

## Drivers and barriers of peer-to-peer accommodation stay – an exploratory study with American and Finnish travellers

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The explosive growth of peer-to-peer (P2P) accommodation service presents a potential transformation in the competitive landscape of accommodation sector. This research explores the market characteristics and the factors that drive and hinder the use of P2P accommodation to better explain the phenomenon of collaborative consumption in the tourism and hospitality marketplace. Using responses from travellers residing in the United States and Finland, exploratory factor analyses revealed two factors that drive the use of P2P accommodation: social appeal (desire for community and sustainability) and economic appeal (cost savings). The barriers include issues of trust, efficacy and familiarity with the system, and cost. The empirical evidence from this study suggests several managerial implications for tourism and hospitality businesses and directions for future research.

**Keywords:** collaborative consumption; sharing economy; P2P accommodation; P2P rental

### Introduction

In recent years, the phenomenon of sharing economy has emerged in tourism marketplaces (Guttentag, 2015). Information and communication technology (ICT) enables the development of this socio-economic model by facilitating the creation and sustenance of online peer communities. The increasing connectivity, propagated by online social network platforms, allows people to share access to products and services among each other. Belk (2014) explains this phenomenon as collaborative consumption, where people coordinate “the acquisition and distribution of a resource for a fee or other compensation” (p. 1597). Similarly, referring to it as market-mediated access-based consumption, Bardhi and Eckhardt (2012) explain the domain of collaborative consumption as consumers gaining access to goods and services by paying for the experience of temporarily accessing them, highlighting that no ownership is transferred in these transactions. Businesses leveraging the sharing economy have flourished. Companies such as Airbnb and Uber develop scalable platforms empowering individuals to distribute and share access to excess capacity of accommodation (e.g. spare rooms) and transportation (e.g. cars or bicycles sitting idle) with one another. They act as a matchmaker by creating a global network connecting individuals with under-used assets and others who are willing to pay for using them and, in so doing, allocating

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resources where they are needed (*The Economist*, 2013). As these companies bring consumers together to better link the supply and demand in hospitality and tourism, they create added value in the market (Zekanović-Korona & Grzunov, 2014).

Many believe that the sharing economy is an appealing alternative for consumers due to its economic benefits (i.e. low cost), which was considered important after the global economic crisis (Bardhi & Eckhardt, 2012; Guttentag, 2015; Walsh, 2011). Indeed, Zekanović-Korona and Grzunov (2014) assert that taking a trip without costly arrangements and accommodation has become a mission of many tourists. However, Botsman and Rogers (2011) argue that collaborative consumption is driven by motivations that extend beyond cost savings. Gansky (2010) suggests that the sharing economy is driven by consumers' changing attitude towards consumption. Consumers are willing to try out new brands (Gansky, 2010) and are more open to new ways of accessing what they need (Botsman & Rogers, 2011; Bardhi & Eckhardt, 2012). Additionally, consumers are increasingly aware of the pressure that (over)consumption can pose to the environment. The idea of sharing idle capacity to reduce environmental concerns, the renewed belief in the importance of community, and cost-consciousness move consumers towards the practice of sharing, openness, and collaboration (Botsman & Rogers, 2011; John, 2013; Walsh, 2011). Hence, it is suggested that collaborative consumption will continue to grow even when the economy is fully recovered and, hence, will disrupt traditional value chains and threaten companies that are being bypassed by customers who are connecting and buying with each other (Sigala, 2015). The emergent business model presents opportunities and challenges for travel and hospitality businesses as well as tourism destinations. Therefore, it is important to identify the motivational factors that drive or hinder travellers from using peer-to-peer (P2P) accommodation. Hence, the goals of this study are threefold: (1) to identify the market characteristics of P2P accommodation (i.e. who the users are and how they are different from non-users); (2) to assess the drivers for the use of P2P accommodation among users; and (3) to assess the barriers to the use of P2P accommodation among non-users.

### **The sharing economy**

ICT continuously revolutionizes the tourism and hospitality industries by facilitating convergences among different players, enabling the creation of new services with improved processes for the suppliers and added values for the consumers. As ICT becomes an integral part of everyday life, it plays a significant role in affecting travellers' behavioural choices, including the selection of places to stay when travelling. By the start of 2015, Airbnb served more than 25 million guests, offering accommodation in more than 34,000 cities around the globe (airbnb.com, 2015). Additionally, the information cascades generated through social media, where users share information and experiences with each other and rely on information from their peers to make consumption decisions, contribute to the popularity of P2P sharing and the convergence on the practices of collaborative consumption (John, 2013).

The explosive growth of P2P accommodation stimulates a growing concern on whether it negatively affects the hotel industry. Many believe that P2P accommodation and hotels operate in different spaces, catering to different demographics, with low-budget consumers being the primary demographic for P2P accommodation (Nath, 2014). Assessing the impacts of Airbnb on the hotel industry in the state of Texas, Zervas, Proserpio, and Byers (2014) identified that the impacts are unevenly distributed across the industry, with lower-end hotels being the most affected, confirming their market similarity with

P2P accommodation. However, contrary to this suggestion, Olson (2013) shows that consumers with higher income levels are more likely to participate in collaborative consumption. She also shows that younger demographics find collaborative consumption appealing (32% of GenX and 24% of Millennials, in contrast to 15% of Baby Boomer). Similarly, John (2013) suggests that the online sharing behaviour of digital natives (e.g. updating statuses, uploading photos, etc.), who were born in the era of digital social technologies, translates into offline sharing behaviour. That is, younger consumers who are accustomed to sharing information and media online are significantly more likely to participate in collaborative consumption (Gaskins, 2010; John, 2013). A further investigation on the demographic and behavioural characteristics of consumers who use P2P accommodation will provide a better understanding of the market and its behavioural patterns.

The rapid rise of the sharing economy is driven by various factors, including societal (e.g. increasing population density, desire for community, etc.), economic (e.g. monetize excess inventory, increase financial flexibility, etc.), and technology (e.g. social networking, mobile devices, and payment system) (Owyang, 2013). From the consumers' perspective, several motivations underlying participation in collaborative consumption have been suggested, despite being supported by anecdotal evidence. The global economic crisis caused consumers to rethink their values, to be more mindful with their spending habits, and to be more resourceful (Gansky, 2010). The movement towards collaborative consumption is driven by the increasing value of access as an alternative mode of consumption, as opposed to ownership (Bardhi & Eckhardt, 2012; Botsman & Rogers, 2011). Collaborative consumption is perceived as offering more value with less cost (Botsman & Rogers, 2011; Gansky, 2010; Lamberton & Rose, 2012; Sacks, 2011), suggesting that consumers are motivated to participate in collaborative consumption for its economic benefits.

An increasing awareness of environmental pressure drives people to find ways to use resources more efficiently in order to have a more sustainable society (Albinsson & Perera, 2012; Gansky, 2010; Luchs et al., 2011). Indeed, resource redistribution approach offers an economic and social framework that enhances sustainability by efficiently deploying excess capacity of resources. Collaborative consumption is believed to help reduce the negative impacts on the environment because it reduces the development of new products and the consumption of raw materials (Botsman & Rogers, 2011; Luchs et al., 2011; Walsh, 2011). For consumers with a greater preference towards greener consumption, collaborative consumption can be considered a manifestation of sustainable behaviour, a way to contribute to sustainable living (Luchs et al., 2011).

Since social network and collaboration fuel collaborative consumption, direct P2P interactions and the sharing of personal experiences allow participants to create and maintain social connections with others. Participating in collaborative consumption is an opportunity to make new friends and to develop meaningful connections (Botsman & Rogers, 2011). These are also motivations very closely connected to what Germann Molz (2011, p. 216) defined as network hospitality, the way people "connect to one another using online networking systems, as well as to the kinds of relationships they perform when they meet each other offline and face to face". While hospitality plays a great role in P2P accommodation experience, it is not the professional hospitality as in hotels and other tourism businesses (Brotherton, 1999). P2P accommodation systems foster direct interactions between hosts and guests (i.e. by sharing personal experiences), allowing travellers to connect with local communities (Guttentag, 2015). Therefore, Albinsson and Perera (2012) assert that a sense of community is not only the driver of collaborative consumption, but also an outcome of this practice.

To date, empirical studies verifying the suggested motivational factors for collaborative consumption are extremely limited. Among the few, Hamari, Sjöklint, and Ukkonen (2015) investigate the motivations that drive people to participate in online collaborative consumption with a consideration to intrinsic and extrinsic motives, previous studies on sharing practices, and context-specific adjustment. The results from their study show that the factors of enjoyment (i.e. from using the website and/or mobile system, an intrinsic motive) and economic benefits significantly affect behavioural intention for collaborative consumption, while sustainability and enjoyment drive attitudes towards collaborative consumption. In a closely related topic, Zekanović-Korona and Grzunov (2014) conducted an online survey to gauge information regarding the advantages and drawbacks of Airbnb system, including such aspects as information presentation as well as simplicity and accessibility of the database. From a total of 118 respondents (44% of their respondents use Airbnb, 36% plan to do so, and 20% are not interested in the service), they suggested that ease of use, search options, and information about hosts were considered advantages of Airbnb. The summary of drivers of collaborative consumption from the previous literature and the media is presented in Table 1.

While the benefits of P2P accommodation appeal to its users, there are barriers to its acceptance in the market. Owyang (2013) suggests several challenges associated with

Table 1. Drivers of and barriers to collaborative consumption: summary from literature.

Factors	Definition	Literature
<i>Drivers</i>		
Economic benefits	Collaborative consumption offers more value with less cost	Botsman and Rogers (2011), Gansky (2010), Guttentag (2015), Lambertson and Rose (2012), Sacks (2011)
Sustainability	Collaborative consumption reduces the development of new products and the consumption of raw materials Collaborative consumption supports local residents and local economy	Botsman and Rogers (2011), Luchs et al. (2011)
Community	Collaborative consumption offers opportunities to create and maintain social connections and sense of community	Albinsson and Perera (2012), Botsman and Rogers (2011), Guttentag, (2015), Owyang (2013)
Enjoyment	Participation in collaborative consumption is enjoyable Ease of use and good amount of information provided in the system	Hamari et al. (2015), Zekanović-Korona and Grzunov (2014)
<i>Barriers</i>		
Trust	Lack of interpersonal trust (guests–hosts), lack of trust toward technology, lack of trust toward the company	Botsman and Rogers, (2011), Guttentag (2015), Keymolen (2013), Olson, (2013)
Value	Concerns of receiving bad quality products and services and that the value from collaborative consumption is not worth the effort Lack of cost savings	Buczynski (2013), Hennig-Thurau et al. (2007), Olson (2013)
Familiarity	Participation in collaborative consumption requires mastering complex technology platforms	Chong et al. (2009), Park, Suh, & Lee (2004)

the collaborative economy concept, stemming from perceived disruption of existing regulation, lack of trust between P2P users, lack of reputation and standard, opposition from existing businesses, and uncertainty over the longevity of the business models. Olson (2013) suggests trust as the most cited barrier to collaborative consumption, which includes the basic mistrust among strangers and concerns for privacy. As suggested by Botsman and Rogers (2011), collaborative consumption implies trusting strangers to a varying degree. To use P2P accommodation is to believe that it is safe to spend some time at the guest room of a perfect stranger. Furthermore, Keymolen (2013) argues that the mediation of ICT brings forth new complexities to trust relations in the context of collaborative consumption. The central role of ICT in mediating collaborative consumption implies “trust through technology”, which results in interpersonal system trust that is built and shaped by ICT. Indeed, in the context of collaborative commerce, trust through technology plays a significant role in companies’ willingness to collaborate (e.g. Ratnasingam, 2004). Therefore, as a deterrent of collaborative consumption, lack of trust can be rooted from trust relations among users (i.e. interpersonal trust between buyers and sellers), trust relations between users and technology (e.g. trust with the payment systems), and trust relations between users and the company (e.g. perceived uncertainty and regulatory issues).

Another barrier is associated with the perceived utility of collaborative consumption. Sacks (2011) provides anecdotal evidence that collaborative consumption is preferred by consumers because it allows access to a desired product with lower costs. From their study on motion picture file sharing systems, Hennig-Thurau, Henning, and Sattler (2007) confirm that consumers find the sharing economy attractive when they perceive that the benefits outweigh the cost. Hence, it can be suggested that the perceived lack of economic benefits (i.e. lack of cost savings) prevents consumers from participating in collaborative consumption (Buczynski, 2013). Consistent with this suggestion, Olson (2013) also shows that consumers are concerned of receiving bad quality products and services and that the value from collaborative consumption is not worth the effort. Finally, as collaborative consumption is enabled by ICT, consumers’ adoption of collaborative consumption can be influenced by the characteristics of technology. For example, in the context of collaborative commerce, ease of use, complexity, and trialability of the technology systems (as suggested in innovation diffusion theory; Rogers, 2003) are considered important adoption factors that allow multiple users to interact, collaborate, and transact with each other using an online platform (e.g. Chong, Ooi, & Sohal, 2009; Park et al., 2004). Comparably, consumers will not participate in collaborative consumption if they find the technology systems too complex. In other words, lack of technology efficacy deters consumers from participating in collaborative consumption and, in this research context, using P2P accommodation. The summary of barriers to collaborative consumption as suggested in the previous literature and the media is presented in Table 1.

## Methodology

Due to the recent emergence of this research topic, in order to achieve the three research goals, this study applies an exploratory approach to gauge the drivers of and barriers to the use of P2P accommodation. Following the definition provided by Belk (2014), this study focuses on P2P accommodation rentals (such as Airbnb) and excludes free P2P accommodation (such as Couchsurfing) and other forms of nonreciprocal, uncompensated social sharing practices. To accommodate the global phenomenon of P2P accommodation, this study was designed to capture responses from adult travellers residing in the United States (US) and Finland. The contrast between US and Finland in terms of market sizes

for P2P accommodation provides opportunities to assess the similarities and differences in terms of market characteristics and motivations in order to make inferences for generalizability of the research results.

A questionnaire was designed to explore the drivers and barriers to the use of P2P accommodation. A list of 24 items corresponding to drivers (i.e. economic benefits, sustainability, social connection, enjoyment, and other accommodation selection factors) and barriers (i.e. trust, privacy and security, familiarity, cost, and other practical issues) to P2P accommodation was developed following evidence suggested in the literature (i.e. the sources listed in Table 1). The items were read and verified for clarity by a group of experienced researchers and undergraduate students in tourism to ensure face validity. Responses were presented as a five-point Likert-type scale from 1–Strongly Disagree to 5–Strongly Agree. In order to explain the market characteristics, demographic variables (i.e. gender, age, education, and income levels) and travel frequency were included in the questionnaire. To capture responses from Finnish travellers, the questionnaire was translated into Finnish language by two bilingual tourism experts. First, the experts translated the questionnaire from English to Finnish independently. Then, the translated questionnaires were compared and once an agreement was achieved, the Finnish questionnaire was translated back into English to ensure that the meanings of the questionnaire stayed the same through the translation process.

The questionnaire was distributed through Amazon Mechanical Turk (AMT, mturk.com) to target adults residing in the US in August 2014 and sent to the M3 Online Panel (m3research.com) members in Finland in December 2014. In order to capture high-quality results from the questionnaire distributed through AMT, this study was made available to respondents with at least 98% approval rating (i.e. users with approval rating lower than 98% were not able to view the survey). Several independent-samples *t*-tests and *chi*-square statistics were utilized to identify differences between users and non-users in order to distinguish the characteristics of the market. Exploratory factor analyses, using principal component analysis (PCA) with Varimax rotation, were utilized to identify the drivers of and barriers to the use of P2P accommodation. Kaiser–Meyer–Olkin measure of sample adequacy and Bartlett’s test of sphericity were employed to assess the usefulness of factor analysis for the datasets. Cronbach’s alpha was used to estimate reliability of the factors.

## Results and discussion

A total of 799 adults residing in the US completed the survey, 61% of them are male and 39% female. Respondents are relatively young, with 53% of them between the ages of 25 and 34 years, 22% of them are 24 years old or younger, and 15% between the ages of 35 and 44 years. About 38% respondents have a four-year college degree and 30% have some college education without a formal degree. It is important to note that the majority of respondents are younger than the median age of 37 (United States Census Bureau, n.d.) and male respondents are slightly larger in proportion than female when compared to the breakdown of US population by gender. About 61% of respondents have an annual income of less than US \$60,000, with 15% in the range of \$40,000–\$49,999 and 15% in the range of \$30,000–\$39,999. Out of 799 respondents, 754 of them stated that they have taken at least an overnight trip for leisure and tourism purposes within the last six months. Among these, the majority (599 travellers, 80%) has not used P2P accommodation; only 155 travellers (20%) indicated that they have used it before.

A total of 1246 responses were collected from Finland; 52% of them are male and 48% female. In terms of age, Finnish respondents are more evenly distributed with

26% under the age of 25 and 27% over the age of 65. The age, gender, and living area distributions are very close to the whole population distributions in Finland. About 35% of respondents have at least a college degree, with 15.6% from university of applied sciences and the rest from general universities. More than half of the respondents have an annual income of less than €45,000, with 22% in the range of €15,000–€29,999 and 21% in the range of €30,000–€44,999. All respondents stated that they have taken at least an overnight trip for leisure and tourism purposes; 79% of them travelled more than three times a year, both domestically and abroad. Among respondents, about 24% of them (295 respondents) have used P2P accommodation before, while the majority of them (951, 76%) have not. A comparison between the characteristics of respondents from the US and Finland is presented in Table 2.

### *Market characteristics*

Based on the chi-square statistics on the demographic characteristics between users and non-users of P2P accommodation in the US, no significant differences were found in terms of gender and age (in contrast to Olson, 2013). Significant differences were found in terms of education (i.e. users are more educated than non-users,  $\chi^2 = 29.79$ ,  $df = 7$ ,  $p = .00$ ) and income (i.e. users have a higher income compared to non-users,  $\chi^2 = 19.89$ ,  $df = 14$ ,  $p = .00$ ; consistent with Olson, 2013). This finding indicates that the P2P accommodation rental market in the US consists of more educated consumers with higher income. On the other hand, a significant difference was found among Finnish respondents in terms of gender (i.e. more male users than female,  $\chi^2 = 9.03$ ,  $df = 1$ ,  $p = .00$ ). Significant differences were also found in terms of age (i.e. users are relatively younger than non-users,  $\chi^2 = 65.52$ ,  $df = 6$ ,  $p = .00$ ), and education (i.e. users are more educated than non-users,  $\chi^2 = 54.48$ ,  $df = 8$ ,  $p = .00$ ), which are consistent with Olson (2013). No significant difference was found among users and non-users in terms of income. Based on the demographic characteristics alone, it can be suggested that P2P accommodation may imply more than just offering a low-cost solution for travellers. Consumers who are well educated may have a greater awareness of the value in collaborative consumption.

In terms of travel frequency, US users travel more often than non-users ( $\chi^2 = 50.37$ ,  $df = 3$ ,  $p = .00$ ) with 24% users who travel more than three times a year and 51% who travel 2–3 times a year, compared to 11% and 39% for non-users, respectively. In terms of accommodation choices, the majority in both groups (79% users and 83% non-users) indicated that they stay at hotels with known brands (such as Hilton and Marriott), more users stay at independent and boutique hotels (43%, compared to 27% non-users,  $\chi^2 = 18.37$ ,  $df = 1$ ,  $p = .00$ ), and more users stay at timeshares or condo rentals (26%, compared to 11% non-users,  $\chi^2 = 26.92$ ,  $df = 1$ ,  $p = .00$ ) during travelling. Likewise, among Finnish travellers, users of P2P accommodation also travel more often ( $\chi^2 = 42.12$ ,  $df = 3$ ,  $p = .00$ ), with 92% of users who travel more than three times annually, compared to only 74% of non-users. Consistent with their American counterparts, Finnish travellers also indicated that they stay at hotels with known brands (79% non-users and 93% users), with more P2P accommodation users staying in independent or boutique hotels (68% users, compared to 33% non-users,  $\chi^2 = 103.15$ ,  $df = 1$ ,  $p = .00$ ), as well as condos or timeshares (87% users, compared to 30% non-users,  $\chi^2 = 282.40$ ,  $df = 1$ ,  $p = .00$ ). This suggests that consumers of P2P accommodation are more open to use different types of accommodation other than hotels with established brands offering predictable experiences. Thus, they may be more accustomed to variation in quality standards and exposed to unique, personal experiences.

Table 2. Characteristics of respondents.

US			Finland		
Characteristics	N	%	Characteristics	N	%
Gender			Gender		
<i>Female</i>	306	38.6	<i>Female</i>	602	48.3
<i>Male</i>	484	61.1	<i>Male</i>	644	51.7
Age			Age		
24 years or younger	170	21.4	24 years or younger	119	9.3
25–34 years	420	53.0	25–34 years	202	16.2
35–44 years	124	15.7	35–44 years	205	16.5
45–54 years	51	6.4	45–54 years	193	15.5
55–64 years	21	2.7	55–64 years	187	15.1
65 years or older	5	0.6	65 years or older	330	26.7
Education			Education		
<i>Less than High School</i>	4	0.5	<i>Elementary School</i>	126	10.2
<i>High School/GED</i>	99	12.5	<i>Vocational School</i>	270	21.9
<i>Some College</i>	237	29.9	<i>High School</i>	150	12.2
<i>2-Year College Degree</i>	75	9.5	<i>Trade-level Education</i>	249	20.2
<i>4-Year College Degree</i>	295	37.2	<i>University of Applied Sciences</i>	192	15.4
<i>Master's Degree</i>	67	8.1	<i>University, Bachelor</i>	69	5.5
<i>Doctoral Degree</i>	5	0.6	<i>University, Master</i>	126	10.2
<i>Professional (JD, MD)</i>	8	1.0	<i>University, PhD</i>	16	1.3
Income			Income		
<i>Under \$20,000</i>	116	14.6	<i>Under €15,000</i>	136	10.9
<i>\$20,000–\$29,999</i>	105	13.3	<i>€15,000–€29,999</i>	252	20.2
<i>\$30,000–\$39,999</i>	114	14.4	<i>€30,000–€44,999</i>	243	19.5
<i>\$40,000–\$49,999</i>	112	14.1	<i>€45,000–€59,999</i>	194	15.6
<i>\$50,000–\$59,999</i>	82	10.4	<i>€60,000–€74,999</i>	156	12.5
<i>\$60,000–\$69,999</i>	69	8.7	<i>€75,000–€89,999</i>	83	6.7
<i>\$70,000–\$79,999</i>	63	8.0	<i>€90,000 or more</i>	90	7.2
<i>\$80,000–\$89,999</i>	36	4.5			
<i>\$90,000–\$99,999</i>	30	3.8			
<i>\$100,000–\$109,999</i>	26	3.3			
<i>\$110,000 or more</i>	43	5.0			
Travel Frequency (Domestic & International)			Travel Frequency (Domestic & International)		
<i>About once every other year</i>	115	14.5	<i>About once every other year</i>	55	4.4
<i>About once a year</i>	220	27.8	<i>About once a year</i>	71	5.7
<i>2–3 times a year</i>	311	39.3	<i>2–3 times a year</i>	141	11.3
<i>More than 3 times a year</i>	101	12.8	<i>More than 3 times a year</i>	979	78.6
P2P Accommodation Use			P2P Accommodation Use		
<i>Yes</i>	155	19.4	<i>Yes</i>	295	23.7
Other Accommodation Use			Other Accommodation Use		
<i>Known Brand Hotels</i>	622	78.5	<i>Known Brand Hotels</i>	988	82.4
<i>Independent/Boutique Hotels</i>	225	28.4	<i>Independent/Boutique Hotels</i>	480	41.7
<i>Condo/Timeshares</i>	107	13.5	<i>Condo/Timeshares</i>	503	43.8
<i>Family &amp; Friends</i>	404	51.0	<i>Family &amp; Friends</i>	958	80.9

### Drivers of P2P accommodation use

An exploratory factor analysis with responses from American travellers revealed two underlying factors that drive the use of P2P accommodation. They are labelled as “Social Appeal” and “Economic Appeal” (see Table 3). The two factors explain 62.55% of the total variance. Kaiser–Meyer–Olkin measure of sample adequacy (.73) and Bartlett’s test of sphericity

Table 3. Drivers of use of peer-to-peer accommodation, US ( $N = 155$ ).

Factors	Factor Loading	Eigenvalue	Cumulative Percent	Cronbach's Alpha
Social Appeal		3.01	37.62%	.83
... I would like to get to know people from the local neighborhoods.	.83			
... I would like to have a more meaningful interaction with the hosts.	.79			
... I would like to get insiders' tips on local attractions.	.76			
... I would like to support the local residents.	.74			
... it was a more sustainable business model.	.69			
Economic Appeal		1.99	62.55%	.73
... it saved me money.	.82			
... it helped me lower my travel cost.	.81			
... I would like to have higher quality accommodation with less money.	.73			

( $\chi^2 = 388.28$ ,  $df = 28$ ,  $p = .00$ ) indicate that factor analysis is appropriate for this data. Cronbach's alpha of .70 or more supports the reliability of both scales. First, the use of P2P accommodation among respondents in the US was driven by the social motivation to get to know, interact, and connect with local communities in a more meaningful way, to experience tourism destinations as a local, and to contribute to local residents, which is consistent with Botsman and Rogers's (2011) and Owyang's (2013) suggestion on the societal drivers of collaborative consumption. The second factor suggests that getting quality accommodation with lower cost drove American travellers to choose P2P accommodation, which is consistent with suggestions from the literature regarding the low-budget appeal of collaborative consumption (Botsman & Rogers, 2011; Gansky, 2010; Guttentag, 2015; Lambertson & Rose, 2012; Owyang, 2013; Sacks, 2011).

As seen in Table 4, both factors have significant correlations with users' future intention to use P2P accommodation, with Economic Appeal ( $r = .42$ ,  $p = .00$ ) having a stronger correlation coefficient compared to Social Appeal ( $r = .19$ ,  $p = .00$ ). These suggest that cost

Table 4. Correlations between market characteristics and drivers of use of peer-to-peer accommodation, US ( $N = 155$ ).

Factors	1	2	3	4	5	6	7
D: Social Appeal (1)	–						
D: Economic Appeal (2)	n.s.	–					
Future Intention (3)	.19**	.42**	–				
Gender (4)	n.s.	n.s.	n.s.	–			
Age (5)	n.s.	-.28**	n.s.	.16**	–		
Education (6)	n.s.	n.s.	.09**	n.s.	n.s.	–	
Income (7)	n.s.	n.s.	n.s.	n.s.	.07**	.23**	–
Travel Frequency (8)	n.s.	n.s.	.21**	n.s.	n.s.	.18**	.26**

\*\*Correlation is significant at the .01 level (two-tailed).

Table 5. Drivers of use of peer-to-peer accommodation, Finland ( $N=295$ )

Factors	Factor Loading	Eigenvalue	Cumulative Percent	Cronbach's Alpha
Social Appeal		4.44	55.50%	.88
... I would like to get to know people from the local neighborhoods.	.87			
... I would like to support the local residents.	.80			
... I would like to have a more meaningful interaction with the hosts.	.79			
... it was a more sustainable business model.	.75			
... I would like to get insiders' tips on local attractions.	.73			
Economic Appeal		1.25	71.07%	.81
... it saved me money.	.90			
... it helped me lower my travel cost.	.89			
... I would like to have higher quality accommodation with less money.	.64			

savings will continue to appeal to American travellers to use P2P accommodation in the future alongside the desire for a stronger sense of community and social responsibility. The only significant correlation between market characteristics and drivers of P2P accommodation use was found between age and Economic Appeal ( $r = -.28, p = .00$ ), indicating that collaborative consumption is associated with financial benefits for younger users. Furthermore, users in the US stated that it is highly likely for them to use P2P accommodation again in the future (Mean = 4.24,  $s.d. = .78$ ). The future intention has significant correlations with education and travel frequency, confirming that more educated and experienced travellers are likely to use P2P accommodation in the future.

Secondly, an exploratory factor analysis using responses from Finnish travellers revealed the same two factors (see Table 5), explaining 71.07% of the total variance. Kaiser–Meyer–Olkin measure of sample adequacy (.84) and Bartlett's test of sphericity ( $\chi^2 = 1195.52, df = 28, p = .00$ ) indicate that factor analysis is appropriate for this data. Cronbach's alpha of .80 or more supports the reliability of the two scales. Table 6 shows

Table 6. Correlations between market characteristics and drivers of use of peer-to-peer accommodation, Finland ( $N=295$ ).

Factors	1	2	3	4	5	6	7
D: Social Appeal (1)	–						
D: Economic Appeal (2)	.55**	–					
Future Intention (3)	.22**	.37**	–				
Gender (4)	n.s.	.26**	n.s.	–			
Age (5)	.15**	n.s.	–.18**	n.s.	–		
Education (6)	n.s.	n.s.	n.s.	n.s.	.17**	–	
Income (7)	n.s.	n.s.	n.s.	–.13**	.22**	.27**	–
Travel Frequency (8)	n.s.	.15**	.23**	n.s.	n.s.	.15**	.19**

\*\*Correlation is significant at the .01 level (two-tailed).

significant correlations between age and Social Appeal factor (i.e. older travellers are associated with higher social responsibility drive), as well as between gender and Economic Appeal (i.e. female travellers are associated with larger cost savings) and between travel frequency and Economic Appeal (i.e. more frequent travellers are associated with larger cost savings). These results indicate that while the low budget appeal can be effective particularly for female travellers and those who travel more frequently, the notion that collaborative consumption is a more sustainable business model and one that creates stronger communities will appeal to older travellers. Even though slightly lower than users in the US, users in Finland also stated that it is likely for them to use P2P accommodation again in the future (Mean = 3.59, *s.d.* = 1.03). The two drivers are significantly correlated with the future intention, with Economic Appeal ( $r = .37, p = .00$ ) having a higher correlation coefficient than Social Appeal ( $r = .22, p = .00$ ). Again, this is consistent with the results from American travellers.

### **Barriers to P2P accommodation use**

Exploratory factor analyses were also employed to identify the underlying factors that prevented travellers from using P2P accommodation. First, using responses from the US, three factors emerged and labelled as “Trust”, “Efficacy”, and “Cost” (see Table 7), which explain 74.80% of the total variance. Kaiser–Meyer–Olkin measure of sample adequacy (.78) and Bartlett’s test of sphericity ( $\chi^2 = 2472.12, df = 36, p = .00$ ) indicate that factor analysis is appropriate for this data. All factors have Cronbach’s alpha of .70 or higher, indicating their reliability. The first factor that deterred American travellers from using P2P rentals represents their distrust towards the hosts (i.e. including concerns of privacy and safety) and the online platform used to communicate and execute transactions (i.e. payment), which is consistent with the issues raised by Olson (2013) and Keymolen (2013). Secondly, American travellers did not use P2P accommodation because they did

Table 7. Barriers to the use of peer-to-peer accommodation, US ( $N = 599$ ).

Factors	Factor Loading	Eigenvalue	Cumulative Percent	Cronbach’s Alpha
Trust		3.67	40.76%	.87
... I was concerned about safety.	.88			
... I was concerned about privacy.	.86			
... I did not trust the host(s).	.85			
... I did not trust the online platform to execute the transaction.	.67			
Efficacy		2.02	63.68%	.74
... I did not have enough information about how it works.	.89			
... I did not know what it is.	.85			
... it was not easy to search for the list of vacation rentals online.	.68			
Cost		1.00	74.80%	.80
... it was more expensive than staying at hotels.	.88			
... it did not save me enough money.	.84			

not have sufficient information regarding how the system works. The third hindrance is the cost factor; travellers chose not to use P2P accommodation because it did not generate sufficient cost savings to be considered valuable. This is consistent with the previous literature on commercial sharing systems suggesting that consumers will only participate if the benefits outweigh the effort of collaborative consumption (e.g. Hennig-Thurau et al., 2007; Lambertson & Rose, 2012).

Table 8 presents the correlations between the barrier factors, respondents' characteristics, travel frequency, and the likelihood of using P2P accommodation in the future. It is important to note the significant negative correlations between future intention and Trust ( $r = -.37, p = .00$ ) and Cost ( $r = -.10, p = .00$ ). These suggest the importance of addressing the issues of trust (i.e. eliminating the privacy and safety concerns) and enhancing the economic benefits of P2P accommodation to remove the barriers and allow more consumers to use the service. Significant correlations were also found between education and Trust (i.e. more educated respondents are associated with lack of trust and increased concerns of safety/privacy) and Efficacy (i.e. less-educated respondents are associated with lack of efficacy). Hence, an increase in users' familiarity with the platform and/or the community within the sharing economy, especially targeted to those with lower education level (e.g. making the system more persuasive and user-friendly), may reduce the barriers among American travellers. While most non-users indicated that it is unlikely for them to use P2P accommodation in the future (Mean = 2.89, *s.d.* = .85), its positive correlations with travel frequency ( $r = .21, p = .00$ ) indicate that as people travel more frequently, they may be more open to P2P accommodation as an alternative option in the future.

Secondly, using responses from Finnish travellers, two factors emerged from an exploratory factor analysis. They are labelled as "Value", consisting a combination of items that make up the factors of trust and cost among American travellers, and "Efficacy" (see Table 9), explaining 68.51% of the total variance. Kaiser–Meyer–Olkin measure of sample adequacy (.85) and Bartlett's test of sphericity ( $\chi^2 = 4586.89, df = 36, p = .00$ ) indicate that the factor analysis is appropriate for this data. The first factor preventing Finnish travellers from using P2P accommodation represents their distrust towards the service and the values it delivers. In addition to the privacy and security issues raised by Olson (2013) and Keymolen (2013), this factor also comprises travellers' concern about economic benefits (i.e. collaborative consumption does not bring sufficient economic benefits for travellers). While the first factor demonstrates an extent of knowledge regarding P2P

Table 8. Correlations between market characteristics and barriers to the use of peer-to-peer accommodation, US ( $N = 599$ ).

Factors	1	2	3	4	5	6	7	8
B: Trust (1)	–							
B: Efficacy (2)	n.s.	–						
B: Cost (3)	.51**	n.s.	–					
Future Intention (4)	-.37**	n.s.	-.10**	–				
Gender (5)	n.s.	n.s.	n.s.	n.s.	–			
Age (6)	n.s.	n.s.	n.s.	n.s.	.16**	–		
Education (7)	.08**	-.13**	n.s.	.09**	n.s.	n.s.	–	
Income (8)	n.s.	n.s.	n.s.	n.s.	n.s.	.07**	.23**	–
Travel Frequency (9)	n.s.	n.s.	n.s.	.21**	n.s.	n.s.	.18**	.26**

\*\*Correlation is significant at the .01 level (two-tailed).

Table 9. Barriers to the use of peer-to-peer accommodation, Finland ( $N=951$ ).

Factors	Factor Loading	Eigenvalue	Cumulative Percent	Cronbach's Alpha
Value		4.69	52.18%	.89
... I was concerned about safety.	.85			
... I was concerned about privacy.	.83			
... I did not trust the host(s).	.82			
... I did not trust the online platform to execute the transaction.	.76			
... it did not save me enough money.	.75			
... it was more expensive than staying at hotels.	.67			
Efficacy		1.47	68.51%	.82
... I did not have enough information about how it works.	.90			
... I did not know what it was.	.87			
... it was not easy to search for the list of vacation rentals online.	.70			

accommodation business and the values it delivers, the second factor indicates lack of information and efficacy to use the system (consistent with the results from American travellers).

As presented in Table 10, the Value factor is negatively correlated with the likelihood of using P2P accommodation in the future ( $r = -.11, p = .00$ ), making it an important barrier to eliminate (consistent with the results from the US). The only significant correlation between respondents' characteristics and the barriers was found between age and Efficacy factor ( $r = .07, p = .00$ ), indicating that older respondents are associated with lack of knowledge and ability to use the system. Therefore, an increase in users' familiarity with and ease of use of the online platform, especially for older users, may reduce the barrier to P2P accommodation. Finnish respondents who have not used P2P accommodation also stated that it is unlikely for them to use it in the future (Mean = 2.37,  $s.d. = 1.13$ ), especially among older travellers ( $r = -.18, p = .00$ ). However, its positive correlation with travel frequency ( $r = .23, p = .00$ ) suggests that more frequent travellers may be open to use P2P accommodation in the future.

Table 10. Correlations between market characteristics and barriers to the use of peer-to-peer accommodation, Finland ( $N=951$ ).

Factors	1	2	3	4	5	6	7
B: Value (1)	–						
B: Efficacy (2)	.47**	–					
Future Intention (3)	-.11**	n.s.	–				
Gender (4)	n.s.	n.s.	n.s.	–			
Age (5)	n.s.	.07**	-.18**	n.s.	–		
Education (6)	n.s.	n.s.	n.s.	n.s.	.17**	–	
Income (7)	n.s.	n.s.	n.s.	-.13**	.22**	.27**	–
Travel Frequency (8)	n.s.	n.s.	.23**	n.s.	n.s.	.15**	.19**

\*\*Correlation is significant at the .01 level (two-tailed).

## **Conclusion and recommendation**

Addressing the increasing importance of providing empirical evidence to explain the disruptive force of collaborative consumption in the tourism and hospitality marketplace, this study explores the market characteristics as well as the drivers of and barriers to the use of P2P accommodation. The market characteristics for collaborative consumption were derived from comparing groups of users and non-users in the US and Finland in terms of their demographic characteristics and travel behaviour. The results suggest that, even though generally associated with lower cost, P2P accommodation attracted not only budget-conscious consumers, but also those in the high-income brackets, especially among American travellers. Consistently, users in the US and Finland are highly educated, travel more often, and use less conventional types of accommodation (e.g. boutique hotels, condo rentals, and timeshare, etc.). It can be suggested that the market for P2P accommodation comprises experienced travellers who are more accustomed to different standards of quality in accommodation and, thus, open to less-predictable, but unique travel experiences as they enjoy staying with local residents.

Consistent between American and Finnish travellers, the drivers of P2P accommodation rental use can be explained in two factors: economic appeal (i.e. cost savings) and social appeal (i.e. desire for community/sustainability). As suggested in the literature and the media, P2P rentals appeal to consumers as a low-cost alternative to the well-established accommodation services (Botsman & Rogers, 2011; Gansky, 2010; Guttentag, 2015; Lambertson & Rose, 2012; Owyang, 2013; Sacks, 2011). Travellers in the US and Finland use P2P accommodation because they believe it helps lower their travel cost and they get more value from paying less for the quality accommodation they receive while travelling. The cost saving factor is associated with younger travellers among Americans and with female and frequent travellers among Finns. Importantly, the cost saving factor is significantly correlated with the likelihood of using P2P accommodation in the future, making it an important competitive advantage for the business of collaborative consumption. Secondly, the use of P2P accommodation is driven by factors other than cost, which include a desire for social relationship (i.e. to have meaningful social interactions) and to have a stronger community (Albinsson & Perera, 2012), a drive for social responsibility (i.e. to contribute to local residents) and sustainability (Botsman & Rogers, 2011; Luchs et al., 2011; Walsh, 2011), and to experience tourism destinations like locals (i.e. to get insider tips). This explains the social and experiential appeal of collaborative consumption by providing guests with the feeling of being integrated in the local community and access to local (i.e. insider) experiences. This also supports the suggestion from Hamari et al. (2015), stating that P2P accommodation provides access to MacCannell's (1973) concept of "back regions", offering tourists with intimacy of relationships and authentic experiences. P2P accommodation thus provides tourists with hospitality that they cannot receive from hotels and other accommodation providers. It might not be considered professional (Brotherton, 1999), but more authentic and, hence, valuable. For example, studies on Airbnb (2015) show that hosts are willing to go an extra mile for their customers and provide them with unique hospitality experiences. Among Finnish travellers, the social appeal factor is significantly correlated with older consumers. The significant positive correlation between the social appeal and future intention, consistent between American and Finnish travellers, emphasizes its strategic importance for P2P accommodation. Therefore, from the market characteristics and the analyses of the factors driving the use of P2P accommodation, this study suggests that collaborative consumption penetrates the lodging market not only as a low-cost alternative to hotels, but more so as a new, more socially responsible and

rewarding way of travelling. Consequently, it has the potential to penetrate a bigger market, capturing those outside of the low-budget segment.

In terms of barriers to collaborative consumption, exploratory factor analyses produced inconsistent results between American and Finnish travellers. One factor that was identified consistently between the two groups is efficacy. Travellers did not use P2P accommodation simply because of lack of knowledge (i.e. they do not know what it was) or ability (i.e. they do not know how to use it). Considering the short period since the introduction of this business model, it is reasonable to suggest that there are a significant number of consumers having limited knowledge about (or are unaware of) this alternative accommodation. Additionally, as with other forms of innovation, according to diffusion of innovation theory (Rogers, 2003), collaborative consumption might take more time to reach a group of consumers who are typically in the late majority and/or laggards. This factor is significantly correlated with education among American travellers (i.e. low education associated with less efficacy) and age among Finnish travellers (i.e. older travellers associated with less efficacy). Importantly, efficacy factor is negatively correlated with future intention among Finnish travellers, making it an important barrier to eliminate. Secondly, the barrier to P2P accommodation among American travellers is trust, which includes distrust towards the host and technology (i.e. mistrust between strangers, concerns of safety and privacy). This finding is aligned with the previous literature suggesting consumers' concerns regarding safety and security with tourism and hospitality services involving online transactions and payment (e.g. Kim, Kim, & Leong, 2005). Furthermore, the significant negative correlation between trust factor and future intention makes trust between strangers and towards online platform a substantial obstacle in collaborative consumption. Finally, lack of cost savings (i.e. staying at P2P accommodation does not generate sufficient reduction in travel cost) is the third factor that deterred American travellers from using P2P accommodation. This factor is significantly correlated, negatively, with future intention, making it an important barrier to ease. The last two factors emerged as one factor among Finnish travellers, interpreted as perceived lack of value and trust.

Based on these findings, several managerial implications for P2P accommodation are suggested in order to reduce barrier to entry and increase participation. First, because cost is an important motivating factor and its absence is a barrier to the use of P2P accommodation, it is critical for these businesses to convey the economic benefits to the consumers to emphasize this competitive edge. Particularly, the economic appeal should be targeted to younger demographics and those who travel more frequently (i.e. experienced travellers). Second, in order to expand beyond the budget-conscious market, it is critical to convey the social appeal of collaborative consumption by highlighting the aspects of community, authenticity, and sustainability. As confirmed by the findings in this study, P2P accommodation also draws users from higher income brackets and higher education levels. Associating collaborative consumption with intimacy and kinship, community building and responsible lifestyle will add to the competitive advantage of P2P accommodation. Third, considering trust as a significant challenge, P2P accommodation businesses need to develop a platform that helps increase trust among users (e.g. with the inclusion of reputation scoring or other regulatory measures that work towards consumer protection) as well as increase users' trust on the web and mobile platforms (i.e. providing safe and secure transaction, data/identity protection, etc.). Lastly, as familiarity and efficacy factor is one of the important hurdles in collaborative consumption, it is important to increase awareness and familiarity with this business model among consumers. Since P2P accommodation services are built around social network platforms, P2P accommodation companies can take advantage of social media to educate consumers about their services. This can be done

by distributing organic and paid content (e.g. social media advertising) as well as encouraging and incentivising users to share their experiences with their social networks.

In response to this sprouting business model, hotels and other accommodation businesses need to rethink their strategies to stay competitive. First, the cost saving factor presents a substantial challenge for budget hotels and other accommodation targeting budget-conscious consumers to compete directly with P2P accommodation (in line with Zervas et al., 2014). In addition to increasing efficiency in their operations to achieve cost leadership, budget hotels can leverage their brand (for franchise) and networks (for alliance) to appeal to cost-conscious frequent travellers with discounts through loyalty/rewards programmes. Second, while mid-range and luxury hotels are relatively safe from the cost saving requirement, the social appeal of P2P accommodation (i.e. intimacy, relationship, authenticity, etc.) might be the values not easily paralleled by hotel offerings. Hotels can maintain their competitive edge by encouraging more personal interactions between guests and staff or introducing unique experiences relevant to the locale in addition to their core services. Additionally, hotels should also take advantage of their loyalty programme by building a community among club members. This way, hotels could offer added values that appeal to consumers' sense of community. From hotel operators' point of view, it is critical to study P2P accommodation and why their popularity is rapidly increasing. By studying the traveller motivations, hoteliers and hospitality industry will be able to better understand the advantages of P2P accommodation and find ways to prepare for the growth of this disruptive business model (Sigala, 2015). Understanding the advantages of P2P accommodation, which may reflect disadvantages of hotels, will assist hotels in better understanding the customers and what they value. To that end, collaborative consumption serves as an example of how the accommodation industry has to develop a close connection with their customers and accommodate their ever-changing needs and wants.

This exploratory research provides empirical support to explain the phenomenon of collaborative consumption in tourism and hospitality. Due to the infancy of this research area, the main limitation of this research lies in the limited pool of relevant concepts to draw the measurement items for the analysis. Hence, the results in this study should open a pathway for further research in the area. Future studies should explore the factors that did not converge in this study, such as enjoyment (i.e. intrinsic motives) and general hotel selection factors. Also, verifying the results by applying the analysis in different contexts (e.g. different geographic locations and cultures, various travel purposes, etc.) will provide support for the applicability and generalizability of the findings in this study. Further, in order to assess the longevity of P2P accommodation, future studies should assess the contribution of the different motivational factors on guests' satisfaction, attitude, intention, and behaviour.

#### **Disclosure statement**

No potential conflict of interest was reported by the authors.

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