

# The non-monetary Sharing Economy: An Example of Trust and Risk on Couchsurfing

*Full Paper*

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## Abstract

Sharing economy platforms drive new consumption habits in the hospitality industry by attracting individuals through modern technologies and innovative business models. In this study, we examine the relationship between trust, perceived risk, and the consumers' intention to request an accommodation on the non-monetary hospitality platform *Couchsurfing*. We further separate intermediary and corresponding users from each other to investigate the influence of the two-sided market mechanisms on the consumers' intention. Based on a survey of 248 consumers, we propose a research model and perform structural equation modeling. Our results indicate that the influence of trust on the consumers' intention is fully mediated by perceived risk. Further, our results show that perceived risk of the intermediary and the corresponding users influences the consumers' intentions, despite the sharing service being free-of-charge. This study contributes to the sharing economy literature by demonstrating the important role of perceived risk on non-monetary sharing economy platforms.

## Keywords

Couchsurfing, non-monetary Sharing Economy, Trust, Perceived Risk.

## Introduction

New online business models coin the modern Internet landscape. Particularly the service industry encounters the rapid growth of consumer-to-consumer market platforms (Hawlitschek, Teubner, and Gimpel 2016) that shift traditional consumption habits from outdated e-commerce platforms to contemporary service orientated sharing economy platforms. Especially young individuals of the millennials generation foster the rise of these new business models to disintermediate non-social commercial channels and to acquire services from other individuals in an economic, convenient, and sustainable manner (Lenhart et al. 2010). The service orientated sharing economy business model is empowered by modern information technology (Hamari et al. 2015). Modern online sharing economy platforms enable social interactions between strangers on short notice over the Internet. In this regard, existing literature, such as Mittendorf (2016) or Hawlitschek, et al. (2016), identified trust as a critical factor of the individuals' intention to provide or request a particular service in the sharing economy. Trust, as an influential factor of consumer intentions has long been empirically validated in online businesses, such as in the e-commerce industry. For example, Jarvenpaa et al. (1999) assessed that high levels of trust encourage online transaction intentions, whereas Hoffman et al. (1999) showed that the lack of trust is one of the main reasons why people do not engage in online transactions. Other researchers, for example Gefen and Straub (2004), demonstrated that the prevalence of trust is a key driver for one-time interactions between two unfamiliar individuals. Based on this logic, fellow researchers identified perceived risk as a discouraging factor of user intentions in the online industry (Kim et al. 2008).

In this study, we analyze the intermediary framework of the service-based sharing economy hospitality industry. In this regard, we separate the online platform, accommodation providers, and potential

consumers from each other. We further introduce the concept of trust and perceived risk, while evaluating their corresponding influence on the users' intention to request a booking on the Couchsurfing platform; hence, we take the consumer perspective. Our IT artefact is the service-based sharing economy platform Couchsurfing, which enables non-monetary interactions between consumers and accommodation providers. In doing so, we respond to the call by Hawlitschek et al. (2016) to perform a more detailed investigation regarding the effects of trust and risk on the consumers' intentions of contemporary sharing economy platforms. In addition, we address the call of Mittendorf (2016) to evaluate the concept of trust on another sharing economy platform of the hospitality industry. Our two opposing research questions are: RQ1: Does trust in accommodation providers respectively in the intermediary significantly increase the consumers' intention to request a booking on the service-based sharing economy platform Couchsurfing? RQ2: Does perceived risk of accommodation providers respectively of the intermediary significantly decrease the consumers' intention to request a booking on the service-based sharing economy platform Couchsurfing?

We adopt and extend the research model by Mittendorf (2016), which investigates the effect of familiarity and trust on the users' intentions on the hospitality platform Airbnb. In this regard, we add perceived risk to the model in order to increase its explanatory power. First and foremost, we contribute to the field of IS by complementing the theory of trust and risk-based decision-making on online platforms (Gefen 2000; Kim et al. 2008). Second, we add to the understanding of the service-based sharing economy research by evaluating the consumer perspective on Couchsurfing – a non-monetary sharing economy platform. Third, by incorporating trust and perceived risk in one research model, we shed light on distinct antecedents of user intentions in the hospitality industry. The remainder of this study is organized as follows: In Section 2, we present the related work on the sharing economy, trust, and perceived risk. In Section 3, we present our research design, propose our research model, and state our research hypotheses. In Section 4, we present our research methodology. In Section 5, we assess the measurement model and present our study results. Section 6, determines our study by discussing possible implications of our findings.

## Literature Review

**Sharing Economy:** Modern service-based sharing economy platforms enable private individuals to request and provide underused assets (Belk 2014; Hamari et al. 2015). Sharing economy platforms can nowadays be found in a variety of industries, such as in hospitality and transportation (Hamari et al. 2015). In this study, we analyze the users' intention on the hospitality sharing economy platform *Couchsurfing*. Couchsurfing uses recent peer-to-peer technology to establish non-monetary relationships between travelers and accommodation providers (Molz 2012). As Couchsurfing is usually free of charge and focuses on the social aspect of traveling, the platform attracts mostly younger individuals of the millennials generation that want to experience a place and the corresponding culture by staying at a local's accommodation (Molz 2012). However, although everyone can afford a free accommodation, Molz (2012) argues that due to this fact negotiations between "both hosts and guests" are perceived as being riskier. Following this logic, an adequate trust basis seems inevitable when requesting lodging from a stranger. Thus, Couchsurfing provides user profiles, reviews, and ratings to enable its user to spot and avoid lousy sharing partners in advance (Lauterbach et al. 2009; Rosen et al. 2011).

**Trust:** Although, researchers have studied the concept of trust incessantly from different perspectives in various disciplinary fields, such as psychology (Geyskens et al. 1996), sociology (Luhmann 1979), and philosophy (Porter 1996), trust seems elusive to define (McKnight and Chervany 2001). For the purpose of this study, we follow the sociological understanding of trust from Luhmann (1979). Luhmann defines trust as a concept to reduce complexity, which makes it easier for individuals to rely on actions of others (Luhmann 1979). Further social sciences literature states that the rapid progress of technology influences the momentousness of trust, as especially the information technology continuously changes causation in social systems (Luhmann 1979). In this context, we argue that the need for trust thrives predominantly in socially distant relationships, such as in the online environment (Jarvenpaa and Leidner 1999). In accordance with other researchers, we argue that online interactions between two strangers require an adequate trust basis to be initiated (Gefen 2000; Rosen et al. 2011). Following this logic, trust is critical in stimulating interactions in the online environment, respectively in a variety of computer-mediated environments, such as in the e-commerce industry (Gefen 2002a), crowdsourcing (Zheng et al. 2011),

virtual teams (Jarvenpaa and Leidner 1999), and the sharing economy (Weber 2014). Nevertheless, there is scarce literature on trust regarding non-monetary business models respectively the social sharing economy. We believe that the characteristics of the given setup, such as mostly non-recurring relationships, temporary sharing of private property, free of charge sharing, interactions with strangers on short notice, concurrence of digital and real-world interactions, and the intermediary framework, are unique to the sharing economy and lead to ubiquitous implications of trust (Chen et al. 2009).

**Disposition to trust** is a concept from psychology and assesses the tendency, based on a lifelong socialization process, to believe in the goodness of other individuals. Accordingly, disposition to trust assesses the individuals' propensity to trust others. The antecedent of trust is a personality-type control that is comprised of two subconstructs: *Trusting stance* and *faith in humanity* (Kim et al. 2008). Trusting stance refers to the confidence in superior outcomes when engaging in a relationship with others (McKnight et al. 1998). Faith in humanity, on the other hand, implies that other individuals are typically reliable, honest, benevolent, and predictable (McKnight et al. 1998). Fellow researchers, such as Kim et al. (2008), argue that disposition to trust is highly effective when individuals are still unfamiliar with each other – a predominant state between individuals on a variety of sharing economy platforms.

**Perceived risk:** The researchers Nicolaou and McKnight (2006) define the concept of perceived risk as the extent to which one believes uncertainty exists about whether a desirable outcome will occur. We adopt the given definition and understand perceived risk as a consumers' belief about the potential negative outcomes from online and offline interactions with providers (Wu et al. 2010). In this regard, our definition includes parts of Sitkin and Pablo's (1992) broader perceived risk concept, which is formed by outcome uncertainty, outcome expectations, and outcome potential. Perceived risk is an important obstruction for proprietors who are considering sharing their accommodation on an online hospitality platform, such as Couchsurfing or Airbnb. Compared to the e-commerce industry, where goods are sold permanently for money, sharing economy services generally let strangers access goods for a predefined period (Belk 2014). Accordingly, there is a greater chance of misconduct by potential consumers in the sharing economy (Weber 2014), compared to traditional e-commerce interactions. Prior research and the peculiarities of the sharing economy mechanisms encouraged us to investigate the implications of trust and perceived risk for temporal sharing of private accommodations on the Couchsurfing platform.

## Hypothesis Development and Research Model

This study is based on the sharing economy platform Couchsurfing, a popular service orientated hospitality platform. We analyze the consumer perspective in our paper. Therefore, we modify and extend the research model by Mittendorf (2016) and analyze the influence of trust and perceived risk on the consumers' intentions. We further introduce disposition to trust as an antecedent of trust. Thus, we build our conceptual model in accordance with previous literature. We follow the findings of Gefen (2002) and Gulati (1995) that disposition to trust can build trust by detracting the likelihood of others engaging in undesirable future actions. Moreover, we introduce trust in the online platform respectively trust in Couchsurfing and trust in accommodation providers. Based on risk theory and the call from Mayer (1995), we also include perceived risk of Couchsurfing and perceived risk of accommodation providers. We further draw on behavioral studies to assess a positive direct effect of trust on user behavior respectively a negative direct effect of perceived risk (Gefen et al. 2003). Table 1 shows an overview of the six constructs we included in this study.

We argue that individuals have a natural disposition to trust and ability to judge trustworthiness, hence we are in line with previous research papers (Gefen 2000; McKnight and Chervany 2001). For example, Wu et al. (2010) find that individuals of high disposition to trust are more inclined to frame positive initial interactions with unfamiliar entities (Luhmann 2000). Since literature identified disposition to trust as an antecedent of trust, we hypothesize a positive effect from the antecedent to the corresponding trust constructs (Gefen and Straub 2004; McKnight and Chervany 2001). In this regard, we expect to find an effect of disposition to trust on both trust in the platform and trust in the sharing partner. In other words, we assume that trust in the Couchsurfing platform and trust in accommodation providers is determined by a general trusting disposition. In particular, we hypothesize: **H1:** The stronger the consumers' disposition to trust is, the more they will trust in Couchsurfing. Furthermore, as most interaction between consumers and accommodation providers are short notice one-time interactions, the respective sharing partners are generally unfamiliar with each other. Hence, we expect that disposition to trust has a positive

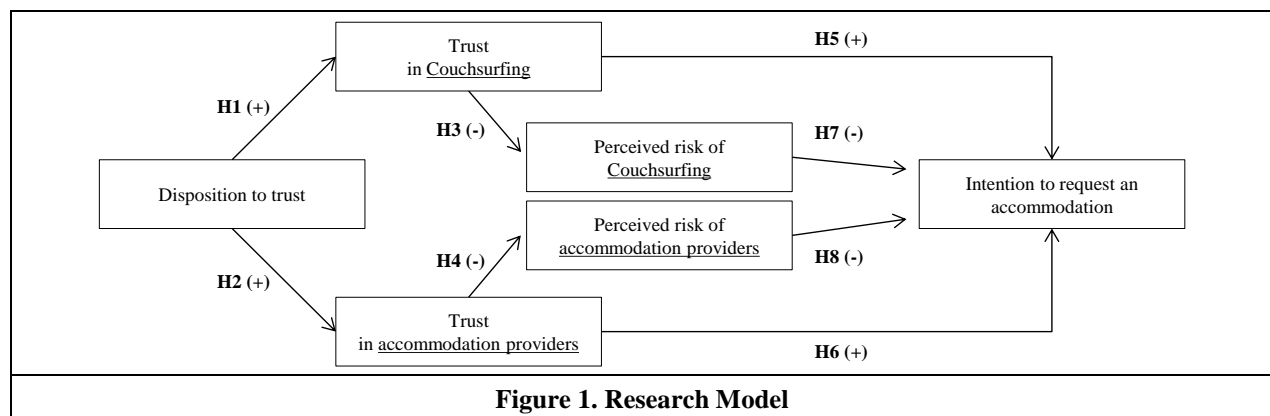
direct effect on trust in accommodation providers on the Couchsurfing platform. **H2:** The stronger the consumers' disposition to trust is, the more they will trust in accommodation providers on the Couchsurfing platform.

<b>Construct</b>	<b>Description</b>	<b>Reference</b>
<b>Disposition to trust</b>	General faith in humanity and belief that other individuals are well-meaning and reliable.	Gefen (2000), Kim et al. (2008), McKnight and Chervany (2001)
<b>Trust in Couchsurfing</b>	Confidence that the Couchsurfing platform respectively the platform administrators will behave in a favorable way.	Chen et al. (2009), Kim et al. (2008), Mittendorf (2016)
<b>Trust in accommodation providers</b>	Confidence that accommodation providers will behave in a favorable way.	
<b>Perceived risk of Couchsurfing</b>	Belief about uncertain negative outcomes from interactions with the Couchsurfing platform.	Kim et al. (2008), Nicolaou and McKnight (2006)
<b>Perceived risk of accommodation providers</b>	Belief about uncertain negative outcomes from interactions with accommodation providers.	
<b>Intention to request an accommodation</b>	Intention of requesting an accommodation on the Couchsurfing platform.	Davis et al. (1989), Mittendorf and Ostermann (2017), Pavlou (2001)

**Table 1. Key Constructs**

We further adapt risk theory (Luhmann 2005) and conclude that high degrees of trust decrease the perception of the related risk (Kim et al. 2008; Pavlou and Gefen 2004). As an empirical example, Pavlou and Gefen (2004) find that trust works as a reduction method of perceived risk in the online environment. Based on this logic, we assume that trust in the online platform respectively in the sharing partners decreases the perceived risk of the corresponding entity to engage in uncomplimentary future actions (Kim et al. 2008; Mittendorf and Ostermann 2017). Accordingly, we hypothesize: **H3:** Increased degrees of trust in Couchsurfing will decrease the consumers' perceived risk of Couchsurfing. **H4:** Increased degrees of trust in accommodation providers on Couchsurfing will decrease the consumers' perceived risk of accommodation providers on Couchsurfing.

Besides and in accordance with research of the e-commerce industry, such as Gefen (2000), Gefen et al. (2003), and Gefen and Straub (2004), we assume a positive direct effect of the respective trust constructs on the consumers' intention. Given this context, we hypothesize that the consumers' intentions to request an accommodation rise with increased degrees of trust (Chen et al. 2009; Gefen 2000). **H5:** Increased degrees of trust in Couchsurfing will increase the consumers' intentions to request an accommodation on Couchsurfing. **H6:** Increased degrees of trust in accommodation providers on Couchsurfing will increase the consumers' intentions to request an accommodation on Couchsurfing. Concurrently, perceived risk decreases the intention of consumers to engage in transactions in the online environment (Kim et al. 2008; Pavlou and Gefen 2004). Hence, we assume that perceived risk has a negative direct effect on the consumers' intention to request an accommodation on Couchsurfing. Accordingly, we hypothesize: **H7:** Increased degrees of perceived risk of Couchsurfing will decrease the consumers' intentions to request an accommodation on Couchsurfing. **H8:** Increased degrees of perceived risk of accommodation providers on Couchsurfing will decrease the consumers' intentions to request an accommodation on Couchsurfing.



**Figure 1. Research Model**

## Methodology

### Measurement Development and Data Collection

For this study, we designed an online questionnaire with which we explicitly gathered data to measure the influence of trust and perceived risk on the intention to request an accommodation on Couchsurfing. We chose to use the survey method as it is best adapted to assess attitudes and personal beliefs (Fang et al. 2014). The online survey contained 45 questions, covering six constructs, and demographic data. The survey employed a standardized response format: 7-point Likert scale. Further, we included age, education, gender, income, financial motives, and social motives as control variables in our questionnaire. Table A1 in the Appendix provides a summary of the item catalogue, including the corresponding constructs, the loadings, and the item codes. The sample of this study was gathered in late 2016 – see Table 2. We targeted individuals of the millennials generation who are familiar with the Couchsurfing service via appropriate social media channels, e.g., Couchsurfing groups and forums. By the due date, 248 participants completed the comprehensive questionnaire.

We used SPSS Statistics and SmartPLS to analyze the collected dataset. In particular, we performed an exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling (SEM). We conducted the EFA because we gathered and modified items from different literature sources. In this regard, we determined the correlation among the items by grouping the variables, based on strong correlations into six groups. We performed the EFA to make sure all our items have factorial loadings greater than 0.50 (Hair et al. 2010) on their respective construct. Further, we checked for cross-loadings greater than 0.40 (Gefen and Straub 2004). In this regard, we examined the pattern matrix, which was generated by the corresponding factor analysis applying a PROMAX rotation. We chose PROMAX as the appropriate oblique rotation choice, because we aimed to evaluate variables in non-orthogonal conditions (Butler 1991). We identified four items (two of each perceived risk construct) that showed cross-loadings above the threshold of 0.4. Hence, we dropped the identified items and continued with the remaining item set in our analysis (see Table A1).

	<b>Count</b>	<b>%</b>		<b>Count</b>	<b>%</b>
<b>Age</b>			<b>Gender</b>		
16 to 20 years	2	0%	Male	91	37%
21 to 25 years	93	34%	Female	157	63%
26 to 30 years	81	34%			
31 to 35 years	33	16%	<b>Marital status</b>		
36 to 40 years	13	6%	Single	215	86%
41 to 45 years	8	3%	Married	20	9%
46 to 50 years	8	3%	Separated	5	2%
51 to 55 years	5	2%	Divorced	8	3%
56 to 60 years	4	2%			
61 to 65 years	0	0%	<b>Profession</b>		
Age 66 or older	1	0%	Student	120	46%
			Employed for wages	92	39%
<b>Income</b>			Self-employed	20	8%
less than US\$20,000	124	47%	Out of work	11	5%
between US\$20,000 and US\$29,999	42	17%	Retired	5	2%
between US\$30,000 and US\$39,999	18	8%			
between US\$40,000 and US\$49,999	12	5%	<b>Education</b>		
between US\$50,000 and US\$59,999	13	6%	High school graduate	43	9%
between US\$60,000 and US\$69,999	14	6%	Associate degree	27	9%
between US\$70,000 and US\$79,999	9	4%	Bachelor's degree	126	54%
between US\$80,000 and US\$89,999	7	3%	Master's degree	46	25%
between US\$90,000 and US\$99,999	2	1%	Doctorate degree	6	4%
above US\$100,000	7	3%			
Required minimum sample size for each survey according to a priori power analysis (Faul et al. 2007): Minimum sample size to detect effect: N = 177; Minimum sample size for model structure: N = 138 (Anticipated effect size 0.3; Desired statistical power level 0.8; Probability level: 0.05)					

**Table 2. Participants Characteristics (N = 248)**

### Measurement Model

First, we assessed the reliability of our measurement model and validity of the six model constructs. We followed the approach from Hair et al. (2010) and Straub et al. (2004) in order to determine internal consistency. As a result, we found sufficient reliability for all our constructs, as the calculated Cronbach's Alpha scores are all above the recommended threshold of 0.70 (Fornell and Larcker 1981). Table 3 gives an overview of the reliability index and the descriptive statistics of our constructs.

	<b>DisTr</b>	<b>TrCS</b>	<b>TrAP</b>	<b>PRCS</b>	<b>PRAP</b>	<b>Req</b>
<b>Cronbach's Alpha</b>	0.866	0.947	0.962	0.874	0.894	0.921
<b>Composite Reliability</b>	0.904	0.962	0.972	0.922	0.934	0.941
<b>rho_A</b>	0.880	0.952	0.966	0.876	0.898	0.933
Note: DisTr = Disposition to Trust, TrCS = Trust in Couchsurfing, TrAP = Trust in Accommodation Providers, PRCS = Perceived Risk of Couchsurfing, PRAP = Perceived Risk of Accommodation Providers, Req = Intention to Request an Accommodation						

**Table 3. Descriptive Statistics and Reliability Index**

Data distribution is an important factor when performing multivariate methods, such as PLS-SEM. Therefore, we controlled for Kurtosis and Skewness issues in our data. We could not identify any Skewness or Kurtosis issues thus we claim that our variables are fairly normal distributed (Sposito et al. 1983). Furthermore, we performed a common method bias (CMB) analysis in order to evaluate the variance that is attributable to our measurement method (Podsakoff et al. 2003). We chose the Harman's single factor test to confirm that no single component explains more than 50% of the total variance; the analysis shows that CMB is unlikely a potential concern in our data.

In addition, we assessed construct validity by calculating convergent validity and discriminant validity (O'Leary-Kelly and Vokurka 1998). *Convergent validity* is the extent to which the measures of an item act as if they are measuring the underlying theoretical construct because they share variance (McKnight et al. 2002). In this regard, convergent validity is considered acceptable when the Average Variance Extracted (AVE) is greater than 0.50 for all constructs (Fornell and Larcker 1981). *Discriminant validity* is the degree to which measures of different latent variables are unique (O'Leary-Kelly and Vokurka 1998). In this regard, discriminant validity is considered acceptable when the square roots of the AVE are superior to the correlations among the research constructs – Fornell-Larcker criterion; and the variance explained by each construct is larger than the measurement error variance. The results of our study indicate that there is strong evidence of construct validity in our dataset. Table 4 shows that there are no validity concerns; hence, the data is suitable for an extended PLS-SEM approach.

Finally, since there are correlations among our latent constructs, we tested for multicollinearity problems in order to identify biases before conducting PLS-SEM (Grewal et al. 2004). It is recommended that constructs in regression analysis should not correlate highly with each other (Graham 2003). Potential multicollinearity issues were examined with SPSS collinearity diagnosis techniques using VIF (Variance Inflation Factors) and Tolerance values as suggested by Hair et al. (2010). Tolerance values should be greater than 0.1 and VIF values should be less than 10 to accept the premise of no multicollinearity problems for reflective constructs (Hair et al. 2010). The results demonstrate that all VIF values are less than 3 and all Tolerances are greater than 0.1; therefore, multicollinearity is unlikely an issue in our data.

	<b>AVE</b>	<b>DisTr</b>	<b>TrCS</b>	<b>TrAP</b>	<b>PRCS</b>	<b>PRAP</b>	<b>Req</b>
DisTr	0.656	<b>0.810</b>					
TrCS	0.863	0.461	<b>0.929</b>				
TrAP	0.898	0.531	0.652	<b>0.948</b>			
PRCS	0.798	-0.394	-0.546	-0.619	<b>0.894</b>		
PRAP	0.825	-0.361	-0.513	-0.617	0.832	<b>0.908</b>	
Req	0.762	0.377	0.527	0.579	-0.733	-0.726	<b>0.873</b>
Note: AVE = Average Variance Extracted. Diagonal elements of the last six columns represent the square root of the AVE. Off diagonal elements are the correlations among latent constructs.							

**Table 4. Convergent and Discriminant Validity Coefficients**

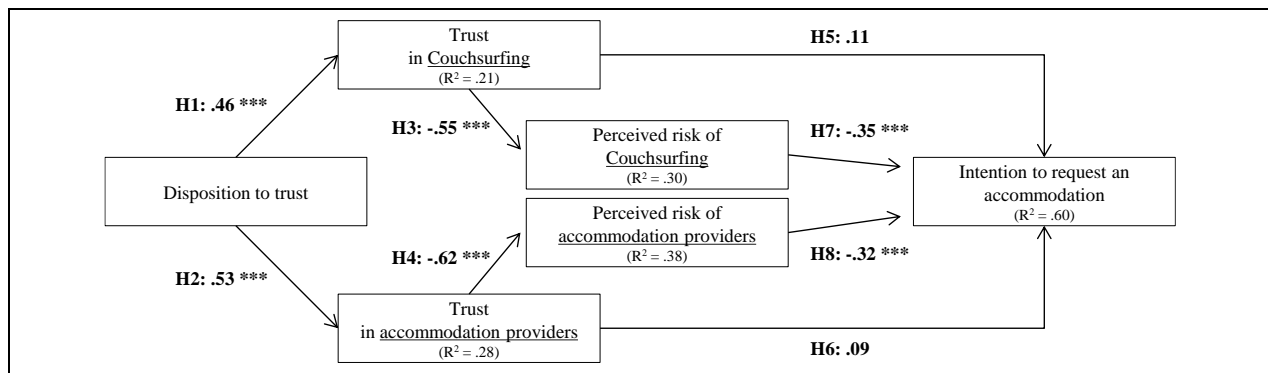
## Structural Model Assessment

The major goal of this study was to understand the implications of trust and perceived risk of both the platform and the corresponding users. Therefore, after we confirmed the factor structure of our dataset in the CFA, we performed PLS-SEM to analyze both measurement and structural relationships for our research model (Gefen et al. 2011). Our PLS analysis confirms that the collected data adequately fits our research model. The given items share only little residual variance and indicate unidimensionality of the SEM approach (Hu and Bentler 1999). The results of the SEM are presented in Table 5 and visually summarized in Figure 2. The explanatory power of our research model was assessed by examining the significance levels of the corresponding path coefficients. The results show support for six hypotheses. Disposition to trust affects trust in Couchsurfing and accommodation providers, supporting H1 and H2. In addition, H3 and H4 are supported, demonstrating that trust has a significant negative effect on perceived risk. H5 and H6 are not supported as trust does not have a direct significant effect on the users' intention while being mediated through perceived risk. In this regard, we find that perceived risk has a significant negative effect on the users' intention in both cases, supporting H7 and H8.

Hypothesis	Path	Path coefficient	Sample Mean	Standard Dev.	t-value	p-value
H1	DisTr --> TrCS	0.461	0.465	0.053	8.673	***
H2	DisTr --> TrAP	0.531	0.533	0.044	12.116	***
H3	TrCS --> PRCS	-0.546	-0.547	0.051	10.756	***
H4	TrAP --> PRAP	-0.617	-0.618	0.045	13.660	***
H5	TrCS --> Req	0.111	0.114	0.059	1.792	0.059
H6	TrAP --> Req	0.093	0.093	0.056	1.664	0.096
H7	PRCS --> Req	-0.345	-0.346	0.094	3.685	***
H8	PRAP --> Req	-0.324	-0.321	0.089	3.660	***

Note: \* significant at a .05 level, \*\* significant at a .01 level, \*\*\* significant at a .001 level

**Table 5. Results of Path Coefficients**



**Figure 2. Research Model**

We tested mediation effects on H5 and H6 using the procedure established by Judd and Kenny (1981). We followed the three conditions: (1) the independent variable (IV) significantly predicts the dependent variable (DV); (2) the IV significantly predicts the mediator variable (MV); and (3) when the DV is regressed on both the MV and the IV, the MV significantly predicts the DV, while the predictive expressiveness of the IV is reduced. We find a full mediation in both cases as the mediators are significant and the independent variables are not significant in the regression (see Table 6).

Hypothesis	Path	Path coefficient	Sample Mean	Standard Dev.	t-value	p-value
H5	TrCS --> Req	0.202	0.205	0.054	3.717	***
H6	TrAP --> Req	0.183	0.178	0.057	3.234	**

**Table 6. Results of Indirect Effects**

Hence, the data analysis successfully answered our research questions. We could show that disposition to trust has an effect on trust in Couchsurfing and accommodation providers. In addition, we are in line with

previous literature identifying a negative effect of trust on perceived risk. Furthermore, we identify a full mediating effect of perceived risk on the users' intention. In this regard, it is important to point out that platform risk and provider risk are both immediately influential on the users' intention.

## Conclusion and Implications

The study attempts to provide a foundation for an understanding of trust and perceived risk on the consumers' intentions on the sharing economy platform *Couchsurfing*. In our study, we adopted and extended the recent research model of fellow sharing economy researcher Mittendorf (2016). Our modified research model is based on trust and risk theory to explain the consumers' intentions on the given platform. Following the idea of the two-sided market (Eisenmann et al. 2006), we separated the online platform from the respective users in order to evaluate their distinct impact on the consumers' intentions. The separation of the platform from its users is particularly necessary to evaluate contemporary sharing economy platforms, as interactions in the sharing economy are usually initiated via an online platform, but executed in the offline world between the respective sharing partners. The distinct influence of both the sharing economy platform and its corresponding users on the consumers' intentions cannot be fully explained with the given literature or established theories (Lauterbach et al. 2009; Weber 2014); especially as the sharing economy peculiarities provide a unique framework of an online environment that connects strangers on online platforms that further enable offline interactions between consumers and providers. For example, Mittendorf (2017) finds differing results on sharing economy platforms of other industries. To close this research gap, we incorporated trust and perceived risk of Couchsurfing respectively trust and perceived risk of accommodation providers to shed light on the consumers' intentions on non-monetary sharing economy platforms of the hospitality industry. By conducting an EFA, CFA, and SEM with adequate construct validity measures, we were able to empirically validate the specific effects of trust and risk on the consumers' intentions.

Our study contributes to research in several ways: First and foremost, based on trust literature, we find a negative effect of trust on perceived risk for both entities – platform and providers. In this regard, we find that trust is fully mediated through perceived risk on the consumers' intentions. Hence, whereas we follow the calls from Gefen (2001) and Kim et al. (2008) to evaluate disposition to trust and trust in e-commerce related online environments, we further include risk theory in terms of perceived risk based on the recommendation from Mayer (1995). Thus, our study is among the first to address the theoretical gap by incorporating both trust and perceived risk on user intentions that do not follow financial motives respectively are non-monetary. Keeping in mind the two-sided market model of the sharing economy, we were able to show that perceived risk of the platform and perceived risk of the providers are immediately influential on the consumers' intention to engage in a sharing encounter. Overall, we add to our scholarly understanding of non-monetary sharing economy mechanisms. Besides, our study has practical implications for the sharing economy platforms administrators. In this regard, the identification of perceived risk, as a critical factor on the consumers' intention to engage in accommodation sharing on Couchsurfing, could lead to an endorsement for the online platform: (1) to emphasize the importance of risk reduction and trust building measures for both the platform and the accommodation providers in order to signal trust to potential consumers. Furthermore, (2) in order to counter the perception of perceived risk, current quality control processes could be advanced and exposed in a more transparent manner while including additional background checks; thus reducing concealed damage possibilities.

Further research can address some limitations of our study. First, whereas the sample size of our study is generally acceptable for an EFA, CFA, and SEM, a larger sample size is desirable to identify potential differences between user groups, such as cultural differences. Second, our study focuses on the consumer perspective – hence, an additional research approach could identify commonalities and differences with the accommodation provider's perspective. Finally, our study is solely based on one sharing economy platform – Couchsurfing. Consequently, our study is context-dependent and it is indistinct whether our findings can be generalized to other sharing economy platforms with a monetary focus. Finally, we make a research call on dimensionality of service encounters across platform, as previous studies, such as Hawlitschek et al. (2016) and Mittendorf (2017), do not always have congruent findings. Second, we make a call to examine the effect of transparency of profile information on trust, as for example BlaBlaCar discloses much more information about the sharing partners than other ridesharing platforms, such as Uber or Lyft.



## REFERENCES

- Belk, R. 2014. "You are what you can access: Sharing and collaborative consumption online," *Journal of Business Research* (67:8), Elsevier Inc., pp. 1595–1600.
- Butler, J. K. 1991. "Toward Understanding and Measuring Conditions of Trust: Evolution of a Conditions of Trust Inventory," *Journal of Management* (17:3), pp. 643–663.
- Chen, J., Zhang, C., and Xu, Y. 2009. "The Role of Mutual Trust in Building Members' Loyalty to a C2C Platform Provider," *International Journal of Electronic Commerce* (14:1), pp. 147–171.
- Davis, F., Bagozzi, R., and Warshaw, P. 1989. "User acceptance of computer technology: a comparison of two theoretical models," *Management science* (35:8), pp. 982–1003.
- Eisenmann, T., Parker, G., and Alstyne, M. W. Van. 2006. "Strategies for Two- Sided Markets," *Harvard Business Review* (84:10), p. 12.
- Fang, Y., Qureshi, I., Sus, H., Mccole, P., Ramsey, E., and Lim, K. H. 2014. "Trust, Satisfaction, and Online Repurchase Intention: The Moderating Role of Perceived Effectiveness of E-Commerce Institutional Mechanisms," *MIS Quarterly* (38:2), pp. 407–427.
- Faul, F., Erdfelder, E., Lang, A.-G., and Buchner, A. 2007. "G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences," *Behavior Research Methods* (39:2), pp. 175–91.
- Fornell, C., and Larcker, D. F. 1981. "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research* (18:1), pp. 39–50.
- Gefen, D. 2000. "E-commerce: the role of familiarity and trust," *Omega* (28:6), pp. 725–737.
- Gefen, D. 2002a. "Reflections on the Dimensions of Trust and Trustworthiness Among Online Consumers," *SIGMIS Database* (33:3), pp. 38–53.
- Gefen, D. 2002b. "Customer Loyalty in E-Commerce," *Journal of the Association for Information Systems* (3).
- Gefen, D., Karahanna, E., and Straub, D. W. 2003. "Trust and TAM in Online Shopping: An integrated Model," *MIS Quarterly* (27:1), pp. 51–90.
- Gefen, D., Rigdon, E. E., and Straub, D. W. 2011. "An Update and Extension to SEM Guidelines for Administrative and Social Science Research.," *MIS Quarterly* (35:2), pp. iii–xiv.
- Gefen, D., and Straub, D. W. 2004. "Consumer trust in B2C e-Commerce and the importance of social presence: Experiments in e-Products and e-Services," *Omega* (32:6), pp. 407–424.
- Graham, M. H. 2003. "Confronting Multicollinearity in Ecological Multiple Regression," *Source: Ecology Ecology* (84:11), pp. 2809–2815.
- Grewal, R., Cote, J. A., and Baumgartner, H. 2004. "Multicollinearity and measurement error in structural equation models: Implications for theory testing," *Marketing Science* (23:4), pp. 519–529.
- Gulati, R. 1995. "Does familiarity breed trust? the implications of repeated ties for contractual choice in alliances.," *Academy of Management Journal* (38:1), pp. 85–112.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. 2010. *Multivariate Data Analysis Vectors*.
- Hamari, J., Sjöklint, M., and Ukkonen, A. 2015. "The Sharing Economy: Why People Participate in Collaborative Consumption," *Journal of the Association for Information Science and Technology*, pp. 1–19.
- Hawllitschek, F., Teubner, T., and Gimpel, H. 2016. "Understanding the Sharing Economy - Drivers and Impediments for Participation in Peer-to-Peer Rental," in *Proceedings of the Annual Hawaii International Conference on System Sciences* (Vol. 4801), pp. 4782–4791.
- Hawllitschek, F., Teubner, T., and Weinhardt, C. 2016. "Trust in the Sharing Economy," *Die Unternehmung* (70:1), pp. 26–44.
- Hoffman, D., Novak, T., and Peralta, M. 1999. "Building Consumer Trust Online," *Communications of the ACM* (42:4), pp. 80–85.
- Hu, L., and Bentler, P. M. 1999. "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives," *Structural Equation Modeling: A Multidisciplinary Journal* (6:1), pp. 1–55.
- Jarvenpaa, S. L., and Leidner, D. E. 1999. "Communication and Trust in Global Virtual Teams," *Organization Science* (10:6), pp. 791–815.
- Jarvenpaa, S. L., Tractinsky, N., and Saarinen, L. 1999. "Consumer trust in an internet store: a cross culture validation," *Journal of Computer Mediated Communication* (5), pp. 1–35.
- Judd, C. M., and Kenny, D. A. 1981. "Process Analysis Estimating Mediation in Treatment Evaluations," *Evaluation review* (5:5), pp. 602–619.

- Kim, D. J., Ferrin, D. L., and Rao, H. R. 2008. "A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents," *Decision Support Systems* (44:2), pp. 544–564.
- Lauterbach, D., Truong, H., Shah, T., and Adamic, L. 2009. "Surfing a Web of Trust: Reputation and Reciprocity on CouchSurfing.com," *2009 International Conference on Computational Science and Engineering* (4), pp. 346–353.
- Lenhart, A., Purcell, K., Smith, A., and Zickuhr, K. 2010. "Social Media & Mobile Internet Use among Teens and Young Adults. Millennials," *Pew internet & American life project* (1).
- Luhmann, N. 1979. *Trust and Power* (Vol. 23), John Wiley & Sons.
- Luhmann, N. 2000. "Familiarity, Confidence, Trust: Problems and Alternatives," in *Gambetta, Diego (ed.) Trust: Making and Breaking Cooperative Relations*, pp. 94–107.
- Luhmann, N. 2005. *Risk: A Sociological Theory*.
- McKnight, D. H., and Chervany, N. L. 2001. "What Trust Means in E-Commerce Customer Relationships: An Interdisciplinary Conceptual Typology," *International Journal of Electronic Commerce* (6:2), pp. 35–59.
- McKnight, D. H., Choudhury, V., and Kacmar, C. 2002. "The impact of initial consumer trust on intentions to transact with a web site: A trust building model," *Journal of Strategic Information Systems* (11:3–4), pp. 297–323.
- McKnight, D. H., Cummings, L. L., and Chervany, N. L. 1998. "Initial Trust formation in new organizational relationships," *Academy of Management Review* (23:3), pp. 473–490.
- Mittendorf, C. 2016. "What Trust means in the Sharing Economy: A provider perspective on Airbnb.com," *Americas Conference on Information Systems*, pp. 1–10.
- Mittendorf, C. 2017. "The Implications of Trust in the Sharing Economy – An Empirical Analysis of Uber," in *50th Hawaii International Conference on System Sciences (HICSS)*, pp. 5837–5846.
- Mittendorf, C., and Ostermann, U. 2017. "Private vs. Business Customers in the Sharing Economy – The Implications of Trust, Perceived Risk, and Social Motives on Airbnb," in *50th Hawaii International Conference on System Sciences (HICSS)*, pp. 5827–5836.
- Molz, J. G. 2012. "CouchSurfing and network hospitality: 'It's not just about the furniture'," *Hospitality & Society* (1:3), pp. 215–225.
- Nicolaou, A. I., and McKnight, D. H. 2006. "Perceived information quality in data exchanges: Effects on risk, trust, and intention to use," *Information Systems Research* (17:4), pp. 332–351.
- O'Leary-Kelly, S. W., and Vokurka, R. J. 1998. "The empirical assessment of construct validity," *Journal of Operations Management* (16:4), pp. 387–405.
- Pavlou, P. A. 2001. "Integrating Trust in Electronic Commerce with the Technology Acceptance Model: Model Development and Validation," in *AMCIS 2001*, pp. 816–822.
- Pavlou, P. A., and Gefen, D. 2004. "Building Effective Online Marketplaces with Institution-Based Trust," *Information Systems Research* (15:1), pp. 37–59.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., and Podsakoff, N. P. 2003. "Common method biases in behavioral research: a critical review of the literature and recommended remedies.," *The Journal of applied psychology* (88:5), pp. 879–903.
- Porter, T. 1996. *Trust in numbers. The pursuit of objectivity in science and public life*.
- Rosen, D., Lafontaine, P. R., and Hendrickson, B. 2011. "CouchSurfing: Belonging and trust in a globally cooperative online social network," *New Media & Society* (13:6), pp. 981–998.
- Sitkin, S. B., and Pablo, A. L. 1992. "Reconceptualizing the Determinants of Risk Behavior," *The Academy of Management Review* (17:1), pp. 9–38.
- Sposito, V. A., Hand, M. L., and Skarpness, B. 1983. "On the Efficiency of Using the Sample Kurtosis in Selecting Optimal lp Estimators," *Communications in Statistics - Simulation and Computation* (12:3), pp. 265–272.
- Weber, T. A. 2014. "Intermediation in a Sharing Economy: Insurance, Moral Hazard, and Rent Extraction," *Journal of Management Information Systems* (31:3), pp. 35–71.
- Wu, G., Hu, X., and Wu, Y. 2010. "Effects of Perceived Interactivity, Perceived Web Assurance and Disposition to Trust on Initial Online Trust," *Journal of Computer-Mediated Communication* (16:1), pp. 1–26.
- Zheng, H., Li, D., and Hou, W. 2011. "Task Design, Motivation, and Participation in Crowdsourcing Contests.," *International Journal of Electronic Commerce* (15:4), pp. 57–88.