionality of one's product can negatively affect trust, for instance through negative word-of-mouth and publicity, and even result in consumer distrust [20,80,81]. We argue that the same holds true for exaggerating, over-emphasizing, and falsely claiming positive impacts of sharing. Consequently, against the backdrop of growing doubts in the actual social and environmental impact of the sharing economy [42,82], we posit that the perception of sharewashing will lead to a decrease of consumer trust.

**Hypothesis 1 (H1).** *Sharewashing is negatively associated with consumer trust.*

As depicted in our research model in Figure 1, this main effect is suggested to be (partially) mediated by perceptions of consumer confusion and perceptions of risk, which we elaborate on in the following.

### 3.2. The Mediating Role of Consumer Confusion (H2)

Consumer confusion often arises in situations in which too similar, too complex, too ambiguous, or simply too much information about products or services is communicated to consumers [20]. Especially in the complex terminological environment of the sharing economy, consumers are confronted with various and often ambiguous notions of characteristics attributed to the broad sharing economy umbrella term [3,83,84]. Moreover, today's sharing economy landscape is in a steady process

of change and development [85]. While businesses, politics, and academia try to keep up with this rapid evolution in terms of marketing, regulation, and conceptual definitions, consumers are confronted with a hardly manageable supply of marketing messages and business models [86]. The possibility that platform providers actively attempt to mislead consumers by “feelgood” marketing narratives renders the situation even more difficult. Due to consumers’ restricted cognitive abilities, greater amounts of information will increase the chances of information overload and confusion [87]. According to Mitchell and Papavassiliou [69], the three main sources of consumer confusion are overchoice, product similarity, and information unclarity. Sharewashing practices confront consumers with potentially paradoxical information, that is, pertaining mainly to information unclarity. This makes it arguably difficult for consumers to evaluate platforms and their products or services. Thus, with respect to social and environmental claims, sharewashing can be expected to result in increased consumer confusion.

**Hypothesis 2 (H2a).** *Sharewashing is positively associated with consumer confusion.*

Consumer confusion, in turn, has been associated with several unfavorable consequences [88]. Alongside with negative word-of-mouth, it has been found to negatively impact consumer trust [20,89,90]. Consumers confused by misleading marketing claims and even subtle forms of advertising deception can react with defensive behavior, even against firms with good reputation [91]. Consumers may interpret such deceptive messages as a deliberate attempt to dupe them, raising suspicion and doubts about the companies’ actual motives and intentions—hence undermining trust [89]. Consequently, our next hypothesis states:

**Hypothesis 2 (H2b).** *Consumer confusion is negatively associated with consumer trust.*

### 3.3. The Mediating Role of Perceived Risk of Sharing (H3)

Along with the increasing market penetration and acceptance of sharing economy business models [92], companies have started to promote their offers with slogans such as “Let’s Tackle Air Pollution” [93], or “We’re Taking Action Against Discrimination” [94]. Beyond marketing efforts to foster user acceptance of the idea of access rather than ownership, practices of “collective lobbying for sharing” have taken root around the globe [95,96]. Such initiatives are stressing the promises and positive effects of sharing for the society and the environment [96]. However, prominently claiming the promising green and social logics may cause consumers to become especially aware of the potential and actual detrimental external effects of sharing businesses [97–99]. This may, for example, include considerations about consumptive rebound effects [62], legal and regulatory concerns [74], the economization of formerly non-economic domains [7,39], aggravation local housing markets [100], discrimination [76,77], or the creating of a gig/sharing precariat [39]. Platforms that obviously overstate the positive aspects of their doing may thus be associated with higher risks of negative consequences.

**Hypothesis 3 (H3a).** *Sharewashing is positively associated with the perceived risk of sharing.*

The perception of social and ecologic risks related to the use of sharing economy platforms is becoming more prevalent in both academia and the press [42]. Based on the principles of risk aversion and avoidance, outlined above, risk perceptions affect consumer choices whether to trust or not to trust a certain party [101]. One vivid example is Uber, for which Kaplan and Nadler [102] postulate that the public mistrust against the company results from its role in shaping the situation of low-wage work. From the opposite perspective, reducing perceived risk can facilitate trust on the consumer side [103]. Similar to the risks of sharing practices, green risks were found to be a negative antecedent of trust [20]. Overall, we thus suggest that risk perceptions associated with a platform’s sharewashing efforts and practices will impede consumers trust in such platforms.

**Hypothesis 3 (H3b).** *Perceived risk of sharing is negatively associated with consumer trust.*

## 4. Survey Administration and Results

### 4.1. Procedures and Sampling

To evaluate our research model and hypotheses, we conducted an online survey. The data was collected in February 2017. The survey comprised two consecutive parts. First, an introduction explained the scope and context of the study. After that, general questions regarding demographics and control variables (such as age, gender, education, risk aversion, familiarity with the sharing economy, frequency of Internet usage and affinity) as well as the main constructs (sharewashing, perceived risk of sharing, consumer confusion, and consumer trust; see Table 1) were surveyed. The questionnaire items were measured on 5-point Likert scales ranging from strong disagreement (1) to strong agreement (5) that were adapted from Chen and Chang [20] and subjected to a content validity assessment. All items were formulated for peer-to-peer sharing platforms in general in order to reflect the broad and diverse sharing economy landscape and were presented in random order. Furthermore, two control questions were included to assess the participants' honesty and attention. Participants from a student subject pool at a German university were invited via email. With our sampling approach, we targeted a younger and well-educated audience of millennials, that is, one of the main user groups of sharing economy platforms [40,104–106]. Participation was incentivized by a prize draw in form of 15 × 20 EUR of cash payments. In total, 169 participants started the survey and 150 completed it. Five participants did not pass the control questions and were hence excluded from the sample. Thus, 145 observations were considered for further analysis.

### 4.2. Overall Results

As a first step, we briefly describe the demographic background of our user sample. Except from one participant who did not provide any information on scholarly degree, all participants had at least a higher education entrance qualification (among those 45.8 percent held a bachelor's degree and 15.3 percent a master's degree or equivalent). The average age was 24.4 years with a median of 24 years. Average risk attitude on a scale from zero ("not at all willing to take risks") to ten ("very willing to take risks") was 5.2, which is comparable to the results for a representative sample of adults [70]. Average Internet affinity was 8.4 (scale from 0 to 10). While all participants stated to know platforms such as Airbnb, Couchsurfing, Uber, and BlaBlaCar, 94 percent had heard of the term "sharing economy" before and 88 percent stated to have first-hand experience with sharing economy platforms. To establish the hypothesized main effect of this paper, we consider the relation between perceptions of sharewashing and consumer trust (**H1**). A Pearson correlation reveals a significant negative association ( $r = -0.465$ ;  $p < 0.001$ ,  $n = 145$ ). In the following, we consider the hypothesized paths through consumer confusion and risk perception and investigate whether (and if so, how) they mediate the overall effect from sharewashing on consumer trust. To this end, we evaluate the structural research model as proposed in Figure 1.

### 4.3. Measurement Model

The research model was evaluated using partial least squares structural equation modelling (PLS-SEM), conducted in SmartPLS 3.0 [107,108]. The sample size of this study ( $n = 145$ ) exceeded the minimum required to validate the model in PLS [109,110]. According to Cohen [111], at least 137 observations at a level of statistical power of 80 percent are necessary to detect minimum  $R^2$  values of 0.1 at a significance level of 5 percent. Next, we consider reliability and validity. Internal consistency in terms of composite reliability was established (all CR values  $> 0.70$ )—since Cronbach's Alpha is interpreted as a lower bound value which underestimates the true reliability [110]. Also construct validity was established by ensuring convergent validity (average variance extracted, all AVE values  $> 0.50$ ; Fornell and Larcker [112]). An acceptable level of indicator reliability was verified. Item loadings were generally above the proposed threshold of 0.70 and in three cases  $> 0.60$  [110,113]. The indicator CNF2 was dropped due to its low major loading and the corresponding



increase in construct reliability [110]. With regard to discriminant validity, the square roots of all AVE values were larger than those of any correlation between that construct and any other construct [112]. Moreover, all item loadings on their respective constructs were larger than on other constructs [109]. Recently it is recommended to use the heterotrait-monotrait (HTMT) ratio as rigorous criterion for the assessment of discriminant validity [114]. In our case, all HTMT values were readily below the 0.90 threshold (SHW/CNF 0.688; SHW/RSK 0.600; SHW/TRU 0.603; CNF/RSK 0.645; CNF/TRU 0.620; RSK/TRU 0.512). Also inference-based testing revealed that none of the 95 percent confidence intervals for HTMT ratios included the value of 1 (in fact, the largest upper bound was 0.839). This suggests that all constructs are empirically distinct. Table 2 summarizes the constructs' main descriptives, reliability measures, and inter-construct correlations. Table 3 summarizes item loadings and cross loadings.

**Table 2.** Construct descriptives, reliability measures, and correlations ( $n = 145$ ).

	Descriptives		Composite Reliability	Cronbach's Alpha	AVE	Correlation Matrix			
	Mean	SD				SHW	CNF	RSK	TRU
SHW	3.371	0.725	0.834	0.737	0.558	<b>0.747</b>			
CNF	3.099	0.706	0.795	0.612	0.567	0.471	<b>0.753</b>		
RSK	3.564	0.637	0.834	0.736	0.558	0.442	0.431	<b>0.747</b>	
TRU	3.507	0.621	0.847	0.768	0.582	−0.499	−0.448	−0.416	<b>0.763</b>

Note: Diagonal elements contain the square root of AVE (average variance extracted) for each construct. (SHW = Sharewashing, CNF = Consumer Confusion, RSK = Perceived Risk, TRU = Consumer Trust)

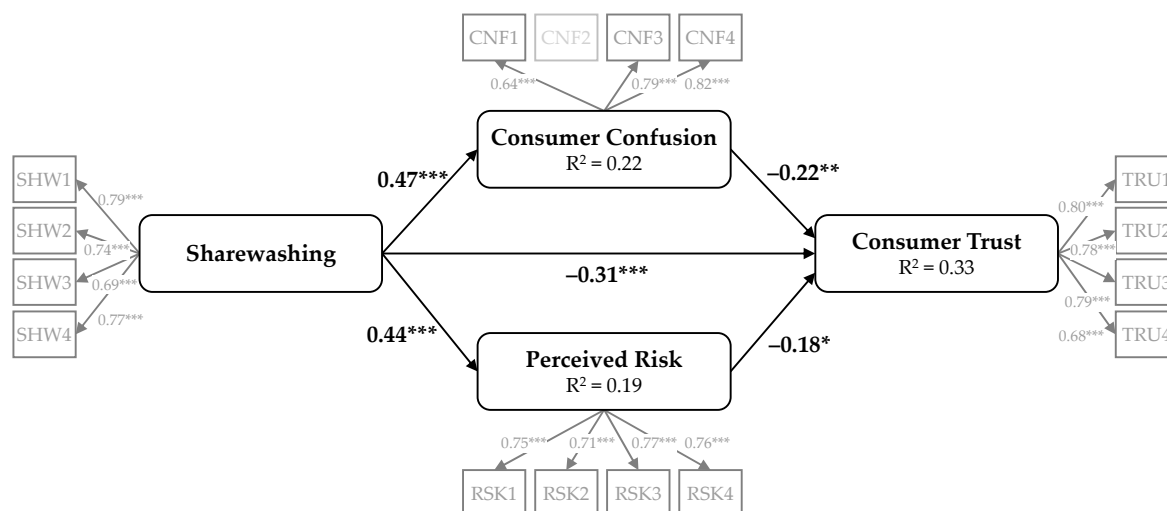
**Table 3.** Item-construct loadings and cross loadings.

Construct	Item	SHW	CNF	RSK	TRU
Sharewashing	SHW1	<b>0.793</b>	0.325	0.354	−0.432
	SHW2	<b>0.737</b>	0.346	0.370	−0.296
	SHW3	<b>0.689</b>	0.458	0.276	−0.441
	SHW4	<b>0.765</b>	0.238	0.323	−0.282
Consumer Confusion	CNF1	0.362	<b>0.637</b>	0.322	−0.231
	CNF3	0.359	<b>0.794</b>	0.305	−0.388
	CNF4	0.349	<b>0.815</b>	0.351	−0.376
Perceived Risk	RSK1	0.345	0.258	<b>0.751</b>	−0.270
	RSK2	0.350	0.251	<b>0.710</b>	−0.254
	RSK3	0.339	0.357	<b>0.770</b>	−0.382
	RSK4	0.287	0.417	<b>0.755</b>	−0.324
Consumer Trust	TRU1	−0.377	−0.341	−0.331	<b>0.795</b>
	TRU2	−0.505	−0.413	−0.396	<b>0.780</b>
	TRU3	−0.337	−0.314	−0.316	<b>0.794</b>
	TRU4	−0.217	−0.257	−0.151	<b>0.676</b>

(SHW = Sharewashing, CNF = Consumer Confusion, RSK = Perceived Risk, TRU = Consumer Trust)

#### 4.4. Structural Model and Hypotheses Testing

The structural model was evaluated based on PLS bootstrapping (5000 samples, no sign changes, complete bias-corrected and accelerated bootstrapping, two-tailed hypotheses testing). The path coefficients and significance levels are provided in Figure 2. All hypothesized relationships are supported. As previously hypothesized, sharewashing exerts a detrimental effect on consumer trust (H1,  $\beta = -0.31$ ,  $p < 0.001$ ,  $f^2 = 0.105$ ). Overall, the model explains 33 percent of the variance of consumer trust towards platform operators through the paths of sharewashing, consumer confusion (H2b,  $\beta = -0.22$ ,  $p < 0.01$ ,  $f^2 = 0.053$ ), and perceived risk of sharing (H3b,  $\beta = -0.18$ ,  $p < 0.05$ ,  $f^2 = 0.036$ ). The main effect of sharewashing on consumer trust is partially mediated both through consumer confusion (H2a,  $\beta = 0.47$ ,  $p < 0.001$ ,  $R^2 = 0.22$ ) and perceived risk of sharing (H3b,  $\beta = 0.44$ ,  $p < 0.001$ ,  $R^2 = 0.19$ ).



**Figure 2.** Results (\*\* $p < 0.001$ ; \* $p < 0.01$ ; \* $p < 0.05$ ). (SHW = Sharewashing, CNF = Consumer Confusion, RSK = Perceived Risk, TRU = Consumer Trust).

#### 4.5. Control Variable Analysis

To control for individual differences, we test the impact of several control variables, namely gender, risk affinity, Internet affinity, and actual sharing platforms usage. Overall, only two of these variables have an effect. Male participants exhibit slightly higher perceptions of sharewashing ( $\beta = 0.156$ ,  $p < 0.05$ ). Also, general Internet affinity is positively associated with consumer trust ( $\beta = 0.238$ ,  $p < 0.001$ ). Importantly, all of the model's hypothesized effects remain stable in terms of sign, magnitude, and significance. Hence, controlling for participants' gender, Internet and risk affinity, as well as sharing platform usage does not alter the conclusions derived from this study.

## 5. Discussion

The results of this study suggest that there exists a negative connection between consumer perceptions of sharewashing and consumer trust (**H1**). This study is the first to quantitatively establish this relation within the novel and emerging context of sharing economy platforms. The main effect is partially mediated through both consumer confusion (**H2**) and perceived risk of sharing (**H3**), providing support for all hypothesized effects. By establishing the overall negative relation between sharewashing and consumer trust, this work makes two main contributions. First, we conceptualize the phenomenon of sharewashing within the broader sharing economy landscape. By reviewing the literature from the context of green marketing and corporate social responsibility, we anchor the emerging issue of exaggerated and false claims by sharing platform operators to the established body of knowledge and literature on corporate "greenwashing" activities. We develop and validate a corresponding research model as a first attempt to illustrate the potential ramifications of sharewashing practices and as a starting point for future work.

Second, extending the work of Chen and Chang [20], we establish a framework to better understand the mediating roles of consumer confusion and perceived risk of sharing for the relation between corporate sharewashing activities and consumer perceptions of trust. We thus provide first empirical evidence for the role and impact of sharewashing from the consumers' perspective. Consequently, we contribute to the growing body of literature on marketing communication, trust, and consumer behavior in the sharing economy.

#### 5.1. Practical Implications

In online environments, particularly in C2C platforms, trust plays a crucial role and is referred to as its currency [25,27,31,115]. Since sharewashing exerts a significant negative influence on consumer

trust, platform operators and managers should hence be aware of this issue. Previous research has highlighted that trust can drive consumer intentions to use a sharing economy platform [27]. In this regard, it is of utmost importance for platform operators to understand and manage the antecedents of consumer trust as a fundament for user participation [26]. Beyond the direct impact of consumer trust on platform adoption and usage, trust towards an individual provider is at least as important for the realization of a transaction as trust towards the platform [32]. Prior literature has shown that users, especially providers on C2C platforms can inherit the platform's trustworthiness [28,116]. Consumer trust towards the platform will hence not only foster platform adoption per se but also actual usage as well, rendering its role even more important.

First and foremost, our findings hence suggest that platform operators should actively attempt to reduce consumer perceptions of sharewashing in order to improve consumer trust. While our survey addresses perceptions of sharewashing in general, it is worthwhile to consider the corresponding relevance for single platform operators. Perceptions of sharewashing may arise as a consequence of a platform's marketing efforts of presenting itself as socially and/or ecologically sustainable when its actual business model and practices do not live up to such claims. Much of this is related to the language and wording used by the platforms as sharewashing disables the "promise of an economy based on sharing by stealing the very language we use to talk about it" [12]. Platforms should thus be highly aware of the way they position themselves contextually and semantically within or outside of the broader sharing economy conception. Depending on their actual business model, a platform's marketing and storytelling may have to be redirected away from notions of community, sociability, and sustainability, towards other concepts such as functionality, cost savings, ease of use, or individual benefits [43]. Of course operators may think of ways to develop their business models towards actually becoming more sustainable in the first place. For platforms, this may, for instance, be achieved by incentivizing specific types of resource providers while excluding others. Airbnb, for instance, could focus on single-unit hosts and exclude hosts of multiple listings (or tag them as professional suppliers). Moreover, Uber could reinforce their shared ride model (uberPOOL), and, for instance, cross-subsidize such rides at the cost of regular taxi rides.

Importantly, the public perception of sharewashing associated with a certain company or platform may not only be driven by its own communication and marketing activities, but also by the way it is covered by press and social media. Uber, for example, considers and positions itself as a ubiquitous tech and transportation company, not more, not less, claiming to provide "transportation as reliable as running water, everywhere for everyone." [117]. In view of Uber's peer-based concept and the lack of a shared and commonly accepted definition of what actually constitutes the sharing economy [83], it is not too surprising that Uber has been and is repeatedly denoted as an archetypical proponent of the sharing economy by press and scholarly articles [4,102].

Beyond managing their own public communication, companies should hence also keep an eye on the perception conveyed through press and social media—which of course is much more difficult to do and control. Being perceived as a sharing platform may be favorable, but being perceived as merely claiming to be one (even if not actually doing so) may provoke detrimental perceptions and corrupt consumer trust. In this sense, the legitimacy of "true sharing" platforms may serve as a sales angle and should consequently be assessed thoroughly, *inter alia* through social media [118].

Furthermore, our results show that in addition to sharewashing, also consumer confusion and perceptions of risk constitute threats to consumer trust. Platform operators should hence systematically identify and address sources of confusion and risk perceptions. Improving consumer knowledge about the product and usability, that is "educating" the consumer can be regarded as tangible means to reduce consumer confusion [90,119]. Thus, assuring consumers of the reliability of sustainability-related claims and guarantees about sustainability-related values could be leveraged to reduce the perceived risks of sharing [120].

## 5.2. Limitation and Future Research

As any research, this study needs to be seen in view of several limitations which also provide viable starting points for future work. First, the study is based on a rather small and entirely collegiate sample and should thus be interpreted with caution [121]. This may imply limited representativity and hence limited generalizability. Note, however, that (a) users of C2C platforms are rather young (i.e., “Millennials are engaging with most aspects of the sharing economy at a level that is roughly three times greater than those who are over 35”; Maru/Matchbox [122] (p. 8)) and (b) C2C platform adoption rates are particularly high within the age group of 21 to 34 years (35 percent; 7 percent for teenagers and 17 percent for the group of 35–49 years) [40,105,123]. Also note that a vast majority of almost 90 percent of our study’s participants indicated to be experienced with sharing platforms. While the sample may not be representative for the entire population, it can be seen as a valid sample for investigating actual users of sharing platforms. Future research may employ larger and more diverse samples. In this regard, it would be worthwhile to specifically investigate non-users, among which sharewashing perceptions may play an important role for their refusal to engage.

Second, a typical limitation of survey-based studies such as ours is that there remains incertitude with regard to the direction of effect causality. All of the model’s constructs were assessed simultaneously and thus, from a statistical perspective, suffer from endogeneity. Given the established bodies of evidence and theory on the directions of causal flows (e.g., from sharewashing perceptions to consumer trust rather than the opposite), our assumptions do not appear all too outlandish. Future research may attempt to employ treatments with deliberately manipulated and varying degrees of sharewashing to allow for more robust claims about cause and effect [124]. In doing so, also detailed knowledge about the antecedents of sharewashing perceptions in relation to specific platforms can be acquired.

Third, consumer trust in the context of this study is defined as “the consumers’ willingness to depend on a platform based on the beliefs or expectation resulting from its credibility, benevolence, and ability associated with environmental and social performance.” However, this definition is rather narrow and tailored to the context of sharewashing. In this sense, the actual impact of sharewashing perceptions on consumer trust in its full dimensionality (see Hawlitschek et al. [27]) should be addressed in future research.

Fourth, in relying on the work of Chen and Chang [20], we focus on perceived risk and consumer confusion as mediators of the influence of sharewashing perceptions on consumer trust. However, it could be worthwhile to extend the original model by other mediating factors such as the most important antecedents of trust [26] and discuss the corresponding theoretical implications. This may well include the observation and use of behavioral instead of self-reported measures as a complementary approach [125].

Fifth, the sharing economy represents a broad and only insufficiently defined concept. While we provided participants with a general frame of business models and platforms, different individuals may have strong and highly diverse priors and opinions about what sharing is, what it is not—or what it should be. Subsequent studies may consider to focus on single platforms (e.g., Airbnb, Uber) and assess in greater detail which of the participants’ opinions and sensed discrepancies between the platform’s claims and reality drive perceptions of sharewashing. We call for future research addressing these issues to foster a better understanding of the various potential antecedents and consequents of sharewashing.

## 6. Conclusions

While platforms for peer-to-peer sharing have attracted increasing attention in scientific and public press for several years and also the effects of corporate greenwashing practices have been covered extensively by marketing scholars, the concept of sharewashing has still remained rather unexplored and also scientific literature on sharewashing hardly exists. This paper sheds first light on this phenomenon and its effects on consumer trust. By quantitatively evaluating the relation between

sharewashing and consumer trust, we show that the detrimental effects of sharewashing are partly conveyed through the paths of consumer confusion and perceived risk of sharing. We hence contribute to the sustainability literature by providing a perspective by which to disentangle actual sustainability efforts from mere communication. As our study addresses the emerging platform economy landscape, it is important to note that there exists a plethora of platforms and business models that strive to enable better resource utilization and hence more sustainable consumption practices. Note that this paper is not a blueprint for non-sustainable firms on how to best disguise their practices. Rather, we make the case that unfit sustainability communication may impair any business' success and hence should be considered carefully. This may particularly benefit platforms that allow for higher resource efficiency as a side effect of their model rather than their initial or primary goal. We encourage both researchers and practitioners to further explore the issue of sharewashing—after all, corporate social responsibility in the era of digital platforms appears to emerge as a topic of utmost importance. Supporting consumers to vote with their wallets based on unambiguous information may not only be in the best interest of our planet but may also be crucial for the success of platform providers.

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## References

- Price, L.L.; Belk, R.W. Consumer Ownership and Sharing: Introduction to the Issue. *J. Assoc. Consum. Res.* **2016**, *1*, 193–197. [CrossRef]
- Sundararajan, A. *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*; MIT Press: Cambridge, MA, USA, 2016; ISBN 978-0-262-33341-2.
- Frenken, K.; Schor, J. Putting the sharing economy into perspective. *Environ. Innov. Soc. Transit.* **2017**, *23*, 1–8. [CrossRef]
- Meelen, T.; Frenken, K. Stop Saying Uber is Part of the Sharing Economy. *Fast Co.* 2015. Available online: <https://www.fastcompany.com/3040863/stop-saying-uber-is-part-of-the-sharing-economy> (accessed on 24 July 2018).
- Teubner, T.; Hawlitschek, F. The Economics of Peer-to-Peer Online Sharing. In *The Rise of the Sharing Economy: Exploring the Challenges and Opportunities of Collaborative Consumption*; Albinsson, P.A., Perera, Y., Eds.; ABC-CLIO: Santa Barbara, CA, USA, 2018; pp. 129–156, ISBN 978-1440851865.
- United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development*; United Nations: New York, NY, USA, 2015.
- Frenken, K. Political economies and environmental futures for the sharing economy. *Philos. Trans. A Math. Phys. Eng. Sci.* **2017**, *375*, 1–15. [CrossRef] [PubMed]
- Martin, C.J. The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism? *Ecol. Econ.* **2016**, *121*, 149–159. [CrossRef]
- Belk, R.W. Sharing versus pseudo-sharing in web 2.0. *Anthropologist* **2014**, *18*, 7–23. [CrossRef]
- Montiel, I. Corporate social responsibility and corporate sustainability: Separate pasts, common futures. *Organ. Environ.* **2008**, *21*, 245–269. [CrossRef]
- Mahoney, L.S.; Thorne, L.; Cecil, L.; LaGore, W. A research note on standalone corporate social responsibility reports: Signaling or greenwashing? *Crit. Perspect. Account.* **2013**, *24*, 350–359. [CrossRef]
- Kalamar, A. Sharewashing is the New Greenwashing. *OpEdNews*. 2013. Available online: <https://www.opednews.com/articles/Sharewashing-is-the-New-Gr-by-Anthony-Kalamar-130513-834.html> (accessed on 24 July 2018).
- MacmillanDictionary. Sharewashing. Available online: <http://www.macmillandictionary.com/buzzword/entries/sharewashing.html> (accessed on 24 July 2018).
- Parguel, B.; Benoît-Moreau, F.; Larceneux, F. How Sustainability Ratings Might Deter “Greenwashing”: A Closer Look at Ethical Corporate Communication. *J. Bus. Ethics* **2011**, *102*, 15–28. [CrossRef]



15. Light, A.; Miskelly, C. Sharing economy vs sharing cultures? Designing for social, economic and environmental good. *Interact. Des. Archit. J.* **2015**, *24*, 49–62.
16. Netter, S. *Exploring the Sharing Economy*; Copenhagen Business School: Frederiksberg, Denmark, 2016.
17. Huang, L.-S. #WeWashing: When “Sharing” Is Renting and “Community” Is a Commodity. *Huffington Post*. 2015. Available online: [https://www.huffingtonpost.com/leesean-huang/wewashing-when-sharing-is\\_b\\_6879018.html](https://www.huffingtonpost.com/leesean-huang/wewashing-when-sharing-is_b_6879018.html) (accessed on 24 July 2018).
18. Tu, D.P. *Sharewash in the Sharing Economy: A First Look on the Phenomenon and Effects of Sharewash*; Karlsruhe Institute of Technology: Karlsruhe, Germany, 2017.
19. Hawlitschek, F.; Stofberg, N.O.; Teubner, T.; Tu, P.; Weinhardt, C. A First Look on Sharewashing in the Sharing Economy: How False Claims Can Impede Trust Extended Abstract. In Proceedings of the 4th International Workshop on the Sharing Economy (IWSE), Lund, Sweden, 15–16 June 2017.
20. Chen, Y.; Chang, C. Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk. *J. Bus. Ethics* **2013**, *114*, 489–500. [CrossRef]
21. Laufer, W.S. Social Accountability and Corporate Greenwashing. *J. Bus. Ethics* **2003**, *43*, 253–261. [CrossRef]
22. Levin, S. Airbnb’s data shows that Airbnb helps the middle class. But does it? *Guardian*. 2016. Available online: <https://www.theguardian.com/technology/2016/jul/27/airbnb-panel-democratic-national-convention-survey> (accessed on 24 July 2018).
23. Ganesan, S. Shankar Determinants of long-term orientation in buyer-seller relationships. *J. Mark.* **1994**, *58*, 1–19. [CrossRef]
24. Chen, Y. The Drivers of Green Brand Equity: Green Brand Image, Green Satisfaction, and Green Trust. *J. Bus. Ethics* **2010**, *93*, 307–319. [CrossRef]
25. Mazzella, F.; Sundararajan, A.; Butt d’Espous, V.; Möhlmann, M. How digital trust powers the Sharing Economy: The digitization of trust. *IESE Insight* **2016**, 24–31. [CrossRef]
26. Ter Huurne, M.; Ronteltap, A.; Rense, C.; Buskens, V. Understanding trust in the sharing economy: A systematic review. *J. Consum. Behav.* **2017**. [CrossRef]
27. Hawlitschek, F.; Teubner, T.; Weinhardt, C. Trust in the Sharing Economy. *Die Unternehm. Swiss J. Bus. Res. Pract.* **2016**, *70*, 26–44. [CrossRef]
28. Möhlmann, M. Digital Trust and Peer-to-Peer Collaborative Consumption Platforms: A Mediation Analysis. *SSRN Electron. J.* **2016**. [CrossRef]
29. Mittendorf, C. The Implications of Trust in the Sharing Economy—An Empirical Analysis of Uber. In Proceedings of the Hawaii International Conference on System Sciences 2017 (HICSS-50), Hilton Waikoloa Village, HI, USA, 4–7 January 2017; pp. 5837–5846.
30. Ert, E.; Fleischer, A.; Magen, N. Trust and reputation in the sharing economy: The role of personal photos in Airbnb. *Tour. Manag.* **2016**, *55*, 62–73. [CrossRef]
31. Möhlmann, M.; Geissinger, A. Trust in the Sharing Economy: Platform- Mediated Peer Trust (Forthcoming). In *Cambridge Handbook of the Law and Regulation of the Sharing Economy*; Davidson, N., Infranca, J., Finck, M., Eds.; Cambridge University Press: Cambridge, UK, 2018.
32. Hawlitschek, F.; Notheisen, B.; Teubner, T. The limits of trust-free systems: A literature review on blockchain technology and trust in the sharing economy. *Electron. Commer. Res. Appl.* **2018**, *29*, 50–63. [CrossRef]
33. Meadows, D.H.; Meadows, D.L.; Randers, J.; Behrens, W.W.I. *The Limits to Growth*; Universe Books: New York, NY, USA, 1972; ISBN 0876631650.
34. General Assembly of the United Nations (UNGA). *2005 World Summit Outcome*; General Assembly of the United Nations: New York, NY, USA, 2005.
35. Heinrichs, H. Sharing Economy: A Potential New Pathway to Sustainability. *GAIA Ecol. Perspect. Sci. Soc.* **2013**, *22*, 228–231. [CrossRef]
36. Botsman, R.; Rogers, R. *What’s Mine Is Yours: The Rise of Collaborative Consumption*; HarperCollins Publishers: New York, NY, USA, 2010; ISBN 9780061963544.
37. Demailly, D.; Novel, A.-S. The Sharing Economy: Make It Sustainable. *IDDRI SciencesPo* **2014**, *3*, 14–30.
38. Möhlmann, M. Collaborative consumption: Determinants of satisfaction and the likelihood of using a sharing economy option again. *J. Consum. Behav.* **2015**, *14*, 193–207. [CrossRef]
39. Schor, J. Debating the Sharing Economy. *J. Self-Gov. Manag. Econ.* **2016**, *4*, 7–22.

40. PwC. The Sharing Economy—Consumer Intelligence Series. 2015. Available online: <https://www.pwc.com/us/en/industry/entertainment-media/publications/consumer-intelligence-series/assets/pwc-cis-sharing-economy.pdf> (accessed on 24 July 2018).
41. Böcker, L.; Meelen, T. Sharing for people, planet or profit? Analysing motivations for intended sharing economy participation. *Environ. Innov. Soc. Transit.* **2017**, *23*, 28–39. [[CrossRef](#)]
42. Murillo, D.; Buckland, H.; Val, E. When the sharing economy becomes neoliberalism on steroids: Unravelling the controversies. *Technol. Forecast. Soc. Chang.* **2017**, *125*, 66–76. [[CrossRef](#)]
43. Habibi, M.R.; Davidson, A.; Laroche, M. What managers should know about the sharing economy. *Bus. Horiz.* **2017**, *60*, 113–121. [[CrossRef](#)]
44. Coppola, L. Flash Report: 82% of the S&P 500 Companies Published Corporate Sustainability Reports in 2016. *3BL MEDIA*. 2016. Available online: <https://3blmedia.com/News/Flash-Report-82-SP-500-Companies-Published-Corporate-Sustainability-Reports-2016> (accessed on 24 July 2018).
45. Dyllick, T.; Muff, K. Clarifying the Meaning of Sustainable Business. *Organ. Environ.* **2016**, *29*, 156–174. [[CrossRef](#)]
46. Dočekalová, M.P.; Kocmanová, A. Composite indicator for measuring corporate sustainability. *Ecol. Indic.* **2016**, *61*, 612–623. [[CrossRef](#)]
47. Alvaredo, F.; Chancel, L.; Piketty, T.; Saez, E.; Zucman, G. Global inequality dynamics: New findings from WID.world. *Am. Econ. Rev.* **2017**, *107*, 404–409. [[CrossRef](#)]
48. Rogelj, J.; Den Elzen, M.; Höhne, N.; Fransen, T.; Fekete, H.; Winkler, H.; Schaeffer, R.; Sha, F.; Riahi, K.; Meinshausen, M. Paris Agreement climate proposals need a boost to keep warming well below 2 °C. *Nature* **2016**, *534*, 631–639. [[CrossRef](#)] [[PubMed](#)]
49. Borck, J.C.; Coglianese, C. Voluntary Environmental Programs: Assessing Their Effectiveness. *Annu. Rev. Environ. Resour.* **2009**, *34*, 305–324. [[CrossRef](#)]
50. Porter, M.E.; Kramer, M.R. Creating Shared Value. *Harv. Bus. Rev.* **2011**, *89*, 62–77. [[CrossRef](#)]
51. Reinhardt, F. Market Failure and the Environmental Policies of Firms: Economic Rationales for “Beyond Compliance” Behavior. *J. Ind. Ecol.* **1999**, *3*, 9–21. [[CrossRef](#)]
52. Lankoski, L. Corporate responsibility activities and economic performance: A theory of why and how they are connected. *Bus. Strateg. Environ.* **2008**, *17*, 536–547. [[CrossRef](#)]
53. Vos, J. Actions speak louder than words: Greenwashing in corporate America. *Notre Dame JL Ethics Pub. Pol’y* **2009**, *23*, 673–697. Available online: <https://scholarship.law.nd.edu/ndjlepp/vol23/iss2/13> (accessed on 24 July 2018).
54. Pope, S.; Wæraas, A. CSR-Washing is Rare: A Conceptual Framework, Literature Review, and Critique. *J. Bus. Ethics* **2016**, *137*, 173–193. [[CrossRef](#)]
55. Hooghiemstra, R. Corporate communication and impression management: New perspectives why companies engage in corporate social reporting. *J. Bus. Ethics* **2000**, *27*, 55–68. [[CrossRef](#)]
56. Niskanen, J.; Nieminen, T. The objectivity of corporate environmental reporting: A study of Finnish listed firms’ environmental disclosures. *Bus. Strateg. Environ.* **2001**, *10*, 29–37. [[CrossRef](#)]
57. Rivera, J.; de Leon, P.; Koerber, C. Is greener whiter yet? The sustainable slopes program after five years. *Policy Stud. J.* **2006**, *34*, 195–221. [[CrossRef](#)]
58. Christmann, P.; Taylor, G. Firm Self-Regulation through International Certifiable Standards: Determinants of Symbolic versus Substantive Implementation. *J. Int. Bus. Stud.* **2006**, *37*, 863–878. [[CrossRef](#)]
59. Ashley-Cantello, W. Advertising watchdog receives record complaints over corporate ‘greenwash’. *The Guardian*. 2008. Available online: <https://www.theguardian.com/environment/2008/may/01/corporatesocialresponsibility.ethicalliving> (accessed on 24 July 2018).
60. Furfaro, D. Uber and Lyft ordered to hand over trip data. *New York Post*. 2017. Available online: <https://nypost.com/2017/02/02/uber-and-lyft-ordered-to-hand-over-trip-data/> (accessed on 24 July 2018).
61. Airbnb Environmental Impacts of Home Sharing. Available online: <https://blog.atairbnb.com/environmental-impacts-of-home-sharing/> (accessed on 24 July 2018).
62. Voytenko Palgan, Y.; Zvolska, L.; Mont, O. Sustainability framings of accommodation sharing. *Environ. Innov. Soc. Transit.* **2017**, *23*, 70–83. [[CrossRef](#)]
63. Parguel, B.; Lunardo, R.; Benoit-Moreau, F. Sustainability of the sharing economy in question: When second-hand peer-to-peer platforms stimulate indulgent consumption. *Technol. Forecast. Soc. Chang.* **2017**, *125*, 48–57. [[CrossRef](#)]

64. Emerson, S. Uber Wants Us to Think It's Environmentally Friendly, But Is It? *VICE*. 2016. Available online: [https://motherboard.vice.com/en\\_us/article/78kkj9/is-uber-good-or-bad-for-the-environment](https://motherboard.vice.com/en_us/article/78kkj9/is-uber-good-or-bad-for-the-environment) (accessed on 24 July 2018).
65. Goodman, J.D. Under Mayor de Blasio, City Vehicles Rack Up Miles. *The New York Times*. 2017. Available online: <https://www.nytimes.com/2017/09/22/nyregion/city-owned-vehicle-miles-crashes-de-blasio.html> (accessed on 24 July 2018).
66. Schaller, B. Unsustainable? The Growth of App-Based Ride Services and Traffic, Travel and the Future of New York City. Available online: <http://schallerconsult.com/rideservices/unsustainable.htm> (accessed on 24 July 2018).
67. Habibi, M.R.; Kim, A.; Laroche, M. From Sharing to Exchange: An Extended Framework of Dual Modes of Collaborative Nonownership Consumption. *J. Assoc. Consum. Res.* **2016**, *1*, 277–294. [[CrossRef](#)]
68. Bardhi, F.; Eckhardt, G.M. Access-Based Consumption: The Case of Car Sharing. *J. Consum. Res.* **2012**, *39*, 881–898. [[CrossRef](#)]
69. Mitchell, V.; Papavassiliou, V. Marketing causes and implications of consumer confusion. *J. Prod. Brand Manag.* **1999**, *8*, 319–342. [[CrossRef](#)]
70. Dohmen, T.; Falk, A.; Huffman, D.; Sunde, U.; Schupp, J.; Wagner, G.G. Individual risk attitudes: Measurement, determinants, and behavioral consequences. *J. Eur. Econ. Assoc.* **2011**, *9*, 522–550. [[CrossRef](#)]
71. Peter, J.P.; Ryan, M.J. Investigation of perceived risk at the brand level. *J. Mark.* **1976**, *13*, 184–188. [[CrossRef](#)]
72. Avital, M.; Anderson, M.; Nickerson, J.; Sundararajan, A.; Van Alstyne, M.W.; Verhoeven, D. The Collaborative Economy: A Disruptive Innovation or Much Ado about Nothing? In Proceedings of the 35th International Conference on Information Systems (ICIS 2014), Auckland, New Zealand, 14–17 December 2014.
73. Malhotra, A.; Van Alstyne, M.W. The dark side of the sharing economy . . . and how to lighten it. *Commun. ACM* **2014**, *57*, 24–27. [[CrossRef](#)]
74. Hartl, B.; Hofmann, E.; Kirchler, E. Do we need rules for “what’s mine is yours”? Governance in collaborative consumption communities. *J. Bus. Res.* **2016**, *69*, 2756–2763. [[CrossRef](#)]
75. Kassan, J.; Orsi, J. The Legal Landscape of the Sharing Economy. *J. Environ. Law Litig.* **2012**, *27*, 1–20.
76. Edelman, B.; Luca, M. Digital Discrimination: The Case of Airbnb.com. *SSRN Electron. J.* **2014**. [[CrossRef](#)]
77. Edelman, B.; Luca, M.; Svirsky, D. Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment. *Am. Econ. J. Appl. Econ.* **2017**, *9*, 1–22. [[CrossRef](#)]
78. Turnbull, P.W.; Leek, S.; Ying, G. The Mobile Phone Market Customer Confusion: The Mobile. *J. Mark. Cust. Confusion* **2010**, *16*, 143–163. [[CrossRef](#)]
79. Rousseau, D.M.; Sitkin, S.B.; Burt, R.S.; Camerer, C. Not so different after all: A cross discipline view of trust. *Acad. Manag. Rev.* **1998**, *23*, 393–404. [[CrossRef](#)]
80. Kalafatis, S.P.; Pollard, M.; East, R.; Tsogas, M.H. Green marketing and Ajzen’s theory of planned behaviour: A cross-market examination. *J. Consum. Mark.* **1999**, *16*, 441–460. [[CrossRef](#)]
81. Ramus, C.A.; Montiel, I. When are corporate environmental policies a form of greenwashing? *Bus. Soc.* **2005**, *44*, 377–414. [[CrossRef](#)]
82. Acquier, A.; Daudigeos, T.; Pinkse, J. Promises and paradoxes of the sharing economy: An organizing framework. *Technol. Forecast. Soc. Chang.* **2017**, *125*, 1–10. [[CrossRef](#)]
83. Botsman, R. The Sharing Economy Lacks A Shared Definition. *Fast Company*. 2013. Available online: <https://www.fastcompany.com/3022028/the-sharing-economy-lacks-a-shared-definition> (accessed on 24 July 2018).
84. Oh, S.; Moon, J.Y. Calling for a Shared Understanding of the “Sharing Economy”. In Proceedings of the 18th Annual International Conference on Electronic Commerce: E-Commerce in Smart Connected World, Suwon, Korea, 17–19 August 2016. [[CrossRef](#)]
85. Stephany, A. *The Business of Sharing: Making It in the New Sharing Economy*; Palgrave Macmillan: Basingstoke, UK, 2015; ISBN 978-1-137-37618-3.
86. Bellotti, V.; Ambard, A.; Turner, D.; Gossmann, C.; Demková, K.; Carroll, J.M. A Muddle of Models of Motivation For Using Peer-to-Peer Economy Systems. In Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (CHI’15), Seoul, Korea, 18–23 April 2015; pp. 1085–1094. [[CrossRef](#)]
87. Mitchell, V.; Walsh, G.; Yamin, M. Towards a conceptual model of consumer confusion. *Adv. Consum. Res.* **2005**, *32*, 143–150.

88. Lu, A.C.C.; Gursoy, D.; Lu, C.Y.R. Antecedents and outcomes of consumers' confusion in the online tourism domain. *Ann. Tour. Res.* **2016**, *57*, 76–93. [[CrossRef](#)]
89. Walsh, G.; Mitchell, V. The effect of consumer confusion proneness on word of mouth, trust, and customer satisfaction. *Eur. J. Mark.* **2010**, *44*, 838–859. [[CrossRef](#)]
90. Matzler, K.; Stieger, D.; Füller, J. Consumer Confusion in Internet-Based Mass Customization: Testing a Network of Antecedents and Consequences. *J. Consum. Policy* **2011**, *34*, 231–247. [[CrossRef](#)]
91. Darke, P.R.; Ashworth, L.; Ritchie, R.J.B. Damage from Corrective Advertising: Causes and Cures. *J. Mark.* **2008**, *72*, 81–97. [[CrossRef](#)]
92. Hausemer, P.; Rzepecka, J.; Dragulin, M.; Vitiello, S.; Rabuel, L.; Nunu, M.; Diaz, A.R.; Psaila, E.; Fiorentini, S.; Gysen, S.; et al. *Exploratory Study of Consumer Issues in Online Peer-to-Peer Platform Markets*; European Commission: Brussel, Belgium, 2017.
93. BlaBlaCar Let's Tackle Air Pollution. Available online: <https://www.blablacar.co.uk/blablalife/reinventing-travel/lets-tackle-air-pollution> (accessed on 24 July 2018).
94. Airbnb We Accept. Available online: <https://marketing.atairbnb.com/casestudies/we-accept> (accessed on 24 July 2018).
95. Herndon, N.C. The Sharing Economy: Opportunities and Challenges for Marketing Channels and Supply Chains. *J. Mark. Channels* **2017**, *24*, 1–2. [[CrossRef](#)]
96. Mair, J.; Reischauer, G. Capturing the dynamics of the sharing economy: Institutional research on the plural forms and practices of sharing economy organizations. *Technol. Forecast. Soc. Chang.* **2017**, *125*, 11–20. [[CrossRef](#)]
97. Grinevich, V.; Huber, F.; Karataş-Özkan, M.; Yavuz, Ç. Green entrepreneurship in the sharing economy: Utilising multiplicity of institutional logics. *Small Bus. Econ.* **2017**, 1–18. [[CrossRef](#)]
98. Nijland, H.; van Meerkerk, J. Mobility and environmental impacts of car sharing in the Netherlands. *Environ. Innov. Soc. Transit.* **2017**, *23*, 84–91. [[CrossRef](#)]
99. Wegmann, J.; Jiao, J. Taming Airbnb: Toward guiding principles for local regulation of urban vacation rentals based on empirical results from five US cities. *Land Use Policy* **2017**, *69*, 494–501. [[CrossRef](#)]
100. Lee, D. How Airbnb Short-Term Rentals Exacerbate Los Angeles's Affordable Housing Crisis: Analysis and Policy Recommendations. *Harv. Law Policy Rev.* **2016**, *10*, 229–253. [[CrossRef](#)]
101. Harridge-March, S. Can the building of trust overcome consumer perceived risk online? *Mark. Intell. Plan.* **2006**, *24*, 746–761. [[CrossRef](#)]
102. Kaplan, R.A.; Nadler, M.L. Airbnb: A Case Study in Occupancy Regulation and Taxation. *Univ. Chic. Law Rev.* **2015**, *60*, 103–115. [[CrossRef](#)]
103. Koehn, D. The nature of and conditions for online trust. *J. Bus. Ethics* **2003**, *43*, 3–19. [[CrossRef](#)]
104. Akbar, P.; Mai, R.; Hoffmann, S. When do materialistic consumers join commercial sharing systems. *J. Bus. Res.* **2016**, *69*, 4215–4224. [[CrossRef](#)]
105. Godelnik, R. Millennials and the sharing economy: Lessons from a 'buy nothing new, share everything month' project. *Environ. Innov. Soc. Transit.* **2017**, *23*, 40–52. [[CrossRef](#)]
106. Ranzini, G.; Newlands, G.; Anselmi, G.; Andreotti, A.; Eichhorn, T.; Etter, M.; Hoffmann, C.P.; Jürss, S.; Lutz, C. Millennials and the Sharing Economy: European Perspectives. *SSRN Electron. J.* **2017**. [[CrossRef](#)]
107. Ringle, C.M.; Wende, S.; Becker, J.-M. SmartPLS 3. 2015. Available online: <https://www.smartpls.com/> (accessed on 24 July 2018).
108. Sarstedt, M.; Hair, J.F.; Ringle, C.M.; Thiele, K.O.; Gudergan, S.P. Estimation issues with PLS and CBSEM: Where the bias lies! *J. Bus. Res.* **2016**, *69*, 3998–4010. [[CrossRef](#)]
109. Gefen, D.; Straub, D.W.; Boudreau, M.-C. Structural Equation Modeling and Regression: Guidelines for Research Practice. *Commun. Assoc. Inf. Syst.* **2000**, *4*, 7.
110. Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*; SAGE Publications: New York, NY, USA, 2016.
111. Cohen, J. A Power Primer. *Psychol. Bull.* **1992**, *112*, 155–159. [[CrossRef](#)] [[PubMed](#)]
112. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [[CrossRef](#)]
113. Chin, W.W. The partial least squares approach to structural equation modeling. *Mod. Methods Bus. Res.* **1998**, *295*, 295–336.

114. Henseler, J.; Ringle, C.M.; Sarstedt, M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. Acad. Mark. Sci.* **2014**, *43*, 115–135. [[CrossRef](#)]
115. Botsman, R. The Currency of the New Economy Is Trust. Available online: [https://www.ted.com/talks/rachel\\_botsman\\_the\\_currency\\_of\\_the\\_new\\_economy\\_is\\_trust?](https://www.ted.com/talks/rachel_botsman_the_currency_of_the_new_economy_is_trust?) (accessed on 24 July 2018).
116. Han, H.; Koo, C.; Chung, N. Implication of the fit between airbnb and host characteristics. In Proceedings of the 18th Annual International Conference on Digital Government Research, Staten Island, NY, USA, 7–9 June 2016.
117. Ferenstein, G. Uber CEO Spells Out His Endgame, In 2 Quotes. *Forbes*. 2015. Available online: <https://www.forbes.com/sites/gregoryferenstein/2015/09/16/uber-ceo-spells-out-his-endgame-in-2-quotes/#53a1b5937bec> (accessed on 24 July 2018).
118. Etter, M.; Colleoni, E.; Illia, L.; Meggiorin, K.; D'Eugenio, A. Measuring organizational legitimacy in social media: Assessing citizens' judgement with sentiment analysis. *Bus. Soc.* **2018**, *57*, 60–97. [[CrossRef](#)]
119. Drummond, G. Consumer confusion: Reduction strategies in higher education. *Int. J. Educ. Manag.* **2004**, *18*, 317–323. [[CrossRef](#)]
120. Chen, Y.; Chang, C. Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Manag. Decis.* **2012**, *50*, 502–520. [[CrossRef](#)]
121. Peterson, R. On the Use of College Students in Social Science Research: Insights from a Second-Order Meta-analysis. *J. Consum. Res.* **2001**, *28*, 450–461. [[CrossRef](#)]
122. Maru/Matchbox. The Battle for Trust and the Sharing Economy. 2017. Available online: [http://resources.marumatchbox.com/hubfs/The\\_Battle\\_for\\_Trust\\_and\\_the\\_Sharing\\_Economy.pdf](http://resources.marumatchbox.com/hubfs/The_Battle_for_Trust_and_the_Sharing_Economy.pdf) (accessed on 24 July 2018).
123. Nielsen. Is Sharing the New Buying? Reputation and Trust are Emerging as New Currencies. 2014. Available online: <http://www.nielsen.com/us/en/insights/reports/2014/is-sharing-the-new-buying.html> (accessed on 24 July 2018).
124. Antonakis, J.; Bendahan, S.; Jacquart, P.; Lalive, R. Causality and endogeneity: Problems and solutions. In *The Oxford Handbook of Leadership and Organizations*; Day, D.V., Ed.; Oxford University Press: New York, NY, USA, 2014; pp. 93–117, ISBN 9780199755615.
125. Hawlitschek, F.; Teubner, T.; Adam, M.T.P.; Borchers, N.S.; Möhlmann, M.; Weinhardt, C. Trust in the Sharing Economy: An Experimental Framework. In Proceedings of the International Conference on Information Systems (ICIS), Dublin, Ireland, 11–14 December 2016.



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