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THE CONSUMER JOURNEY ON COLLABORATIVE CONSUMPTION PLATFORMS

An empirical study using structure equation modeling

Shailendra Singh Tomar

Dissertation presented as partial requirement for obtaining
the Master's degree in Statistics & Information Management

NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa

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by

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Dissertation presented as partial requirement for obtaining the Master's degree in Information Management, with a specialization in Marketing Research & CRM

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June 2018

PUBLICATION

An article on "*Evaluating collaborative consumption platforms from consumer perspective*" has been submitted to an international journal.

ACKNOWLEDGEMENTS

I would like to thank my advisor, Professor Tiago Oliveira. He helped me not only academically by teaching structure equation modeling technique but also provided practical insights which I used while developing my thesis. When I met him with dissertation proposal, I was unclear with the research. He gave right direction and tutored me through the session. Now we are jointly publishing a research paper, from the findings of this thesis.

Further, I would like to express my gratitude towards my classmates who encouraged me with right feedback. Last but not the least, my family, girlfriend, and friends, who motivated me during the entire period. Thanks a lot!

Shailendra Singh Tomar

ABSTRACT

The consumption pattern in digital world is changing due to emerging platforms that allow individuals to share their underutilized assets so that others can access them without having any liability. These platforms based on collaborative consumption (CC) definitely provide economic gains but how consumers take this entire journey on CC platform is the focus of this research. To understand this phenomenon in detail, we first identified the key determinants of CC Platforms and then estimated the multiple relationships using partial least squares path modelling. The theoretical section included the dimension of consumer trust, social media and other relevant constructs along with technology acceptance theory, which further supported in developing the research model. In order to test the model, we conducted a detailed survey and validated the hypotheses. The outcome variables were sharing intention, user behaviour, trust, satisfaction, and intention to recommend. The explanation all the dependent variables was exceptionally good. In addition, we conducted a mediation analysis and found satisfaction as a mediator variable.

KEYWORDS

Collaborative Consumption Platforms; UTAUT2; Dimension of Consumer Trust; The sharing economy in social media; PLS path modeling

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LIST OF ABBREVIATIONS AND ACRONYMS

CC	Collaborative Consumption
UTAUT	Unified Theory of Acceptance and Use of Technology
B2C	Business to Consumer
C2C	Consumer to Consumer
IT	Information Technology
SDT	Self-determination Theory
TRA	Theory of Reasoned Action
TBP	Theory of Planned Behaviour
TAM	Technology Acceptance Model
PLS	Partial Least Squares
SEM	Structure Equation Modeling
CR	Composite Reliability
CA	Cronbach Alpha
AVE	Average Variance Extracted
HTMT	Heterotrait-Monotrait
VIF	Variance Inflation Factor

1. INTRODUCTION

The rapid growth in technology has provided opportunities to develop innovative business models, and collaborative consumption is one such model (Richter et al., 2017). Individuals are usually interested in utilizing products or services without having any liability, and online platforms for collaborative consumption (CC) can facilitate such transaction at low cost (Botsman and Rogers, 2010). CC has grown from the traditional form of exchange to a triadic framework which includes platform providers that facilitate exchange, customers who want to access underutilized assets and peer service providers who hold ownership of the asset (Benoit et al., 2017). This framework shows how CC platform brings out the innovative business model and creates economic value for the customers.

According to Juniper Research, the forecasted market for the online platforms of collaborative consumption in 2017 is \$18.6 billion, and by 2022, it is expected to be \$40.2 billion (Foye, 2017). Not only the revenue numbers but also the numbers of platforms are going to increase. Just in Europe, in 2015, PWC found 275 collaborative consumption platforms which are operating mainly in five key sectors: transportation, accommodation, collaborative finance, on-demand household and professional services (Daveiro and Vaughan, 2016). The total estimated number of active collaborative consumption platforms across the world are above 800 (Stephany, 2017).

In recent years, the advancement in information technology (IT), especially quick access to the internet using mobile devices (Hawlitsek et al., 2016), has facilitated people to access collaborative consumption platforms such as Airbnb and Uber at a lesser cost compared to traditional hotels and taxis. The reason behind is reduced transaction costs whereas one would require more resources to facilitate the traditional transactions in any hotel or taxi. These platforms have also created disruption (Barnes and Mattsson, 2017) as well as some problems such as user privacy, trust, and ethical issues.

While reviewing the existing research papers, there were many gaps identified. First, the existing literature on this topic is limited to the general context of collaborative consumption, and it was purely theoretical such as online marketplace and on-demand demand economy. Second, the tested models were more focused on specific collaborative consumption platforms e.g. the factors of choosing a sharing option were tested on B2C car-sharing car2go and C2C accommodation marketplace Airbnb (Möhlmann, 2015). Third, most of these models were focused on participation rather than technology adoption. Besides this, fourth, few papers gave further direction on exploring trust (Schor et al., 2016) as an explanatory variable.

The model developed in this research contributed not only to the literature related to CC but also highlighted the relevant determinants of its platform. First, the research is focused on CC Platforms, and its theoretical foundation is established by the most recent unified theory of acceptance and use of technology (UTAUT2) and the research of collaborative consumption. Second, a combination of theories makes the model complete and generalize the results for CC Platforms. Third, the model captures technology adoption and explains a variety of phenomenon such as sharing intention of users who use CC Platforms, their usage pattern, the factors that satisfy them and why they recommend the CC Platforms. Fourth, the model includes the dimension of consumer trust with additional variable of social media. Another new finding is that satisfaction is a mediating variable. The findings of this research will surely help various stakeholders to understand better the consumers who take the journey on CC Platforms to access products or services.

In order to dig deeper, the next section of the study will feature a theoretical background that will cover the concept of CC Platforms, prior research on collaborative consumption with research gap and how it is integrated through technology adoption model. After that, the research model and the development of hypotheses will be put together. The following section will highlight how the research was carried out, used methodology analysis of results, and at the end, discussion, conclusion and further recommendation.

2. THEORETICAL BACKGROUND

2.1. THE CONCEPT OF COLLABORATIVE CONSUMPTION

The collaborative consumption is interpreted as an economic activity where an individual(s) can access underutilized resources of others, who are willing to share (Barnes and Mattsson, 2017) for-profit and non-profit activities. This model creates a win-win situation for both, owners of the resources to make money, and the users of resources to save money (Muñoz and Cohen, 2017). The definition that suits this research defines collaborative consumption as *“the peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services”* (Hamari et al., 2016, p.2047).

Gansky (2014) mentioned in ‘the mesh’ that sharing using IT creates new value for the individuals. There is another word ‘sharing economy’ which is often interchangeable with CC (Hamari et al., 2016). The reason is simple as both words direct towards sharing, bartering or renting, by using technology. According to another researcher, Belk, collaborative consumption and sharing economy has two commonalities, first is the non-ownership models which allow individuals to use consumer goods and services, while second is their dependence on the internet technologies (Belk, 2014).

The traditional form of buying is changing to modern sharing economy models, and it is organized into three core concepts, community-based economy that mainly favors social benefits, access-based economy which broadly committed to second-hand goods and then platform economy that intend to facilitate exchange of good and services through digital channels (Acquier et al., 2017). When People buy items and do not fully utilise, this is the point where collaborative consumption comes in existence. To circulate these goods, nowadays, there are plenty of options, but that is just one small part of collaborative consumption. Not only goods but also less-tangible items such as skill, technology, finance and even space are available for sharing. This is happening because people and companies, both have started offering goods as service (Botsman and Rogers, 2010).

2.2. EXISTING RESEARCH ON COLLABORATIVE CONSUMPTION

The roots of collaborative consumption traced in 1937 when R.H. Coase wrote an article about the nature of firms in which he explained how individuals could reduce the costs by forming partnerships or companies (Coase, 1937). Who knew back in time that this topic would emerge on a greater scale through online marketplaces like eBay (Belk, 2014). Besides this, Russel Belk also introduced internet-facilitated sharing which is nothing but the CC Platforms, where he talked about music and file sharing. The CC Platforms which once started as recirculation of goods through websites like Craigslist has

evolved to complex platforms such as Couchsurfing which offers a network of people and much more than just accommodation (Codagnone and Martens, 2016; Schor, 2014).

Möhlmann developed a framework for choosing a sharing option, where he tested two independent studies, business-to-business (B2B) car-sharing and consumer-to-consumer (C2C) accommodation marketplace (Möhlmann, 2015). The results for C2C were better than B2C data. The major contribution in his C2C study which intent to measure satisfaction with a sharing option came from cost saving, trust, familiarity and utility constructs. The concept of smartphone capability looked futuristic in this scenario. The scope of this research was limited to car sharing, and accommodation marketplace thus demanded to include other type of sharing economy platforms. Möhlmann gave further direction on investigating the actual behaviour of individuals and trust concept with its other verticals from the perspective of sharing economy. A similar study on C2C was done in Germany which was more focused on trust and measured intention from consumption and supply perspective (Hawlitschek et al., 2016).

Cockayne (2016) conducted remarkable research about on-demand economy in which he conducted interviews with individuals who belong to San Francisco's digital media sector and highlighted how sharing makes economic sense for everyone. In the same year, another research on CC explained two main determinants, behavioural intention and attitude (Hamari et al., 2016). Statistically, the model explained well the topic but looking at its constructs, the effect of a latent variable 'enjoyment' was surprisingly higher on both the outcome variables. This research paper included extrinsic and intrinsic motivation but lacked in capturing all factors in the model, needing additional explanatory variables. Plus, it had a direction to investigate usage pattern which we have captured in this research.

Barnes and Mattson tested a theoretical model of CC which was built on the theory of reasoned action (Barnes and Mattson, 2017). Their model emphasized on sharing intention and intention to recommend. Trust had direct effect while the economic benefit contributed to perceived usefulness which had a higher effect on both the outcome variables. The improvement was demanded in sharing intention which is like behavioural intention in extended UTAUT theory. The research paper also gave the future direction to explore more the trust. Exploration of trust in CC Platforms was also recommended in other studies of sharing economy (Frenken and Schor, 2017; Florian Hawlitschek et al., 2016). Therefore, the dimension of consumer trust is expanded more through additional variables such as competence, integrity, and benevolence (Oliveira et al., 2017). In addition, social media, which has a huge influence on CC Platforms, especially on trust (Frenken and Schor, 2017) was also included in this research.

2.3. INTEGRATION WITH TECHNOLOGY ADOPTION MODEL

The literature of collaborative consumption is vast as it has evolved through various theories such as self-determination theory (SDT), the theory of reasoned action (TRA) and planned behaviour (TBP). Table 1.1 presents how these theories have explained the sharing behaviour among individuals who use a different type of CC Platforms. In connection to this, Venkatesh spent years in research to combine many theories including the ones used in CC and built an impressive UTAUT model that was revolutionary in the field of information technology. That means establishing theoretical base as UTAUT will further strengthen the CC Platforms.

Matzner et al. (2015) shed light on how individuals accept IT-enabled sharing platforms and TAM is the model that can play a vital role. Developed from TRA, this model included the psychological factors which affect technology acceptance (Davis, 1989). The fundamental question that TAM answers are why a user accepts or rejects information technology. There are various external factors such as perceived usefulness and easy to use, which clarified the attitude toward using the technology and at the end, explained the behaviour of humans when they react to new technologies (Venkatesh et al., 2000). In the second model of TAM, additional constructs were included to explain more the perceived usefulness which also strengthens intention to use (Venkatesh et al., 2000). This progressive model also included most relevant constructs along with two moderators. The evolution of technology adoption models was combined to develop the recent and robust model of technology acceptance, UTAUT2 (Venkatesh et al., 2012), which is the foundation of this research.

While reviewing existing models of sharing economy, it is evident that the models have a strong link with the technology adoption theories. The fundamental difference is the intention, which is sharing intention in this case. The existing models of CC have already tested many variables of previous theories related to technology adoption. Since peer-to-peer collaborative consumption platforms are growing, it would be better to consider UTAUT2 that will lay the solid foundation for this study. Frenken & Schor (2017) also explained that peer-to-peer platforms and new technology-enabled practices go hand in hand to empower consumers.

Author & Year	Theory Used	Methods Data & context	Key Hypotheses
Barnes & Mattsson (2017)	TRA	Partial least squares path modelling; 115 users of MinBilDinBil	Sharing Intention is a behavioural outcome of sharing which can be explained better through UTAUT model as the theoretical base is similar. While the intention to recommend should be an outcome of the previous variable. Also, user behaviour is missing from TRA.
Hamari et al (2016)	SDT	Structural equation modelling; 168 registered users of Sharetribe	Behavioural intention is similar to above. Since Attitude variable contributed significantly, it will be considered in the model.
Möhlmann, (2015)	Multiple theories of collaboration	Partial least squares path modelling analysis, 236 people from B2C (car2go) and 187 from C2C (Airbnb)	Satisfaction with a sharing option was mostly explained by Trust and Utility. Also, other explanatory variables resemble UTAUT.
Hawlitschek & Teubner (2016)	B2C, C2C e-commerce, and trust	Exploratory factor analysis; 91 individuals from Karlsruhe Institute of Technology	Trust from different dimensions contributed to intention to consume and supply
Hawlitschek et al. (2016)	TBP	Exploratory factor analysis; 605 individuals from Karlsruhe Institute of Technology	Trust was an important factor of the sharing economy
Matzner et al (2015)	TBP	Structural equation modelling; in progress	User behaviour in context of IT-enabled platforms was an important outcome. The behavioural beliefs included trust and perceived usefulness which are the interest of this research
Frenken & Schor (2017)	Various Theories	Discussion paper	This paper put together the literature to highlight the platform economy and it also directed to explore trust as an explanatory variable.

Table 1.1 – Literature supporting technology adoption model

3. DEVELOPMENT OF HYPOTHESIS & RESEARCH MODEL

3.1. HYPOTHESES OF UTAUT2 CONTEXT

From the discussion of previous section, the constructs of technology adoption theories were widely used in the collaborative consumption models. Therefore, UTAUT2 is considered as a base theory for the foundation of the model. One of the key determinants of intention used in Barnes and Mattson's paper (2017) is similar to the behavioural construct of UTAUT2, which means testing its explanatory constructs would be useful for this study.

Beginning with the performance expectancy, it is derived from the variables which aim to determine the usefulness of a technology (Venkatesh et al., 2012). On a similar note, CC Platforms are great utility and provide many benefits to individuals (Zhang et al., 2018). Hence, performance expectancy would contribute to the sharing intention of CC Platforms.

H1: Performance expectancy is positively associated with sharing intention

The active CC Platforms have one thing common, ease of use, which means a low level of efforts are required to be an active user (Frenken and Schor, 2017). This phenomenon was also observed in behavioural intention of UTAUT, making effort expectancy an independent variable (Venkatesh et al., 2003).

H2: Effort expectancy is positively associated with sharing intention

Most of the CC Platforms are the based on sharing human and nonhuman resources that straight away involves social influence (Zhang et al., 2018). It can also be expressed as a factor which measures how the user's social surrounding affect the behavioural intention (Venkatesh et al., 2003). Both arguments support this hypothesis.

H3: Social influence is positively associated with sharing intention

Another important determination is facilitating conditions, which measures the perception of users regarding the resources and support given to them (Venkatesh et al., 2012). Provided the rise in this phenomenon will increase the use of CC Platforms and ultimately will influence the sharing intention and at the same time affect the use behaviour. The hypotheses for this factor are:

H4a: Facilitating conditions is positively associated with sharing intention

H4b: Facilitating conditions is positively associated with user behaviour

Hedonic motivation is interpreted as fun or pleasure that come from the use of technology (Venkatesh et al., 2012) and it was considered as an important variable which had an effect on behavioural intention. On the other hand, Richardson (2015) mentioned in his paper that sharing economy

platforms are fun as they allow users to hire the car and share the food. Hence, it makes sense to test this hypothesis.

H5: Hedonic motivation is positively associated with sharing intention

The value creation is one of the key aspects of sharing economy (Zhang et al., 2018), especially for the monetary cost of using CC Platforms and the benefit received by the individuals. In UTAUT2, price value construct has similar characteristics that leverage the perceived benefits and the cost of using the technology (Venkatesh et al., 2012). Therefore, price value should have a positive effect on sharing intention of CC Platforms.

H6: Price value is positively associated with sharing intention

The habit as a determinant was also discussed in UTAUT2 as it had a direct effect on behavioural intention and use behaviour (Venkatesh et al., 2012). This pattern is also witnessed in the habit of traditional buyers who changed ever since they started using CC Platforms (Akbar and Tracogna, 2018). In the recent years, more and more people are shifting to these platforms, changing the user behaviour and having the effect on sharing intention.

H7a: Habit is positively associated with sharing intention

H7b: Habit is positively associated with user behaviour

3.2. HYPOTHESIS OF ATTITUDE

The attitude of people influences the way they perceive the internet technology (Bankole and Bankole, 2017). Since the CC Platforms are mostly connected to the internet, it infers that attitude of users positively influences the sharing intention (Hamari et al., 2016). The hypothesis is:

H8: Attitude is positively associated with sharing intention

3.3. HYPOTHESIS OF SHARING INTENTION

Based on consumer's intention to share, it is one of the main outcome variables. Although it has different names in the different model such as renting intention (Barnes and Mattsson, 2017), intention to use, consume or supply. As the theoretical foundation is UTAUT2 and its related theories are linked to sharing economy, the ideal name for this construct would be sharing intention and it will have direct impact on user behaviour as individuals have different usage patterns, satisfaction because

they choose the CC platform at the first place and intention to recommend since it is likely that CC Platforms will be used in future.

H9a: Sharing intention is positively associated with user behaviour

H9b: Sharing intention is positively associated with satisfaction

H9c: Sharing intention is positively associated with intention to recommend

3.4. HYPOTHESIS OF USER BEHAVIOUR

CC Platforms not only serve the daily needs of individuals but also provide economic gains (Muñoz and Cohen, 2017). Making the best out of under-utilized resources is one of the reasons why user behaviour is constantly affecting satisfaction on such platforms.

H10: Use behaviour is positively associated with satisfaction

3.5. HYPOTHESIS OF CONSUMER TRUST

Social media often provides a competitive advantage to the business, therefore, sometimes it is put under the umbrella of the CC (Frenken and Schor, 2017) and has links with the trust. Considering the rise in the platforms of CC (Laurell and Sandström, 2017), a similar research on social search was done that influence the trust (Morris et al., 2010), which interprets nothing but finding information using social networks.

H11: Social media is positively associated with trust

Building trust in the online world is indeed a challenge. Usually, the websites establish trust only when an individual's perception exist on three main factors such as credibility, ease of use and risk (Corritore et al., 2003). This model applies to all the websites which also include online sharing economy platforms. Since easy-of-use and credibility (in the form of an image) already exist, the risk is essential to complete the trust as a construct. The trust also influences the intention to use (Mcknight and Chervany, 2001). The significance of trust was even higher in another study done in e-commerce which tested the dimensions of consumer trust on intention to purchase (Oliveira et al., 2017). In the study of Möhlmann and Barnes & Mattson, trust played an important role as well.

H12: Benevolence is positively associated with trust

H13: Integrity is positively associated with trust

H14: Competence is positively associated with trust

H15a: Trust is positively associated with intention to recommend

H15b: Trust is positively associated with satisfaction

3.6. HYPOTHESIS OF SMARTPHONE CAPABILITY AND ECONOMIC BENEFITS

Another linked concept is smartphone usage which has uplift the way CC Platforms function nowadays (Cockayne, 2016). From traditional web-based platforms like Couchsurfing and Craigslist, the technology has now shifted to on-demand applications like Zipcar. In all this development, smartphones particularly using applications has given a boost to the usage of such platforms (Botsman and Rogers, 2010). The concept of a smartphone is readily taken from the Möhlmann's framework and its hypothesis is

H16: Smartphone Capability is positively associated with satisfaction

One of the reasons why people use CC Platforms is to utilize resources with less cost and plus this determinant has a statistical influence on satisfaction (Tussyadiah, 2016). Not only this. Barnes and Mattson also gave few examples how people were reducing spending by car sharing, and ultimately they tested this variable in their model (Barnes and Mattsson, 2017). Here is the hypothesis:

H17: Economic benefits is positively associated with satisfaction

3.7. HYPOTHESIS OF SATISFACTION

In the study of using sharing economy option again, satisfaction played a dominant role which makes it an influential factor (Möhlmann, 2015). However, we are looking at the satisfaction from a different perspective, meaning satisfied customers are likely to recommend in the online business environment (Finn et al., 2009). That means satisfaction can influence the how individuals recommend CC Platforms, considering trust and sharing intention (Frenken and Schor, 2017; Hosany and Prayag, 2013; Möhlmann, 2015). Therefore, satisfaction is not only the explanatory variable but will be a mediator variable between trust and intention to recommend, as well as, sharing intention and intention to recommend. The hypotheses are:

H18a: Satisfaction is positively associated with intention to recommend

H18b: Satisfaction is a mediator between trust and intention to recommend

H18c: Satisfaction is a mediator between sharing intention and intention to recommend

3.8. RESEARCH MODEL

The conceptual model is developed from the well-defined hypotheses. First, the concepts of UTAUT2 and attitude were put together to explain sharing intention and user behaviour. Second, the dimension of consumer trust was explained with a new variable, social media. Third, explanation of satisfaction mainly emerged from trust, smartphone capability, and economic benefits as well as from sharing intention and user behaviour. Finally, fourth, intention to recommend explained through trust, satisfaction, and sharing intention. Combining all together develops the following model.

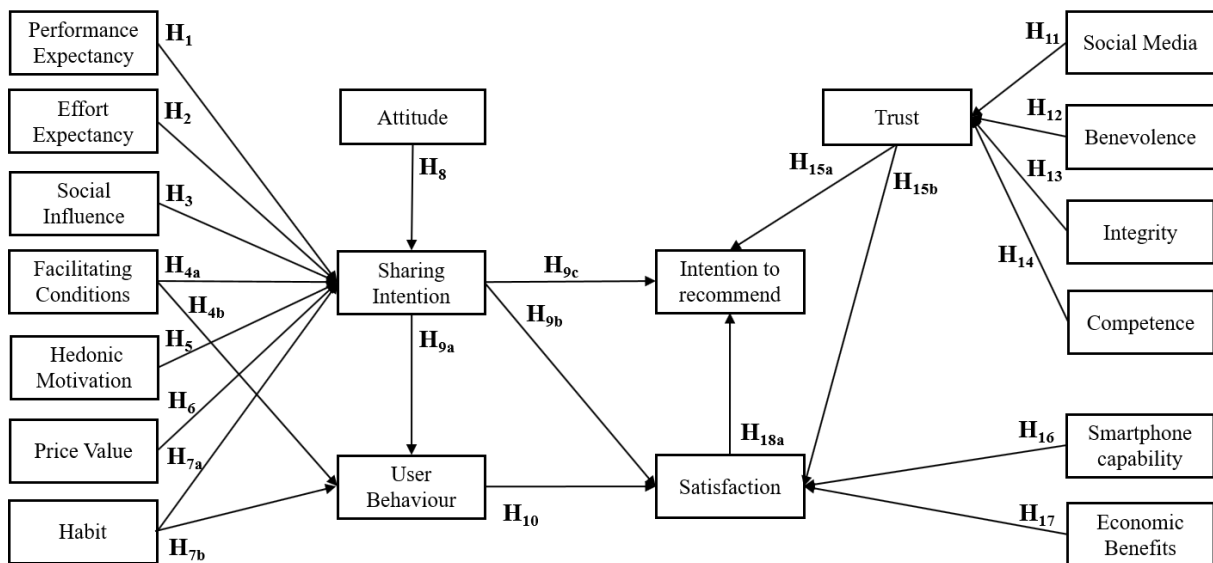


Figure 1.1 – Research model

4. SURVEY METHODS

4.1. SURVEY DESIGN

The survey is designed meticulously, keeping in mind the relevance of the study (Sieber, 1973). The first option was a qualification question about CC Platform, choosing the option 'yes,' would continue the survey, and if 'no' selected, then the survey would end. Before rolling out the actual survey, we also did the pilot test to check if the respondent understood the statement well. The constructs chose for this model are based on the literature review and developed hypothesis. The dependent variables that are being estimated are sharing intention, user behaviour, trust, satisfaction, and intention to recommend.

Further, the statements of each constructs are based on the following literature: UTAUT2 (Venkatesh et al., 2012), sharing intention and intention to recommend (Bankole and Bankole, 2017), user behaviour (Bankole and Bankole, 2017), dimensions of consumer trust (Oliveira et al., 2017), social media (Laurell and Sandström, 2017; Ngai et al., 2015; Schor et al., 2016), economic benefits and smartphone capability (Möhlmann, 2015). These statements were asked on a scale from 1 to 7 (1=Strongly Disagree; 7= Strongly Agree). The details of the survey are available in Appendix 9.1.

4.2. DATA COLLECTION

The data was collected in Europe using the online form, from 3rd January 2018 to 16th April 2018. In total 288 responses were collected, out of that 41 respondents who did not tell us any CC platform were excluded and 247 valid responses were used in the analysis.

The target population was above 18 years old and who have at least used one CC platform. In fact, most of the responses were recorded from 22 years old to 34 years old. Regarding gender, 40% were female, and 60% were male. Almost 74% of the respondents were employed whereas 24% were students and remaining 2% were unemployed or retired.

Additionally, to ensure that the relevant target population, we included a question regarding the familiarity of the survey question (1= Not at all familiar to 7= Extremely familiar) and the majority of the responses were in the positive direction, justifying the quality of respondents.

5. ANALYSIS OF RESULTS

The theoretical background section covered the specific details of collaborative consumption concept, and related concerns are explained. The existing theories and models which have been widely accepted in this area are also put together. We used structure equation modelling (SEM), also known as partial least squares (PLS) path modelling, because we want to estimate the causal relationship between more than one dependent variable and many independent variables (Hair et al., 2014).

We chose this methodology, due to four main reasons: i) PLS works well with small sample size; ii) It is robust when the data does not have normal distribution; iii) PLS is a powerful technique as it has the ability to test highly complex research models (in this case, our model has combined multiple theories); iv) PLS is advised when the research is in early stage or the model never tested before. In order to perform the analysis, SmartPLS3 software was used (Ringle et al., 2015). In the next subsection, first, we will analyse the measurement model and then the structural model (Sarstedt et al., 2014).

5.1. ASSESSMENT OF MEASUREMENT MODEL

Measurement model examines the relationship between the latent variable and its indicators/statements whether it is formative or reflective. In this research, all indicators used in the measurement model are reflective. Therefore, to validate it, we need to check composite reliability (CR), Cronbach alpha (CA), convergent validity, and indicator reliability as well as discriminant validity (Freeze and Raschke, 2007).

First, the minimum value of CR should be 0.7 or higher which justifies the quality of a latent variable (Henseler et al., 2009). In addition, we also checked Cronbach alpha which is expected at least 0.7 (Raykov and Marcoulides, 2007).

Second, in order to assess the convergent validity, we need to make sure that the values of average variance extracted (AVE) are 0.5 or higher (Henseler et al., 2014). The minimum value of any AVE is 0.735 in this model.

Third, indicator reliability checks the outer loadings which are nothing but the correlations between a latent variable and its indicators/statements (Henseler et al., 2009). The loadings of all the latent variables should be above the critical values of 0.708. Table 1.2 has all the value, confirming the three criteria.

Variables	CR	CA	AVE	Indicators	Loadings
Performance Expectancy (PE)	0.95	0.93	0.82	PE1	0.88
				PE2	0.93
				PE3	0.92
				PE4	0.90
Effort Expectancy (EE)	0.98	0.97	0.92	EE1	0.96
				EE2	0.96
				EE3	0.95
				EE4	0.95
Social Influence (SOI)	0.95	0.93	0.87	SOI1	0.92
				SOI2	0.95
				SOI3	0.93
Facilitating Conditions (PC)	0.95	0.93	0.83	FC1	0.90
				FC2	0.94
				FC3	0.93
				FC4	0.88
Hedonic Motivation (HM)	0.96	0.95	0.90	HM1	0.96
				HM2	0.97
				HM3	0.92
Price Value (PV)	0.97	0.96	0.93	PV1	0.95
				PV2	0.97
				PV3	0.97
Habit (HT)	0.92	0.88	0.73	HT1	0.89
				HT2	0.85
				HT3	0.79
				HT4	0.90
Attitude (ATT)	0.96	0.95	0.87	ATT1	0.93
				ATT2	0.93
				ATT3	0.94
				ATT4	0.92
Sharing Intention (SI)	0.97	0.95	0.90	SI1	0.94
				SI2	0.95
				SI3	0.96
User Behaviour (UBR)	0.90	0.83	0.74	UBR1	0.92
				UBR2	0.87
				UBR3	0.79

Variables	CR	CA	AVE	Indicators	Loadings
Social Media (SM)	0.96	0.94	0.85	SM1	0.94
				SM2	0.95
				SM3	0.95
				SM4	0.84
Benevolence (BN)	0.95	0.92	0.86	BN1	0.92
				BN2	0.93
				BN3	0.93
Integrity (IN)	0.96	0.95	0.83	IN1	0.93
				IN2	0.95
				IN3	0.86
				IN4	0.92
				IN5	0.91
Competence (COM)	0.98	0.96	0.93	COM1	0.95
				COM2	0.97
				COM3	0.97
Trust (OT)	0.98	0.97	0.95	OT1	0.98
				OT2	0.98
				OT3	0.97
Smartphone Capability (SPC)	0.98	0.97	0.94	SPC1	0.98
				SPC2	0.98
				SPC3	0.96
Economic Benefits (EBF)	0.93	0.91	0.78	EBF1	0.93
				EBF2	0.92
				EBF3	0.85
				EBF4	0.84
Satisfaction (SF)	0.96	0.94	0.85	SF1	0.91
				SF2	0.92
				SF3	0.93
				SF4	0.90
Intention to Recommend (REC)	0.97	0.96	0.92	REC1	0.97
				REC2	0.96
				REC3	0.95

Table 1.2 – Criterion for measurement model

Lastly, discriminant validity is a prerequisite for validating the measurement model, and it ensures if the latent variable is unique. We should check three criteria: Fornell-Larcker, Heterotrait-Monotrait (HTMT) ratio of correlations, and loadings and cross-loadings. In Fornell-Larcker criterion, we check the square root of the AVE of each construct that is expected to be larger than the correlations with the remaining constructs in the model (Henseler et al., 2014). We can see in Appendix 9.2 that this criterion is fulfilled. The HTMT value should be 0.9 or higher to establish this criterion between two reflective constructs (Henseler et al., 2014), having the details in Appendix 9.3. Finally, the cross-loading should be higher than loadings (Henseler et al., 2014). In Appendix 9.4, we can confirm that this criterion is met. Hence, we fulfil all three criteria for discriminant validity.

5.2. ASSESSMENT OF STRUCTURAL MODEL

As the constructs are reliable we can now estimate the structural model. The first thing to ensure is the collinearity issue that we assessed through the values of variance inflation factor (VIF) which should be lower than five (Sarstedt et al., 2014). In our model, this criterion is met.

To estimate the statistical significance of the path coefficients (β) we performed bootstrap with 5000 iterations (Henseler et al., 2016). In Figure 1.2, we present the path coefficients and the r-squares for the research model.

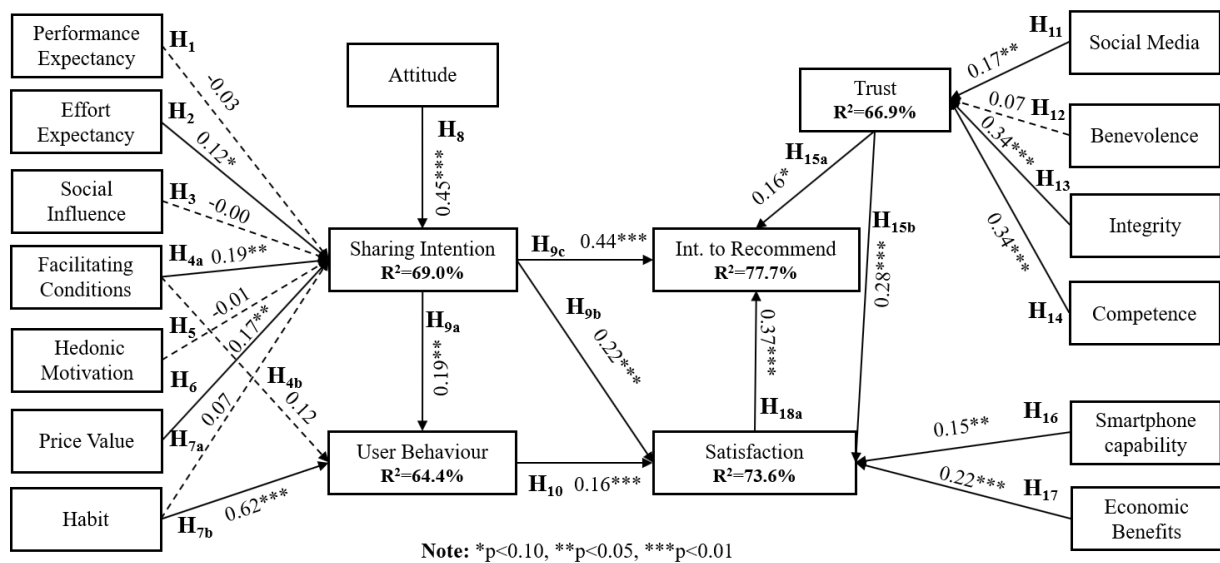


Figure 1.2 – Research model results

The UTAUT2 based constructs combined with attitude explain 69.0% of the variation in sharing intention. The supported hypotheses are H2 ($\hat{\beta} = 0.12$; $p < 0.10$), H4a ($\hat{\beta} = 0.19$; $p < 0.05$), H6 ($\hat{\beta} = 0.17$; $p < 0.01$), and H8 ($\hat{\beta} = 0.45$; $p < 0.01$). Therefore, variables such as effort expectancy, facilitating conditions, price value, and attitude have the statistically significant positive effect on the sharing intention.

The explained variation for user behaviour is 64.4% and two out of three hypotheses are validated. H7b ($\hat{\beta} = 0.62$; $p < 0.01$) and H9a ($\hat{\beta} = 0.19$; $p < 0.05$) which represent habit and sharing intention, both have statistically significant positive effect on user behaviour.

The dimension of consumer trust which had a new variable, social media gets a better explanation from the previous research. 66.9% variation of trust is explained and three hypotheses are supported: H11 ($\hat{\beta} = 0.17$; $p < 0.05$), H13 ($\hat{\beta} = 0.34$; $p < 0.01$), and H14 ($\hat{\beta} = 0.34$; $p < 0.01$). That means, the contribution in trust derived from social media, competence, and integrity.

The model explains 73.6% of the variation in satisfaction. The supported hypotheses are H9b ($\hat{\beta} = 0.22$; $p < 0.01$), H10 ($\hat{\beta} = 0.16$; $p < 0.01$), H15b ($\hat{\beta} = 0.28$; $p < 0.01$), H16 ($\hat{\beta} = 0.15$; $p < 0.01$), H17 ($\hat{\beta} = 0.22$; $p < 0.01$), validating the statistically significant positive effect on satisfaction by sharing intention, user behaviour, trust, smartphone capability, and economic benefits.

Further, the research model explains 77.7% of the variation in intention to recommend. The contributed variables are sharing intention, trust and satisfaction and their valid hypotheses are H9c ($\hat{\beta} = 0.44$; $p < 0.01$), H15a ($\hat{\beta} = 0.16$; $p < 0.10$), H18 ($\hat{\beta} = 0.37$; $p < 0.01$).

In summary, 17 out of 23 hypotheses were supported, having 74% success in validating the established theory. In addition, based on Henseler (2009) all dependent variables can be considered as substantial. This reveals two things, statistical power and well-explained model.

5.3. MEDIATION ANALYSIS

The hypothesis H18b that we formulated is about the mediator variable (please see, Figure 1.3). To know whether satisfaction variable is a mediator variable between trust and intention to recommend, we need to check the related direct and indirect effect (Hair et al., 2014). After that, some calculations for partial mediation are presented in Table 1.3.

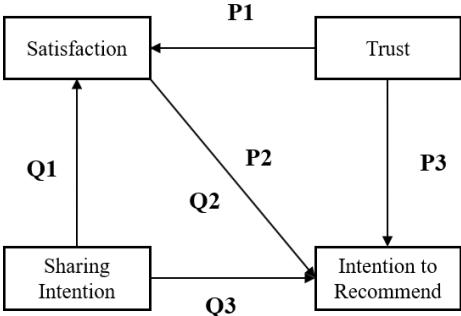


Figure 1.3 – Mediation effect of satisfaction

In order to test mediation analysis for H18b, from Table 1.3, we can see that indirect effect (P1*P2) and direct effect (P3) are statistically significant and multiplication of both (P1*P2*P3) is positive.

We also tested the H18c, where indirect effect (Q1*Q2) and direct effect (Q3) are statistically significant and multiplication of both (Q1*Q2*Q3) is positive.

Hence, it is evident that satisfaction is a complementary partial mediation between trust and intention to recommend, as well as, between sharing intention and intention to recommend.

Type	Details	$\hat{\beta}$	p-values	Decision
P1	Trust → Satisfaction (Direct Effect)	0.28	0.00	Complimentary partial mediation between trust and intention to recommend (H18b)
P2	Satisfaction → Intention to Recommend (Direct Effect)	0.37	0.00	
P3	Trust → Intention to Recommend (Direct Effect)	0.16	0.07	
P1*P2	Trust → Satisfaction → Intention to Recommend (Indirect Effect)	0.10	0.00	
P1*P2*P3	Positive value means complementary partial mediation	0.02		
Q1	Sharing Intention → Satisfaction (Direct Effect)	0.22	0.00	Complimentary partial mediation between sharing intention and intention to recommend (H18c)
Q2	Satisfaction → Intention to Recommend (Direct Effect)	0.37	0.00	
Q3	Sharing Intention → Intention to Recommend (Direct Effect)	0.44	0.00	
Q1*Q2	Sharing Intention → Satisfaction → Intention to Recommend (Indirect Effect)	0.08	0.00	
Q1*Q2*Q3	Positive value means complementary partial mediation	0.04		

Table 1.3 – Measures for mediation analysis

6. DISCUSSION

6.1. SUMMARY

Based on the overall results, this model contributed significantly to the existing literature of collaborative consumption. We explained five endogenous variables – sharing intention, user behaviour, trust, satisfaction, and intention to recommend. PLS results were assessed on r-square which had excellent explanation power for all dependent variables.

The research model explains 69.0% of the variation in sharing intention, which is mostly driven from attitudinal factor (Böcker and Meelen, 2016) and also there some theoretical evidence where attitude had direct relationship towards sharing intention in context of using technology (Fishbein and Ajzen, 1975). Besides, it was found out that individuals believe that they have necessary resources to use CC Platforms, which are fairly simple to use (effort expectancy) and yield good value (price value) for money. Some of the UTAUT2 constructs such as performance expectancy, social influence, hedonic motivation, and habit were not statistically significant. The performance expectancy which tends to improve individual's performance and social influence that is rather seen as an interpersonal influence (Chopdar et al., 2018) are not true in case of CC Platforms. The issue was also found in hedonic motivation that derives pleasure from the technology usage and habit is more like a regular activity (Macedo, 2017).

To understand why individuals use CC Platforms, we formulated the user behaviour construct and explained it with the intention of sharing itself (Carlsson et al., 2006) and habit variable. This concludes that individuals are habitual with CC Platforms and will continue to use such platforms in future. The variance explained for user behaviour is 64.4%. One particular hypothesis of facilitating conditions was not supported by the user behaviour and plausible reason could be irregular users (Constantiou et al., 2017).

Another addition to this model is the dimension of consumer trust and the explained variation is 66.9%. While formulating the hypothesis, we already know how social media is contributing to the growth of CC Platforms (Laurell and Sandström, 2017) and trust is undeniable in this context. The support of social media in creating goodwill for CC Platforms is validated. No only this, competence and integrity are evidently making a positive impact on the consumer trust. Despite the rise in digital trust, few CC Platforms brought controversies (Acquier et al., 2017) and that could one of the reasons why benevolence was not statistically significant.

Satisfaction being a vital factor in the usage of CC Platform has 73.6% variation explained. The main contribution comes from the trust since platforms are trustworthy, economic benefits, and from smartphone capability that ensure mobile compatible platforms (Möhlmann, 2015). Additionally, the behaviour pattern of individuals in the use of CC Platforms and their likeliness to use in future, both emerged as key factors for the satisfaction (Acquier et al., 2017).

Finally, all the hypotheses of intention to recommended were supported (Barnes and Mattsson, 2017), having 77.7% variation explained. This sums up how the initial intention of sharing can add customer value (Zhang et al., 2018) if individuals are satisfied. Further, with satisfaction, we also found out two partial mediations: one was between trust and intention to recommend while other was sharing intention and intention to recommend. The decision for each hypothesis is given in Table 1.4, giving an overview of the model.

Hypothesis	Details	Decision
H1	Performance Expectancy -> Sharing Intention	Unsupported
H2	Effort Expectancy -> Sharing Intention	Supported
H3	Social Influence -> Sharing Intention	Unsupported
H4a	Facilitating Conditions -> Sharing Intention	Supported
H4b	Facilitating Conditions -> User Behaviour	Unsupported
H5	Hedonic Motivation -> Sharing Intention	Unsupported
H6	Price Value -> Sharing Intention	Supported
H7a	Habit -> Sharing Intention	Unsupported
H7b	Habit -> User Behaviour	Supported
H8	Attitude -> Sharing Intention	Supported
H9a	Sharing Intention -> User Behaviour	Supported
H9b	Sharing Intention -> Satisfaction	Supported
H9c	Sharing Intention -> Intention to Recommend	Supported
H10	User Behaviour -> Satisfaction	Supported
H11	Social Media -> Trust	Supported
H12	Benevolence -> Trust	Unsupported
H13	Integrity -> Trust	Supported
H14	Competence -> Trust	Supported
H15a	Trust -> Intention to Recommend	Supported
H15b	Trust -> Satisfaction	Supported
H16	Smartphone Capability -> Satisfaction	Supported
H17	Economic Benefits -> Satisfaction	Supported
H18a	Satisfaction -> Intention to Recommend	Supported
H18b	Satisfaction mediates between Trust & Intention to Recommend	Supported*
H18c	Satisfaction mediates between Sharing Intention & Intention to Recommend	Supported*

Note: * partial mediation.

Table 1.4 – Hypothesis conclusions

6.2. RESEARCH IMPLICATIONS

In the recent years, we have witnessed how CC Platforms have evolved from traditional pre-owned goods exchange to on-demand sharing (Selloni, 2017). These recent changes in CC Platforms got a lot of attention from the academic researchers, which were considered in the literature review. The theoretical section swiftly combined relevant research that aims to build a detailed model for CC Platforms. We adopted the key determinants from not only UTAUT2 but also from other renowned models of CC such as Möhlmann's framework, Hamari et al.'s and Barnes & Mattsson's model. This integration of theories and finding of additional variables such as attitude, social media, and trust take the research forward and present a complete picture of CC Platforms.

6.3. RESEARCH IMPLICATIONS

CC Platforms are modern world technology solutions which save a lot of resources (Kenny and Zysman, 2016). The offerings in each platform can be different than other, but the idea is same. The growth for collaborative consumption will remain progressive (Frenken and Schor, 2017), which offers many opportunities to the managers. Considering this, this new research model has practical implications, as it covers the variety of dimensions that are important for CC Platforms. Sharing intention is the first step that allows individuals to participate in CC Platforms followed by user behaviour, the dimension of consumer trust, satisfaction, and all the way to the recommendation of CC Platforms. These findings can be useful to improve the service of customers who use different types of CC Platforms.

6.4. LIMITATIONS AND FUTURE RESEARCH

This research has certain limitation. First is the sample size. Although the sample size was statistically enough for the estimating the model, it would be interesting to test the adequate sample for each type of CC Platform and sociodemographic type. Second, we need to study the concepts for which the hypotheses were rejected, which could be possibly due to different types of CC Platforms. While collecting data, we also assessed the mean values of the responses for the types of CC Platforms. Surprisingly, the most used platforms were transportation and accommodation sharing while moderately were skill, food sharing, and pre-owned goods. That means the model is more robust for this kind of CC Platforms. However, remaining types such as money lending, crowdfunding, cryptocurrency, office space sharing had a low usage pattern that should be explored further. The research should further be explored by specific types of CC Platforms.

7. CONCLUSION

Compared to previous studies, this is the first model that tested the multiple relationships between five dependent variables to explain how consumer access and takes the journey on CC Platforms. This is indeed a great contribution to the literature.

However, there is still a scope to find more constructs that can further explain the dependent variables. For instance, sharing intention was explained by 69.0% while user behaviour was 64.4% even after testing the UTAUT2 constructs. It would be interesting to assess if the user behaviour varies with different CC Platforms. Furthermore, social media is a new factor that we identified, and it does influence the trust. Although trust has 69.9% variation explained but additional constructs can be identified. In comparison to existing research models, satisfaction and intention to recommend have improved explanation.

Lastly, this research advances the mediation analysis, as satisfaction has partial mediation between trust and intention to recommend, as well as, between sharing intention and intention to recommend. This phenomenon of mediation can be explored further as there might be more mediator variables.

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9. APPENDIX

9.1. SURVEY ITEMS

Have you ever used CC Platforms, e.g., Uber, Airbnb, BlaBla Car? (Yes/ No)

The following statements need to be answered on a scale from 1 to 7 (1=Strongly Disagree; 7= Strongly Agree)

Performance Expectancy (Venkatesh et al., 2012)

PE1. I find CC Platforms useful in my daily life.

PE2. Using CC Platforms increases my chances of achieving things that are important to me.

PE3. Using CC Platforms helps me accomplish things more quickly.

PE4. Using CC Platforms increases my productivity.

Effort Expectancy (Venkatesh et al., 2012)

EE1. Learning how to use CC Platforms is easy for me.

EE2. My interaction with CC Platforms is clear and understandable.

EE3. I find CC Platforms easy to use.

EE4. It is easy for me to become skilful at using CC Platforms.

Social Influence (Venkatesh et al., 2012)

SOI1. People who are important to me think that I should use CC Platforms.

SOI2. People who influence my behaviour think that I should use CC Platforms.

SOI3. People whose opinions that I value prefer that I use CC Platforms

Facilitating Conditions (Venkatesh et al., 2012)

FC1. I have the resources necessary to use CC Platforms.

FC2. I have the necessary knowledge to use CC Platforms.

FC3. CC Platforms are compatible with other technologies I use.

FC4. I can get help from others when I have difficulties using CC Platforms

Hedonic Motivation (Venkatesh et al., 2012)

HM1. Using CC Platform is fun.

HM2. Using CC Platform is enjoyable.

HM3. Using CC Platform is very entertaining.

Price Value (Venkatesh et al., 2012)

PV1. CC Platforms are reasonably priced.

PV2. CC Platforms are good value for the money.

PV3. At the current price, CC Platforms provide a good value.

Habit (Venkatesh et al., 2012)

HT1. The use of CC Platforms has become a habit for me.

HT2. I am addicted to using CC Platforms.

HT3. I must use CC Platforms.

HT4. Using CC Platforms has become natural to me.

Attitude (Hamari et al., 2016)

ATT1. I find participating in CC Platforms to be a wise move.

ATT2. I think participating in CC Platforms are a good thing.

ATT3. Overall, sharing goods and services within a CC Platforms community makes sense.

ATT4. CC Platforms are a better mode of consumption than selling and buying individually

Sharing Intention (Barnes and Mattsson, 2017)

SI1. I will consider using CC Platforms in the future.

SI2. It is very likely that I will use CC Platforms in the future.

SI3. I intend to use CC Platforms in the future.

User Behaviour (Bankole and Bankole, 2017)

UBR1: I have been using CC Platforms on a regular basis.

UBR2: I use CC Platforms in my everyday life

UBR3: I use some of CC Platforms because I have a need for them

Social Media (Laurell and Sandström, 2017; Ngai et al., 2015; Schor et al., 2016)

SM1. I am satisfied with received information from other customers about CC Platforms in social media

SM2. Information received about the CC Platforms from other customers in social media has met my expectations

SM3. Information received on social network about the CC Platforms is acceptable

SM4. I use social network to obtain information and share information about CC Platforms

Benevolence (Oliveira et al., 2017)

BN1. I believe CC Platforms would act in my best interest.

BN2. If I required help, I believe CC Platforms would do its best to help me.

BN3. I trust CC Platforms because it will exceed my expectation.

Integrity (Oliveira et al., 2017)

IN1. I believe CC Platforms are honest with its customers.

IN2. I believe CC Platforms act sincerely in dealing with customers.

IN3. I believe CC Platforms will not overcharge me during sales transactions.

IN4. I believe CC Platforms would keep its commitments.

IN5. I believe CC Platforms are genuine.

Competence (Oliveira et al., 2017)

CO1. I believe CC Platforms have the ability to handle sales transactions on the Internet.

CO2. I believe CC Platforms have sufficient expertise to do business on the Internet.

CO3. I believe CC Platforms have the ability to do online business.

Trust (Oliveira et al., 2017)

OT1. I trust CC Platforms

OT2. I find CC Platforms trustworthy.

OT3. I like the reliability of CC Platforms

Smartphone capability (Möhlmann, 2015)

SPC1. My smartphone is useful for CC Platforms

SPC2. My smartphone enables me a convenient use of CC Platforms

SPC3. Using my smartphone increases the productive use of CC Platforms

Economic benefits (Barnes and Mattsson, 2017; Möhlmann, 2015)

EBF1 I can save money if I participate in CC Platforms.

EBF2 My participation in CC Platforms benefits me financially.

EBF3 My participation in CC Platforms can improve my economic situation.

EBF4 My participation in CC Platforms saves me time.

Satisfaction (Möhlmann, 2015)

SF1. Overall, I am satisfied with Sharing Economy Platforms

SF2. The last use of CC Platforms fulfilled my expectations.

SF3. CC Platforms that I used represents the ideal version of its type

SF4. My experience with using CC Platforms was better than what I expected

Intention to Recommend (Barnes and Mattsson, 2017)

REC1. I would recommend CC Platforms to my friends.

REC2. I am likely to spread positive word-of-mouth about CC Platforms.

REC3. If my friends were looking to travel, I would tell them to try CC Platforms.

9.2. FORNELL-LARCKER CRITERION

	Attitude	Benevolence	Competence	Economic Benefits	Effort Expectancy	Facilitating Conditions	Habit	Hedonic Motivation	Integrity	Intention to Recommend	Performance Expectancy	Price Value	Satisfaction	Sharing Intention	Smartphone Capability	Social Influence	Social Media	Trust	User Behaviour
Attitude	0.93																		
Benevolence	0.74	0.93																	
Competence	0.78	0.69	0.96																
Economic Benefits	0.83	0.66	0.69	0.88															
Effort Expectancy	0.61	0.55	0.66	0.55	0.96														
Facilitating Conditions	0.67	0.56	0.71	0.58	0.82	0.91													
Habit	0.56	0.55	0.42	0.49	0.38	0.45	0.86												
Hedonic Motivation	0.56	0.54	0.53	0.51	0.49	0.56	0.47	0.95											
Integrity	0.66	0.75	0.68	0.61	0.54	0.52	0.48	0.50	0.91										
Intention to Recommend	0.76	0.67	0.75	0.66	0.73	0.76	0.55	0.60	0.62	0.96									
Performance Expectancy	0.60	0.57	0.56	0.56	0.72	0.69	0.53	0.51	0.46	0.59	0.91								
Price Value	0.66	0.62	0.68	0.67	0.68	0.68	0.50	0.57	0.62	0.72	0.57	0.96							
Satisfaction	0.78	0.72	0.75	0.73	0.70	0.75	0.59	0.57	0.68	0.82	0.63	0.71	0.92						
Sharing Intention	0.78	0.62	0.74	0.70	0.66	0.71	0.51	0.52	0.58	0.82	0.58	0.69	0.76	0.95					
Smartphone Capability	0.77	0.59	0.76	0.69	0.68	0.73	0.41	0.45	0.54	0.70	0.56	0.63	0.72	0.74	0.97				
Social Influence	0.53	0.49	0.40	0.47	0.41	0.45	0.44	0.53	0.41	0.47	0.55	0.42	0.47	0.45	0.39	0.93			
Social Media	0.71	0.66	0.65	0.67	0.51	0.50	0.44	0.49	0.67	0.62	0.46	0.56	0.68	0.60	0.62	0.45	0.92		
Trust	0.71	0.67	0.74	0.63	0.64	0.63	0.47	0.56	0.74	0.72	0.52	0.64	0.73	0.66	0.64	0.40	0.67	0.98	
User Behaviour	0.56	0.51	0.50	0.45	0.48	0.53	0.77	0.48	0.44	0.58	0.59	0.52	0.59	0.59	0.48	0.43	0.44	0.47	0.86

Note: The values highlighted in bold are the root square of average variance extracted (AVE)

9.3. HTMT

	Attitude	Benevolence	Competence	Economic Benefits	Effort Expectancy	Facilitating Conditions	Habit	Hedonic Motivation	Integrity	Intention to Recommend	Performance Expectancy	Price Value	Satisfaction	Sharing Intention	Smartphone Capability	Social Influence	Social Media	Trust	User Behaviour	
Attitude																				
Benevolence	0.79																			
Competence	0.82	0.73																		
Economic Benefits	0.89	0.72	0.73																	
Effort Expectancy	0.63	0.58	0.69	0.58																
Facilitating Conditions	0.72	0.61	0.75	0.62	0.87															
Habit	0.59	0.60	0.44	0.53	0.38	0.47														
Hedonic Motivation	0.59	0.58	0.55	0.54	0.50	0.59	0.51													
Integrity	0.69	0.80	0.70	0.65	0.56	0.55	0.51	0.52												
Intention to Recommend	0.80	0.71	0.78	0.70	0.76	0.81	0.57	0.63	0.65											
Performance Expectancy	0.64	0.62	0.59	0.60	0.76	0.74	0.55	0.54	0.49	0.63										
Price Value	0.69	0.66	0.70	0.71	0.70	0.71	0.52	0.60	0.65	0.75	0.60									
Satisfaction	0.82	0.77	0.79	0.78	0.74	0.80	0.63	0.60	0.72	0.86	0.68	0.75								
Sharing Intention	0.82	0.66	0.77	0.75	0.69	0.75	0.54	0.54	0.61	0.87	0.62	0.72	0.81							
Smartphone Capability	0.80	0.62	0.78	0.73	0.70	0.77	0.42	0.46	0.56	0.73	0.58	0.65	0.75	0.77						
Social Influence	0.57	0.53	0.43	0.51	0.43	0.48	0.49	0.57	0.43	0.50	0.59	0.44	0.50	0.48	0.42					
Social Media	0.75	0.70	0.68	0.71	0.53	0.53	0.47	0.52	0.70	0.64	0.49	0.58	0.72	0.63	0.64	0.47				
Trust	0.74	0.71	0.76	0.66	0.66	0.66	0.48	0.58	0.77	0.74	0.54	0.66	0.77	0.69	0.66	0.42	0.69			
User Behaviour	0.63	0.58	0.56	0.52	0.53	0.60	0.87	0.54	0.49	0.65	0.67	0.58	0.67	0.66	0.53	0.49	0.49	0.52		

9.4. OUTER LOADINGS

	PE	EE	SOI	FC	HM	PV	HT	ATT	SI	UBR	SM	BN	IN	COM	OT	SPC	EBF	SF	REC
PE1	0.88	0.70	0.44	0.69	0.48	0.51	0.58	0.54	0.56	0.60	0.43	0.51	0.46	0.54	0.50	0.52	0.50	0.63	0.60
PE2	0.93	0.63	0.51	0.60	0.45	0.50	0.44	0.55	0.53	0.53	0.43	0.54	0.43	0.50	0.47	0.49	0.53	0.57	0.53
PE3	0.92	0.70	0.51	0.66	0.46	0.55	0.45	0.55	0.54	0.49	0.38	0.51	0.41	0.52	0.48	0.54	0.51	0.57	0.54
PE4	0.90	0.58	0.52	0.54	0.46	0.49	0.44	0.53	0.46	0.50	0.42	0.51	0.39	0.45	0.42	0.46	0.48	0.52	0.47
EE1	0.67	0.96	0.38	0.78	0.45	0.66	0.34	0.56	0.63	0.43	0.47	0.49	0.50	0.62	0.61	0.64	0.49	0.65	0.70
EE2	0.71	0.96	0.33	0.78	0.43	0.63	0.38	0.57	0.62	0.46	0.46	0.50	0.51	0.63	0.63	0.64	0.51	0.67	0.68
EE3	0.70	0.95	0.41	0.80	0.51	0.65	0.41	0.61	0.65	0.49	0.53	0.58	0.57	0.67	0.63	0.67	0.55	0.71	0.73
EE4	0.69	0.95	0.43	0.79	0.47	0.66	0.34	0.59	0.63	0.44	0.48	0.53	0.50	0.63	0.60	0.66	0.54	0.66	0.69
SOI1	0.49	0.35	0.92	0.40	0.46	0.37	0.39	0.46	0.40	0.37	0.40	0.40	0.32	0.34	0.35	0.38	0.41	0.40	0.41
SOI2	0.52	0.37	0.95	0.41	0.54	0.36	0.42	0.49	0.42	0.41	0.43	0.46	0.38	0.38	0.36	0.35	0.42	0.43	0.44
SOI3	0.52	0.42	0.93	0.45	0.50	0.45	0.43	0.54	0.44	0.42	0.42	0.51	0.44	0.41	0.41	0.38	0.48	0.48	0.47
FC1	0.65	0.74	0.39	0.90	0.50	0.63	0.39	0.60	0.65	0.48	0.42	0.46	0.45	0.67	0.57	0.69	0.52	0.66	0.71
FC2	0.67	0.80	0.41	0.94	0.50	0.64	0.39	0.64	0.66	0.47	0.46	0.54	0.47	0.69	0.59	0.71	0.55	0.69	0.73
FC3	0.62	0.76	0.41	0.93	0.50	0.63	0.45	0.63	0.64	0.50	0.50	0.54	0.53	0.66	0.62	0.66	0.54	0.72	0.69
FC4	0.59	0.70	0.45	0.88	0.54	0.58	0.43	0.59	0.63	0.48	0.46	0.52	0.45	0.59	0.54	0.62	0.51	0.67	0.65
HM1	0.51	0.48	0.49	0.55	0.96	0.55	0.43	0.55	0.51	0.46	0.47	0.51	0.47	0.52	0.54	0.46	0.50	0.55	0.59
HM2	0.50	0.52	0.51	0.58	0.97	0.59	0.43	0.57	0.54	0.46	0.48	0.53	0.50	0.55	0.58	0.47	0.50	0.58	0.63

HM3	0.43	0.38	0.53	0.44	0.92	0.48	0.48	0.47	0.40	0.43	0.45	0.50	0.44	0.43	0.47	0.33	0.42	0.48	0.48
PV1	0.51	0.62	0.39	0.60	0.54	0.95	0.47	0.59	0.61	0.46	0.49	0.56	0.56	0.59	0.58	0.56	0.63	0.63	0.66
PV2	0.56	0.66	0.39	0.67	0.57	0.97	0.48	0.64	0.67	0.52	0.54	0.60	0.61	0.67	0.63	0.62	0.65	0.70	0.70
PV3	0.57	0.68	0.43	0.68	0.55	0.97	0.50	0.68	0.70	0.53	0.58	0.64	0.63	0.70	0.64	0.64	0.67	0.72	0.71
HT1	0.59	0.46	0.40	0.53	0.45	0.51	0.89	0.56	0.58	0.73	0.45	0.52	0.46	0.45	0.53	0.44	0.51	0.59	0.59
HT2	0.28	0.16	0.37	0.25	0.35	0.32	0.85	0.39	0.32	0.60	0.33	0.46	0.35	0.27	0.25	0.25	0.34	0.40	0.35
HT3	0.28	0.10	0.39	0.17	0.37	0.31	0.79	0.35	0.29	0.51	0.29	0.39	0.29	0.23	0.23	0.21	0.31	0.37	0.32
HT4	0.56	0.48	0.37	0.51	0.41	0.52	0.90	0.55	0.50	0.73	0.41	0.50	0.49	0.44	0.51	0.44	0.46	0.60	0.55
ATT1	0.57	0.59	0.53	0.65	0.56	0.64	0.48	0.93	0.73	0.50	0.64	0.71	0.63	0.77	0.69	0.71	0.82	0.73	0.72
ATT2	0.53	0.55	0.50	0.59	0.52	0.60	0.50	0.93	0.72	0.49	0.69	0.69	0.61	0.70	0.64	0.70	0.76	0.71	0.68
ATT3	0.58	0.57	0.45	0.67	0.53	0.62	0.56	0.94	0.75	0.55	0.68	0.68	0.61	0.76	0.68	0.74	0.78	0.76	0.74
ATT4	0.54	0.55	0.51	0.61	0.48	0.61	0.53	0.92	0.69	0.54	0.64	0.68	0.60	0.68	0.65	0.71	0.72	0.69	0.70
SI1	0.53	0.63	0.42	0.66	0.48	0.63	0.48	0.74	0.94	0.53	0.59	0.57	0.54	0.70	0.62	0.71	0.67	0.70	0.77
SI2	0.55	0.63	0.42	0.67	0.50	0.66	0.49	0.73	0.95	0.55	0.55	0.58	0.54	0.69	0.63	0.71	0.67	0.72	0.78
SI3	0.57	0.63	0.44	0.69	0.49	0.67	0.50	0.75	0.96	0.59	0.57	0.61	0.58	0.71	0.63	0.70	0.67	0.75	0.80
UBR1	0.59	0.48	0.38	0.52	0.47	0.53	0.76	0.53	0.57	0.92	0.41	0.46	0.43	0.47	0.49	0.46	0.43	0.57	0.60
UBR2	0.43	0.30	0.38	0.33	0.36	0.32	0.69	0.40	0.39	0.87	0.31	0.39	0.28	0.32	0.29	0.29	0.30	0.41	0.40
UBR3	0.49	0.43	0.35	0.50	0.40	0.49	0.51	0.50	0.54	0.79	0.39	0.46	0.42	0.50	0.42	0.47	0.43	0.55	0.49
SM1	0.44	0.51	0.43	0.50	0.47	0.56	0.46	0.71	0.60	0.45	0.94	0.66	0.67	0.66	0.69	0.60	0.65	0.68	0.64
SM2	0.43	0.47	0.47	0.48	0.48	0.53	0.43	0.69	0.57	0.42	0.95	0.60	0.63	0.61	0.62	0.58	0.63	0.66	0.57
SM3	0.45	0.50	0.41	0.49	0.48	0.54	0.41	0.69	0.59	0.40	0.95	0.61	0.63	0.65	0.65	0.63	0.65	0.66	0.60
SM4	0.35	0.37	0.32	0.36	0.38	0.39	0.30	0.51	0.43	0.32	0.84	0.53	0.51	0.46	0.49	0.44	0.51	0.50	0.44
BN1	0.56	0.51	0.42	0.52	0.46	0.59	0.53	0.71	0.60	0.50	0.64	0.92	0.73	0.64	0.64	0.57	0.63	0.70	0.65
BN2	0.53	0.52	0.46	0.55	0.53	0.61	0.48	0.69	0.60	0.47	0.59	0.93	0.67	0.67	0.64	0.57	0.62	0.65	0.63
BN3	0.50	0.49	0.47	0.49	0.50	0.53	0.50	0.65	0.51	0.44	0.59	0.93	0.67	0.59	0.60	0.49	0.58	0.64	0.58
IN1	0.43	0.52	0.37	0.50	0.46	0.57	0.44	0.61	0.56	0.41	0.61	0.67	0.93	0.64	0.72	0.54	0.58	0.64	0.59
IN2	0.46	0.52	0.43	0.50	0.47	0.58	0.46	0.62	0.57	0.44	0.64	0.73	0.95	0.65	0.71	0.53	0.59	0.65	0.61
IN3	0.32	0.37	0.32	0.36	0.41	0.52	0.44	0.51	0.43	0.37	0.53	0.59	0.86	0.48	0.57	0.36	0.50	0.54	0.46
IN4	0.47	0.56	0.34	0.52	0.50	0.63	0.42	0.67	0.57	0.41	0.64	0.72	0.92	0.70	0.73	0.55	0.60	0.68	0.61
IN5	0.42	0.50	0.41	0.48	0.44	0.54	0.42	0.57	0.51	0.39	0.61	0.69	0.91	0.61	0.64	0.47	0.52	0.57	0.56
COM1	0.55	0.63	0.41	0.69	0.51	0.62	0.40	0.73	0.70	0.46	0.62	0.66	0.64	0.95	0.70	0.71	0.66	0.72	0.71
COM2	0.53	0.64	0.39	0.68	0.53	0.68	0.42	0.76	0.70	0.49	0.65	0.66	0.67	0.97	0.72	0.72	0.66	0.72	0.71
COM3	0.53	0.65	0.37	0.69	0.49	0.66	0.40	0.77	0.73	0.49	0.62	0.67	0.65	0.97	0.72	0.76	0.68	0.73	0.74
OT1	0.52	0.64	0.39	0.62	0.55	0.64	0.45	0.71	0.65	0.45	0.67	0.66	0.73	0.72	0.98	0.64	0.63	0.72	0.70
OT2	0.49	0.63	0.39	0.62	0.55	0.63	0.45	0.69	0.64	0.44	0.65	0.66	0.74	0.71	0.98	0.61	0.60	0.71	0.70
OT3	0.51	0.62	0.38	0.62	0.55	0.61	0.47	0.70	0.63	0.49	0.64	0.64	0.70	0.72	0.97	0.61	0.60	0.72	0.69
SPC1	0.55	0.70	0.36	0.73	0.45	0.64	0.40	0.76	0.74	0.47	0.60	0.57	0.53	0.75	0.63	0.98	0.68	0.70	0.71
SPC2	0.56	0.69	0.38	0.75	0.45	0.63	0.40	0.76	0.73	0.46	0.61	0.56	0.53	0.75	0.65	0.98	0.69	0.72	0.69
SPC3	0.51	0.60	0.41	0.67	0.41	0.58	0.39	0.73	0.69	0.46	0.59	0.59	0.53	0.71	0.59	0.96	0.66	0.68	0.64
EBF1	0.49	0.50	0.42	0.55	0.49	0.62	0.45	0.76	0.69	0.42	0.60	0.61	0.55	0.66	0.59	0.66	0.93	0.67	0.63
EBF2	0.45	0.48	0.40	0.51	0.46	0.59	0.43	0.74	0.62	0.39	0.57	0.59	0.53	0.60	0.52	0.59	0.92	0.62	0.59
EBF3	0.50	0.41	0.40	0.36	0.38	0.51	0.38	0.66	0.47	0.33	0.56	0.56	0.50	0.48	0.46	0.50	0.85	0.55	0.44
EBF4	0.52	0.52	0.44	0.60	0.45	0.65	0.45	0.76	0.68	0.45	0.62	0.58	0.57	0.67	0.62	0.69	0.84	0.70	0.64
SF1	0.59	0.67	0.44	0.70	0.53	0.69	0.53	0.75	0.75	0.55	0.65	0.66	0.64	0.74	0.71	0.71	0.70	0.91	0.81
SF2	0.58	0.67	0.38	0.72	0.53	0.67	0.52	0.70	0.73	0.56	0.62	0.60	0.60	0.70	0.67	0.70	0.64	0.92	0.77
SF3	0.60	0.65	0.43	0.68	0.54	0.63	0.56	0.69	0.65	0.54	0.61	0.69	0.65	0.66	0.68	0.62	0.66	0.93	0.72
SF4	0.57	0.60	0.46	0.65	0.50	0.63	0.57	0.70	0.67	0.53	0.63	0.69	0.61	0.66	0.62	0.61	0.67	0.90	0.71
REC1	0.59	0.70	0.46	0.72	0.58	0.68	0.53	0.74	0.82	0.57	0.59	0.63	0.58	0.71	0.69	0.69	0.63	0.79	0.97
REC2	0.52	0.67	0.44	0.71	0.57	0.68	0.51	0.72	0.77	0.53	0.59	0.63	0.60	0.70	0.66	0.66	0.62	0.79	0.96
REC3	0.60	0.72	0.46	0.76	0.59	0.71	0.55	0.75	0.79	0.57	0.60	0.66	0.63	0.74	0.71	0.66	0.64	0.78	0.95