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## Who shares? Profiling consumers in the sharing economy

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## ABSTRACT

Sharing platforms are becoming increasingly common, transforming how organisations and customers interact across diverse categories. While there is clear demand for the sharing economy, less is known about heterogeneity of consumer preferences and the varying demand that exists for sharing experiences across different categories of consumption. In order to help brands better understand who shares, this research takes a step forward in the profiling of users of the sharing economy. Drawing on social psychology, this research investigates how social norms can be employed as a form of social influence and nudge consumers to engage in higher levels of shared consumption. We find three clear segments of sharing consumers, representing 86% of all consumers: the mobility-focused sharer, the diverse-platform sharer, and the power-platform sharer. The last segment (accounting for 14%) comprises consumers who do not engage with sharing platforms. Moreover, social norms influenced the future behaviours of only one segment of consumers: the diverse-platform sharer. We discuss how sharing platform providers can better understand, target, and convert consumers to engage in sharing.

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## 1. Introduction

Over a decade ago, Rent the Runway was founded as a platform for renting special-occasion evening wear. The company was valued at US\$1 billion in 2019 and had spawned numerous competitors (Maheshwari, 2019). However, Rent the Runway has never catered for male customers and, despite the growing popularity of clothing rental, there are no significant players in the business of hiring out men's apparel (Testa and Bromwich, 2020). This raises the question: why don't all people engage in the sharing economy to the same extent? Motivated by this question, this research was undertaken to provide a better understanding of who shares, and why they engage in sharing.

There is no doubt that, increasingly, ownership is being replaced by access (Belk, 2014), with the sharing economy growing rapidly and challenging traditional business thinking (Zhang et al., 2018). Sharing as an exchange of value challenges traditional business models by facilitating the collaborative production and consumption of resources, which are often under-utilised by owners

(Schor and Fitzmaurice, 2015; Zervas et al., 2017). Defined as “a scalable socioeconomic system that employs technology-enabled platforms to provide users with temporary access to tangible and intangible resources that may be crowdsourced” (Eckhardt et al., 2019, p.7), the sharing economy represents a paradigm shift in consumption from owning to utilising products and services (Puschmann and Alt, 2016). Over the past decade, the scope and worth of the sharing economy has been increasing exponentially. This change is being driven by factors such as changing consumer attitudes towards product ownership, a need for frugal spending and minimalism, a need for social connection, growing environmental consciousness, the advancement of information technology, and the ubiquity of mobile devices (e.g. Cohen and Kietzmann, 2014; Gibbs et al., 2018; Schor and Fitzmaurice, 2015). Today, shared consumption spans travel, transportation, consumer goods, professional and personal services, healthcare, car repair, childcare, and catering, to name a few categories. Indeed, some sharing platforms have become household brand names. It is anticipated that by 2025, revenue generated through the sharing economy is likely to exceed US\$335 billion (PwC, 2015). Despite this growth, there has been relatively little research on the sharing economy (Cohen and Kietzmann, 2014; Eckhardt and Bardhi, 2015).

In this research, a broad definition of the sharing economy is adopted, and includes sharing between consumers (Meelen and

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Frenken, 2015), as well as access-based consumption (Bardhi and Eckhardt, 2012), and collaborative consumption (Belk, 2014), the latter two including large-scale business-to-consumer services such as Uber, Airbnb, and Zipcar. These dynamic sharing platforms are transforming the way that organisations and customers interact. Indeed, traditional dyadic firm-to-customer interactions are now triadic interactions involving a platform provider, a shared service intermediary and a customer (Benoit et al., 2017), all of whom can share the benefits of sharing (Hamari et al., 2015). Providers and intermediaries benefit from new business models (Fernandes et al., 2020) and value-added services (e.g. insurance, payment) that operate in a lean and economical manner (Zervas et al., 2017) and can lead to positive effects on brand reputation (Puschmann and Alt, 2016). For consumers, the sharing economy offers not only economic and convenience benefits (Eckhardt and Bardhi 2015; Puschmann and Alt, 2016; Sigala, 2019; Zhang et al., 2018), but also ecological benefits such as waste reduction due to a decrease in the production of goods and services (Böcker and Meelen, 2017). Complementary factors such as enjoyment and reputation also contribute to consumers' social aspirations (Starr et al., 2020; Puschmann and Alt, 2016). Although several studies explore the sharing economy from the perspectives of provider and intermediary, there has been relatively little theoretical discussion or empirical investigation of the consumer perspective.

Consumers who use the sharing economy seek financial rewards, such as better deals than those offered by traditional providers (Sigala, 2019), as well as satisfying increasing concerns over ecological, societal, and developmental impacts (Albinsson and Perera, 2012; Belk, 2010; Botsman and Rogers, 2010; Hamari et al., 2015; Tussyadiah, 2015). In 2016, almost 45 million US adults participated in the sharing economy and this number is expected to reach over 86 million by 2021 (Lock, 2019). According to survey research conducted by McKinsey in 2016, users of the sharing economy primarily engage in sharing for the economic value, quality and variety offered, while non-users enjoy the convenience of ownership, but lack trust in sharing platforms and are uncomfortable sharing payment processes (Manyika et al., 2016). Although many consumers have enthusiastically adopted shared products and services (Zervas et al., 2017), little is known about the structure of the consumer population on this basis. Although consumer attitudes and behaviours with regard to shared consumption are not likely to be uniform across the population (Hellwig et al., 2015), few empirical studies have examined consumer similarities and differences in this context. Hence, there is a call for researchers to acknowledge more heterogeneity amongst customers who utilise the sharing economy (Hellwig et al., 2015; McMeekin and Southerton, 2012). The implications of this understanding for organisations, including the opportunity to transform non-users of the sharing economy, are also unknown.

This study contributes to better understanding the sharing economy from the customer perspective by deconstructing consumer perceptions, attitudes and behaviours by means of segmentation. More specifically, we investigate whether distinct groups of consumers exist in terms of their attitudes and behaviours (both current and future) associated with sharing. It is anticipated that this understanding will advance knowledge in three ways. First, we identify consumer segments that exist based on their sharing attitudes and behaviours. Second, we distinguish important factors that predict or explain sharing-based consumer segment membership. Finally, we investigate how consumer segments differ in the way they perceive the benefits and risks of sharing, and whether these factors influence consumers' future sharing behaviour. A better understanding of these issues is important as it can inform the means by which the providers of sharing platforms engage and motivate the consumer population in relation to sharing. Moreover,

it will guide providers in the implementation and communication of appropriate sharing policies and practices. Next, we discuss the theoretical background to understanding how the consumer population perceives and responds to the sharing economy. Following a review of key literature and the identification of relevant segmentation variables, the method and results are presented. We conclude with a general discussion that includes the implications of our findings for both theory and managers.

## 2. Theoretical background

According to the literature, the sharing economy is a technological phenomenon, with activities mediated by various information systems (Hamari et al., 2015). In contrast, the consumer-related literature considers the sharing economy as an emerging consumer culture (Schor and Fitzmaurice, 2015) with temporary rather than permanent ownership (Eckhardt et al., 2019). The term 'collaborative consumption' is a broad one that can comprise gift-giving and marketplace exchange (Belk, 2007), sharing (Belk, 2014a, 2014b), borrowing (Jenkins et al., 2014), a reuse and remix culture (e.g., Lessig, 2008), charity (Hibbert and Horne, 1996; Strahilevitz and Myers, 1998), second-hand markets, sustainable consumption (Young et al., 2010), access (Bardhi and Eckhardt, 2012) and even anti-consumption (Ozanne and Ballantine, 2010). Other scholars see such sharing as a mode of economy, distribution, and social intensification (Kennedy, 2016). Regardless of these various stances, the sharing economy relies heavily on consumer social dynamics in order for actual sharing and collaboration to take place. In fact, it has been proposed that organisations that own and/or operate sharing platforms do not have any control over the act of sharing (Wiertz and de Ruyter, 2007). Rather, social dynamics, such as enjoyment and self-marketing of a community, lead development (Wasko and Faraj, 2000), and sharing platforms act merely as facilitators of economical-technological coordination (Hamari et al., 2015).

### 2.1. Social exchange theory

Social exchange theory has been widely adopted to explain social interaction information systems (Chen, 2013; Stafford, 2008). Social exchange theory is also used to explain the characteristics of the sharing economy, including the nature of relationships between participating individuals (Kim et al., 2015; Priporas et al., 2017). According to social exchange theory, and inherent to the sharing economy, social behaviour is the result of an exchange process, and interpersonal interactions include an exchange of resources (Emerson, 1976). More specifically, resource exchange is based on a subjective cost-benefit analysis and comparison of alternatives, where the choices made are intended to maximise the benefits. Compared to economic exchange theories, social exchange theory is especially relevant to the sharing economy since costs and benefits cannot easily be surmised (Kim et al., 2015). Satisfaction with the resource exchange is primarily influenced by the economic and social outcomes (Priporas et al., 2017), with individuals involved perceiving some degree of shared responsibility for the success or failure of the outcomes (Sierra and McQuitty, 2005). Social exchange theory is an important theoretical lens for investigating consumer attitudes and behaviours in relation to sharing, with a comparison of shared and owned consumption involving an analysis of perceived benefits and risks.

### 2.2. Benefits and risks of participating in the sharing economy

Consumers engage in sharing for many reasons (Belk, 2014). Understanding the perceived benefits and risks associated with sharing are important considerations in understanding consumer

demand for sharing. People have wide-ranging motives for participating in the sharing economy, which is not surprising given the diversity of platforms and activities on offer (Schor and Fitzmaurice, 2015). Drawing on self-determination theory (Ryan and Deci, 2010), studies have investigated users' intrinsic and extrinsic motivations for engaging in shared consumption (Hamari et al., 2015; Tussyadiah, 2016). Intrinsic motivations emerge from the internal value of the given activity, with evidence found for enjoyment (Zhang et al., 2017), sustainability (Hamari et al., 2015), conforming to norms (Hamari et al., 2015; Tussyadiah, 2016), ideology (Dubois et al., 2014;), and risk reduction (Cohen and Kietzmann, 2014). On the other hand, previous work (Anthony et al., 2009; Hars and Ou, 2001) identified extrinsic motivations as those related to external pressures, monetary gain, reputation, and commitment to community.

There are various perceived benefits, which might include social, environmental, or economic benefits (Böcker and Meelen, 2017; Tussyadiah, 2015). In regard to the environment, many sharing economy platforms advertise themselves as 'green', particularly in terms of reducing their carbon footprint. There is a common belief that sharing is less resource-intensive (Schor and Wengronowitz, 2017) and is eco-friendly because, supposedly, it reduces the demand for new goods and the need to construct new facilities (in the case of hotels or shared spaces). Despite these widespread beliefs, to date, there is no empirical evidence supporting these claims, apart from car sharing where substantial reductions in CO<sub>2</sub> emissions are realised (Chen and Kockelman, 2016; Nijland and Van Meerkerk, 2015). However, consumers' perceived benefits are diverse. With regard to bicycle sharing, D'Agostin et al. (2020) found that consumer benefits can include time saving, flexibility, safety (decreased risks of theft), and health (staying active and exercising). Benefits can also extend to status (Edbring et al., 2016), as sharing gives users access to products that they cannot otherwise afford to buy.

Despite the various benefits, there are risks associated with engaging in the sharing economy. Typically, transactions are conducted with strangers, involve asymmetric information, carry some financial risks, and raise the issue of trust (Wilhelms et al., 2017). In fact, in recent times, the safety risks associated with Uber have become more pronounced (Siddiqui, 2018). Another risk relevant to the broader sharing economy, across a diverse range of categories, is convenience in terms of the ability to use the product as and when it is needed (Pizzol et al., 2017). It is expected that an individual's perception of the benefits and risks associated with sharing will affect subsequent demand and create member segmentation.

### 2.3. Towards a sharing-based consumer segmentation

This research builds on existing market segmentations of the sharing economy (i.e. Hellwig et al., 2015) by segmenting consumers on the basis of their perceptions, attitudes and behaviours related to sharing, as well as their general psychographic and demographic characteristics. The number of segments will depend on the level of heterogeneity that exists in the population, and on the weight that each variable receives in the formation of perceptions, attitudes and behaviours (both current and future) related to sharing. Although the formation of these variables is arguably different for each individual, segmentation techniques operate on the principle of minimising within-group heterogeneity, while maximizing differences between groups. Hence, the exact number of segments is to be determined empirically, and formal hypotheses are not derived *a priori* (e.g. Konuş et al., 2008; Sands et al., 2016). However, it is possible to develop some basic expectations for consumer segments in terms of the relative importance of different types of variables, namely perceptions, attitudes and behaviours related to

sharing, as well as the ability of these factors to influence future sharing intentions.

#### 2.3.1. Psychographic and demographic characteristics

A wide range of research shows that individuals who share demographic and/ or psychographic characteristics can also share similar behaviours, which in turn can influence consumption behaviour (Hellwig et al., 2015; Sands et al., 2019). Demographic variables such as age, gender, and income all have different influences on consumer behaviour (Raajpoot et al., 2008), and are therefore important when profiling consumer segments (Konuş et al., 2008; Sands et al., 2016). In the context of the sharing economy, demographic aspects are shown to influence consumers' past use of services offered by the sharing economy, and willingness to pay for them in future (Hellwig et al., 2015; Hsiao et al., 2018). Notably, Hsiao et al. (2018) found that age is negatively correlated to willingness to pay, and that higher levels of income or education have no effect on behaviour or intention. Further, Fraiberger and Sundararajan (2015) suggested that the sharing economy is more likely to be accessed by consumers from low-income groups. In terms of psychographic variables, a wide range can be used to understand the generic motivations of the users of a sharing economy (Bajaj et al., 2020; Konuş et al., 2008; Sands et al., 2016). An individual's level of innovativeness is one consumer-related variable which is likely to drive sharing behaviour. Innovativeness relates to the degree to which customers prefer to seek out new experiences and try new and different products (Konuş et al., 2008). Given the sharing economy generally, and that many of the platforms coming into the market are new, it is anticipated that innovativeness will influence sharing demand and the resulting segment membership. In addition, time pressure, or an individual's predisposition to consider time as a scarce resource the use of which must be planned carefully (Kleijnen et al., 2007), is expected to be an important individual characteristic driving sharing demand and segment membership. Kleijnen et al. (2007) recognise that the greater the consumers' perception of time convenience, the greater the perceived value of sharing, and time-conscious consumers seek opportunities to leverage their time.

#### 2.3.2. Sharing behaviours and attitudes

Increasingly, consumers are engaging in the sharing economy, changing the way in which products and services are provided and consumed (Kathan et al., 2016). In order to understand consumer usage and future behaviour with regard to sharing, it is important to understand the repetition of an individual's consumption patterns, or the behaviours which are a central feature of their daily lives (Wood and Neal, 2009). In this way, consumption patterns capture the extent to which particular behaviours are part of consumers' daily lives and routines. It is important to have an understanding of habit and consumption patterns, as much behaviour is repeated, often daily (Neal et al., 2006; Wood et al., 2002) in an effort to reduce mental and physical consumption efforts (Amine, 1998). We expect that consumption behaviour, past and current, will be a key differentiator of segments of sharing users.

Consumers' attitudes toward sharing, or the extent to which individuals have positive or negative evaluations of a certain behaviour (Ajzen, 1991), are expected to influence preferences and, therefore, demand. For example, if a customer has a favourable view of sharing generally, s/he might be more likely to engage in the behaviour, and try a wider range of alternatives, as opposed to a customer with an unfavourable attitude. With regard to participating in the sharing economy, or consuming shared products or services, consumer behaviour suggests that although consumers may be ideologically aligned with the behaviour, their aspirations might not translate into action (Phipps et al., 2013; Vermeir and

Verbeke, 2006; Paramita et al., 2020). Regardless, it is expected that different attitudes towards sharing will affect subsequent demand and resultant segment membership.

Social identity, or connection to a community, is another factor that is expected to influence consumer attitude toward sharing. Historically, the practice of sharing has been confined to trusted individuals such as family, friends and neighbours (Frenken and Schor, 2019). Belk (2013) notes that there are many ways that individuals can to express identity, with and without ownership (Belk 2013). Further, sharing reproduces social relations (Ozanne and Ozanne, 2020) and consolidates cultural practices (Belk, 2009). In essence, sharing can influence one's social identity and sense of community and belonging (Pizzol et al., 2017). Hence, it is expected that social identity will be an attitudinal variable that will affect subsequent demand and resultant segment membership.

#### 2.4. Influencing future intentions to engage in sharing

While increasingly common and having great potential for positive sustainable benefit (Mi and Coffman, 2019), the sharing economy still represents a small share of overall consumption. Therefore, new knowledge is required to determine the ways by which consumers can be encouraged to increase their use of sharing alternatives - particularly on platforms that might have significant social benefit (Chen and Kockelman, 2016). One such social benefit may be realised through social connections and building social relationships amongst consumers who participate in the sharing economy (Belk 2010; Ozanne and Ballantine, 2010). Indeed, interactions between users and providers of goods are at the heart of many forms of the sharing economy (Lang et al., 2020). In this way, shared consumption users often articulate a desire to meet new people or get to know or interact with local community members (Albinsson and Perera, 2012; Tussyadiah, 2015), or even commit to a social transformation movement (Schor and Fitzmaurice, 2015).

More broadly, in the context of sustainable consumption, social psychologists have long considered the ways by which they can influence consumers' daily consumption habits, particularly those that can have significant impacts on the environment (Oskamp, 2000; Schmuck and Vlek, 2003). One kind of social influence that is receiving considerable attention in the literature is that of normative social influence by way of social norms (Deutsch and Gerard, 1955). Social norms constitute an important source of social influence, having a long and established history in the literature (Sherif, 1935). Descriptive norms refer to an individual's perception of the prevalence of a behaviour being exhibited by others: what most others do, or what is generally done by others. Importantly, descriptive norms have been shown to act as decisional shortcuts (Cialdini et al., 1990). Cialdini et al. (1990) analysed the effects of social norms on behaviour and found that norms motivate behaviour primarily when they are activated, which is more likely when they are made salient. Thus, an individual who is contextually focused on normative considerations is likely to act in a norm-consistent way.

Several studies have shown the effectiveness of the norm-based approach as a means of reducing environmental harm and changing behaviour generally (Miller and Prentice, 2016; Schultz et al., 2008). For instance, in one study investigating towel reuse in a midsize hotel in the southwestern United States, Goldstein et al. (2008) were able to encourage guests to be environmentally responsible ("Help save the environment") and reuse their towels. The guests receiving normative information were significantly more likely to recycle one or more towels. These effects were later replicated by Schultz et al. (2008). In essence, by advising individuals that a proportion of people engage in some given behaviour, people were able to be nudged toward behavioural

change in a pro-social direction. It is likely that norm-based approaches can also be used to increase consumer usage of sharing platforms.

#### 2.5. Summary of segmentation variables

The literature reviewed above led to the conclusion that consumers' sharing behaviours and attitudes, perceived benefits and risks, and demographic and psychographic characteristics will influence segment membership of the sharing economy. In line with previous consumer segmentation studies across numerous contexts, in this study, a range of descriptors and discriminating variables are used to profile the sharing consumer market, including consumer-orientated (i.e. attitude, preference) and outcome-orientated (i.e. behaviour) variables (e.g. Konuş et al., 2008; Sands et al., 2016). The following three propositions are developed in order to guide our research from theoretical development to conceptualisation. *Proposition 1.* Heterogeneity exists in the models such that the underlying attitudes and behaviours of individuals with regard to sharing lead to clearly-defined user segments.

*Proposition 2.* The segments can be profiled based on significant differences in terms of what they perceive to be the benefits and risks of sharing.

*Proposition 3.* Social norms may have some influence on the future sharing intentions for individuals within segments.

### 3. Method

#### 3.1. Data collection and sample profile

Data were collected in the United States using the online subject recruitment platform, Prolific, a dedicated platform specifically intended for social science researchers (Palan and Schitter, 2018; Peer et al., 2017). Crowdsourced data collection methods have also been shown to recruit respondents that are more demographically diverse than can be obtained via student samples (Buhrmester et al., 2011). The final sample comprised 411 respondents, which is sufficient for segmentation given it is more than 30 times the number of variables in the empirical model (Dolnicar et al., 2016). The final sample is not significantly different from that of the general US population in terms of gender (Female: Sample = 47.2%; Population = 50.8%) (US Bureau of Statistics, 2010). There is a difference in the predominant age group of the sample compared to the general population; 57.4% of the sample were aged between 25 and 44 years, but this age group constitutes only 26.6% of the general population. However, this is not a major concern given that age quotas were applied to sample individuals over 18. In regard to household income, a variety of income brackets are included, with 30% earning less than US\$29,999 per annum and 18% earning in excess of US\$100,000 per annum.

As the survey data were collected from the same respondents using self-reported measures and common scale formats and anchors, it was deemed important to test for common method variance (CMV). In anticipation of CMV, the survey was designed so that the sections relating to the IVs and DVs were not presented sequentially. CMV was assessed using Harman's single factor test (Podsakoff et al., 2003). This test was conducted using unrotated principal components EFA of the survey with the factor extraction constrained to 1. As the resulting single factors did not account for a majority of the inter-item covariance (29.97%), common method bias was not a problem.

### 3.2. Experimental scenario

The first section of the survey presented respondents with an experimental set-up. The experiment was closely aligned with that of Demarque et al. (2015) and adapted from sustainable consumption to our context. The experimental scenario is presented in Appendix A. Toward the end of the survey, respondents were presented a manipulation check to determine whether they had correctly interpreted the strength of the nudge (weak vs. strong). Results show that in excess of 95% of respondents correctly recalled the strength of the nudge as either weak or strong. Following segmentation, each identified segment was analysed in terms of whether the nudge condition (weak vs. strong) had an impact on the respondent's chosen behaviour.

### 3.3. Variable measurement

Following the experimental scenario, respondents were advised that the remainder of the survey items would be focused on their experience of and general perceptions about the sharing economy. In this study, consumers were considered as consumers of the sharing economy, rather than as providers (Hamari et al., 2015). To this end, respondents were advised that for the purposes of this research, the sharing economy could be defined as:

*Paying for products or services on-demand, or as you need them, rather than owning these permanently or signing long-term contracts for services. In the accommodation sector, Airbnb is an example of the sharing economy in action.*

All scales were adapted from existing literature. Indicator variables were measured to assess consumers' sharing attitudes and behaviours. Behavioural intention was measured with four-items adapted from Hamari et al. (2015), attitude was measured with five-item scales adapted from Hamari et al. (2015), and social identity was measured with a three-item scale adapted from Pizzol et al. (2017). Respondents also answered questions about their experience and use of a variety of sharing platforms. First, we assessed consumers' sharing usage (coded as 0 = never used sharing platforms, 1 = have used sharing platforms). We also drilled down to assess usage and frequency of usage across the sub-categories of mobility (e.g., car sharing platforms), retail (e.g., clothing rental platforms), tourism (e.g., accommodation platforms), and finance (e.g., peer-to-peer lending platforms). Finally, we assessed each individual's breadth of usage of sharing platforms (coded as 0 = none to 4 = uses mobility, retail, tourism, and finance platforms). Psychographic covariates were adapted from Konus et al. (2008), with five items relating to innovativeness and two items relating to time pressure. Demographic covariates including gender, age and household income were also collected. We also profiled consumers in terms of the perceived benefits and risks of sharing, with six perceived benefits adapted from D'Agostin et al. (2020) and two perceived risks adapted from Pizzol et al. (2017).

All items reported in Appendix B were operationalised on a seven-point Likert scale (anchored by 1 = strongly disagree and 7 = strongly agree). Factor analysis was conducted to determine the structure of the variables; results for all measures are also presented in the Appendix. Factor loadings are sufficient with good internal reliability demonstrated (Cronbach, 1951), with alphas ranging from 0.70 to 0.97. Given the post-hoc nature of segmentation analysis, we followed previous studies that did not pre-determine segment membership and, hence, did not propose formal hypotheses (Konus et al., 2008; Sands et al., 2019). However, we developed propositions in line with our measured indicator variables, covariates, and profile variables based on our review of key literature.

### 3.4. Data analysis

Segmentation analysis, using Latent GOLD® 5.1 software (Vermunt and Magidson, 2015), was conducted to explore the extent to which the indicators and covariates differ between consumer segments. This analysis enabled the identification of heterogeneous preferences in consumer choices and was underpinned by a latent cluster model (LCM), whereby typologies for the differences between groups were identified. The LCM provided an efficient clustering method that provided a statistical basis for deciding on the final number of clusters to be included (Magidson and Vermunt, 2015). The LCM also accommodated a variety of different variables from several different scale types (Vermunt and Magidson, 2015).

The model was estimated by means of maximum likelihood (Collins and Lanza, 2010; McCutcheon, 2002), using 100 different random sets of starting parameters to reduce the chance of local maxima (Masyn, 2013). Further, local independence was tested by means of bivariate residuals, and included additional model terms where appropriate (Collins and Lanza, 2010; McCutcheon, 2002; Vermunt and Magidson, 2015). A three-step analysis procedure (Vermunt and Magidson, 2015) was followed. The impact of segment membership on outcomes is discussed in the section below.

### 3.5. Segmentation results

Solutions were estimated for a variety of different cluster sizes (1 to 10). The best model was selected by applying the Bayesian information criterion (BIC), with classification error used as a secondary criterion (Collins and Lanza, 2010; Nylund et al., 2007). The four-cluster model provided the lowest BIC, and also had a minimal classification error as shown in Table 1; hence, this model was deemed the most suitable and therefore was chosen as the final model. Table 2 displays the results for the indicator variables, covariates, and profiling variables for each cluster.

Table 3 presents a descriptive overview of the profiling variables for each consumer segment. After the identification of segments and classification within the dataset, analysis of variance (ANOVA) was conducted on each profiling variable to ascertain group differences between segments. As shown in Table 3, variance amongst segment groups exists across all perceived sharing benefits and perceived sharing risks. A detailed interpretation of results is presented in the following section.

Table 4 presents an overview of results from the experimental scenario. Similar to the analysis of the profiling variables in Table 3, ANOVA was conducted to compare the means of the weak nudge ( $n = 124$ ) and strong nudge ( $n = 287$ ) conditions. Results show that a significant effect occurs between nudge conditions for the diverse-platform sharer segment only [weak nudge = 4.96 (1.11); strong nudge = 5.42 (0.99), F-value (5.05),  $p < 0.05$ ]. A detailed interpretation is presented in the following section.

### 3.6. Interpretation of segments, their characteristics and relationship with sharing decisions

The segmentation analysis identified four segments of sharing consumers: three engaged in the sharing economy (representing a large proportion of the population, 86%) and the fourth (14%) does not engage in sharing-based initiatives. In this section, further analysis of each segment's behaviour, consumer covariates, and profiling variables are presented in order to determine the similarities and differences between segments.

The first segment is the largest (39%) with all having engaged in sharing, and most having engaged in one sharing category (42%) – typically mobility. Most consumers in this segment have engaged in the mobility sharing economy (78%), with fewer having engaged

**Table 1**  
Log-likelihood statistics for model selection.

Model	LL	BIC(LL)	Npar	df	p-value	Class.Err.
1-Cluster	-6618.14	13,868.23	105	306	2.6e-2561	0.000
2-Cluster	-6117.35	13,053.22	136	275	3.3e-2374	0.041
3-Cluster	-5874.66	12,754.42	167	244	6.6e-2297	0.054
<b>4-Cluster</b>	<b>-5755.13</b>	<b>12,701.94</b>	<b>198</b>	<b>213</b>	<b>1.7e-2272</b>	<b>0.043</b>
5-Cluster	-5675.57	12,729.4	229	182	6.7e-2266	0.044
6-Cluster	-5619.84	12,804.52	260	151	1.7e-2270	0.044
7-Cluster	-5582.65	12,916.71	291	120	2.6e-2284	0.065
8-Cluster	-5533.10	13,004.18	322	89	1.7e-2294	0.056
9-Cluster	-5492.17	13,108.9	353	58	1.0e-2310	0.048
10-Cluster	-5465.41	13,241.96	384	27	7.8e-2337	0.047

Notes: LL = Log likelihood; BIC(LL) = Bayesian information criterion (based on log-likelihood); Npar = number of model parameters; df = degrees of freedom; Class.Err. = Classification error.

**Table 2**  
Latent-class cluster profiles (n = 411).

	Mobility-focused sharer (39%)	Diverse-platform sharer (29%)	Power-platform sharer (18%)	Non-sharer (14%)	p-value
<i>Indicator variables</i>					
Behavioural intention	4.62	5.60	5.52	4.31	0.000
Attitude	4.62	5.60	5.52	4.31	0.000
Social identity	3.43	4.66	4.66	3.26	0.000
Engaged in sharing	100%	100%	100%	0%	0.005
Mobility sharing use	78%	88%	100%	0%	0.002
Retail sharing use	44%	53%	100%	0%	0.010
Tourism sharing use	26%	65%	100%	0%	0.000
Finance sharing use	35%	31%	100%	0%	0.014
<i>Breadth of sharing platform use</i>					
None	0%	0%	0%	100%	
1 platform	42%	12%	0%	0%	
2 platforms	34%	39%	0%	0%	
3 platforms	22%	49%	0%	0%	
4 platforms	2%	0%	100%	0%	
<i>Psychographic covariates</i>					
Innovativeness	3.28	4.13	4.19	3.17	0.000
Time pressure	4.99	5.11	5.11	5.04	0.680
<i>Demographic covariates</i>					
Gender - Female	47%	47%	49%	44%	0.860
Mean age (years)	43	35	33	43	0.000
<i>Household income</i>					
Less than \$10,000	9%	5%	5%	18%	
\$10,000 - \$19,999	10%	9%	4%	11%	
\$20,000 - \$29,999	15%	10%	9%	16%	
\$30,000 - \$39,999	8%	11%	7%	13%	
\$40,000 - \$49,999	9%	16%	12%	5%	
\$50,000 - \$59,999	9%	10%	7%	4%	
\$60,000 - \$69,999	10%	6%	5%	7%	
\$70,000 - \$79,999	5%	7%	12%	9%	
\$80,000 - \$89,999	4%	5%	7%	2%	
\$90,000 - \$99,999	6%	5%	5%	0%	
\$100,000 - \$149,999	8%	12%	21%	11%	
More than \$150,000	8%	5%	5%	4%	

in sharing for retail (44%), tourism (26%), and finance (35%). Members of this segment have moderate levels of future sharing intention (4.62) and attitude (4.62) – with low stated levels of sharing reflecting their social identity (3.43). In terms of psychographics, those consumers in this segment have relatively low levels of innovativeness (3.28) and on average are the oldest of all segments (mean age = 43 years). In terms of perceived benefits of the sharing economy, the ability to test products/ services (4.76) and the reduction of waste generation and greenhouse gases emission (4.70) were rated the highest. On the other hand, the main risk of using the sharing economy is that the product or service may not be suitable for use when needed (i.e. condition, cleanliness), having the highest level at 5.63. For consumers in this segment, behavioural nudging had no effect on their intended sharing behaviour (strong nudge:  $M = 1.25$ ,  $S.D. = 0.11$ ; weak nudge:  $M = 1.26$ ,  $S.D. = 0.18$ ,  $F$ -value = 0.62,  $p > 0.05$ ). Given the behavioural characteristics of this segment, in particular the greatest

use of mobility sharing and typical engagement in only one sharing platform, we label this segment the *Mobility-focused Sharer*.

The second segment constitutes 29%, with all having engaged in sharing. Most of the consumers in this segment have engaged in three unique categories of sharing (49%) – typically mobility (88%), tourism (65%) and retail (53%). Compared to all other segments, members of this segment have the highest levels of future sharing intention (5.60), attitude (5.60), and perception that sharing reflects their social identity (4.66). In terms of psychographics, those in this segment rate high in terms of innovativeness (4.13) and have a mean age of 35 years. For six of the five perceived benefits of the sharing economy, those in this segment rate the highest as: the ability to test products/ services (5.50), reduction of waste and greenhouse gases emission (5.52), compatibility and consistency with values and beliefs, experiences, and needs of users (5.41), a more sustainable option (5.63), and is aligned with sustainability as a lifestyle (5.45). The primary risk of using the sharing economy

**Table 3**  
Segmentation profiling variables.

	Mobility-focused sharer, M (S.D.)	Diverse-platform sharer, M (S.D.)	Power-platform sharer, M (S.D.)	Non-sharer, M (S.D.)	F-value	p-value
<i>Perceived sharing benefits</i>						
Allows me to test the products/ services <sup>3</sup>	4.76 (1.11)	5.50 (1.07)	5.49 (1.04)	4.58 (1.30)	17.050	0.00
Provides me social recognition for using a new technology <sup>1</sup>	3.24 (1.37)	4.40 (1.39)	4.48 (1.46)	3.13 (1.48)	25.890	0.00
Allows for less waste generation and greenhouse gases emission <sup>2</sup>	4.70 (1.41)	5.52 (1.06)	5.24 (1.28)	4.75 (1.21)	10.990	0.00
Compatible and consistent with values and beliefs, experiences, and needs of potential users <sup>1</sup>	4.41 (1.11)	5.41 (1.10)	5.16 (0.99)	4.45 (1.29)	22.470	0.00
A more sustainable option <sup>2</sup>	4.48 (1.08)	5.63 (1.11)	5.47 (1.03)	4.53 (1.30)	29.730	0.00
Aligned with sustainability as a lifestyle <sup>2</sup>	4.61 (1.24)	5.45 (0.99)	5.43 (1.03)	4.64 (1.30)	17.520	0.00
<i>Perceived sharing risks</i>						
I can't use the product or service when I need it <sup>3</sup>	5.10 (1.29)	4.54 (1.51)	4.47 (1.43)	5.40 (1.08)	8.860	0.00
The product or service may not be suitable for use when I need it (i.e. condition, cleanliness) <sup>3</sup>	5.63 (1.01)	4.97 (1.32)	4.96 (1.19)	5.78 (0.90)	13.530	0.00

Note: Measured on a 7-point Likert scale with 4 as the midpoint.

<sup>1</sup> Social-orientated benefits/ risks;

<sup>2</sup> Environmental-orientated benefits/ risks;

<sup>3</sup> Economic-orientated benefits/ risks.

**Table 4**  
Experimental scenario results.

	Mobility-focused sharer	Diverse-platform sharer	Power-platform sharer	Non-sharer
Weak nudge condition, M (S.D.)	1.26 (0.18)	4.96 (1.11)	5.24 (0.94)	2.92 (1.38)
Strong nudge condition, M (S.D.)	1.25 (0.11)	5.42 (0.99)	5.16 (1.04)	2.91 (1.38)
F-value	0.62	5.05	0.12	0.01
p-value	0.804	0.027	0.742	0.979
Df	1163	1114	1,73	1,53

Note: Measured on a 7-point Likert scale with 4 as the midpoint.

is that the product or service may not be suitable for use when needed (i.e. condition, cleanliness), ranking the highest (4.97). For consumers in this segment, behavioural nudging had a significant and positive effect on altering their intended behaviour with regard to the sharing economy (strong nudge:  $M = 5.42$ ,  $S.D. = 0.99$ ; weak nudge:  $M = 4.96$ ,  $S.D. = 1.11$ ,  $F\text{-value} = 5.05$ ,  $p < 0.05$ ). Given these behavioural characteristics, we label this segment the *Diverse-platform Sharer*.

The third segment represents 18%, all of whom have engaged in sharing. Consumers in this segment have engaged in all of the sharing categories presented - including mobility, tourism, retail, and finance. Members of this segment have high levels of future sharing intention (5.52), attitude (5.52), and perception that sharing reflects their social identity (4.66). In terms of psychographics, those in this segment rate the highest of all segments in terms of innovativeness (4.19), and are the youngest (mean age = 33 years). In terms of perceived benefits of the sharing economy, those in this segment rate the ability to test products/ services (5.49) the highest and acquiring social recognition for using new technology (4.40) the lowest. Like the other segments, the potential of the product or service not being suitable for use when needed (i.e. condition, cleanliness) is the highest perceived risk (4.96). For consumers in this segment, behavioural nudging had no effect on altering their intended purchase behaviour with regard to the sharing economy (strong nudge:  $M = 5.16$ ,  $S.D. = 1.04$ ; weak nudge:  $M = 5.24$ ,  $S.D. = 0.94$ ,  $F\text{-value} = 0.12$ ,  $p > 0.05$ ). Given these behavioural characteristics, we label this segment the *Power-platform Sharer*.

The final, and smallest segment represents 14% of the total population. No-one in this segment engaged in the sharing economy. Members of this segment have the lowest levels of future intention

(4.31), attitude (4.31), albeit still moderately high - and of perception that sharing reflects their sharing social identity (3.26). Despite these levels being the lowest, the values are still moderate in terms of the 7-point measurement scale. In terms of psychographics, consumers in this segment, with a mean age of 43 years, are the least innovative (3.17). Regarding benefits of the sharing economy, those in this segment perceived less waste generation and reduced greenhouse gas emissions (4.75) as the greatest. Compared to all other segments, consumers in this segment gave the highest rating (5.40) to the risk of not being able to use the product or service when needed, and the highest (5.78) to the risk of the product or service not being suitable for use when needed. For consumers in this segment, behavioural nudging had no effect on altering their intended purchase behaviour with regard to the sharing economy (strong nudge:  $M = 2.91$ ,  $S.D. = 1.38$ ; weak nudge:  $M = 2.91$ ,  $S.D. = 1.38$ ,  $F\text{-value} = 0.01$ ,  $p > 0.05$ ). Given these behavioural characteristics, we label this segment the *Non-Sharer*.

#### 4. General discussion

As access replaces ownership and challenges traditional business thinking (Belk, 2014; Zhang et al., 2018), brands are striving to develop sharing platforms across a diverse range of products and services. Today, consumers can choose from any number of alternatives to access goods and pay for the experience of temporary access, rather than ownership (Bardhi and Eckhardt, 2012). This research shows that heterogeneity exists amongst sharing users, with segment groupings underpinned by attitudes and behaviours of individuals, as well as their perception of the benefits and risks of sharing. Our segmentation analysis identified four segments of sharing consumers. Consumers in the first three segments are



those who engage in the sharing economy. Taken together, these groups represent a large proportion of the population (86%). The fourth segment represents 14% of the total population, with no consumers in this segment engaging in sharing-based initiatives. Together, our analysis reveals theoretical and managerial implications which are discussed below.

#### 4.1. Theoretical implications

Our research findings have several implications for theory. The research distinguishes four types of sharing-economy customers based on their purchasing behaviours on sharing-based platforms. In doing so, this research provides brands with knowledge about the kinds of consumers that engage in the share economy, as well as the similarities and differences between various groups. Non-sharers are also profiled – these are consumers who do not engage in sharing, despite having relatively positive perceptions of and purchase intentions regarding the sharing economy. Interestingly, those within this non-sharing segment do not differ significantly from consumers in the mobility-focused sharer segment. Specifically, the profiles of non-sharers and mobility-focused sharers are not significantly different in terms of key indicator variables (i.e. behavioural intention, attitude), psychographic covariates (i.e. innovativeness), or their perceived benefits and risks. It is possible that there is some other factor that acts as a tipping point for the non-sharer to move into the trial and usage of sharing-based platforms. While this research is unable to provide an answer to this question, it offers potential for further theoretical development in the area.

This research also provides insight into the consumers' motives for engaging in the sharing economy. The literature usually categorises users' motivations for engaging in the sharing economy as economic, environmental and social (Böcker and Meelen, 2017; Tussyadiah, 2015). Hence, in this research, each segment is profiled accordingly, with findings indicating that these motivations are significant predictors of consumers' segment membership. Specifically, we find strong support for environmental motivations driving sharing behaviour, with all three sharing segments (particularly in comparison to the non-sharer segment), giving high ratings to perceived environmental motivations or benefits. Further, significant variation is found between segment membership in terms of economic-orientated motivations. Specifically, we find that economic motivations (in particular access to the product or service, or availability when needed) are significantly higher perceived risks for non-sharers and the mobility-focused sharer. This finding suggests that the mobility-focused sharers may be somewhat reluctant to engage in additional sharing-based products and services as they perceive economic risks associated with access and availability.

Further, this research explored the important issue of how to promote sharing-based consumption. Hence, it considered social norms, as these have been shown to constitute powerful behavioural nudges (Schultz et al., 2008; Wilson et al., 2017). The goal of this research was to examine the influence of norms on sharing-based purchase decisions, and findings show that only one segment (the diverse-platform sharer) was susceptible to behavioural nudging that was likely to influence their future behaviour. Importantly, these norm-based nudges are easy to implement, with consumers needing only to be advised of others' previous behaviour (Cialdini, 2003). While social norm information is shown to be an effective form of nudging that can influence sustainable behaviour and purchase (Schultz et al., 2008), our findings suggest that the efficacy of social norms may be limited in the context of sharing. It is possible that social norms are too passive as a nudging technique; perhaps more active exchanges, where consumers engage in a rational assessment and weighing up of the pros and cons (French, 2011), may be more effective.

Given the finding that nudging by means of social norms was ineffective in shifting the behaviour of most consumers, the question arises: how might other consumers be nudged and will other nudge strategies work for different segments? Demarque et al. (2015) provide some guidance on alternative forms of persuasion, specifically in terms of the role of linguistic factors in the presentation of quantitative information. They suggest that positive polarity framing may be another way by which consumers may be nudged to take certain actions (Schmeltzer and Hilton, 2014). Other strategies could benefit new and emerging platforms which as yet have comparatively low usage, but which may be growing rapidly. Demarque et al. (2015) suggest that when the number of consumers buying a product is increasing from year to year, communications that draw attention to this trend may be effective.

#### 4.2. Managerial implications

It is important that brand managers understand consumer demand in the development of sharing economy platforms so that they can also understand how the sharing economy influences consumer behaviour. Failure to do so might lead to an overestimation of the demand for sharing platforms and could miss the heterogeneity of consumers. This is particularly important for the sharing economy, as it has the potential to continue to disrupt business-as-usual through continued market reconfiguration (Richardson, 2015). This study gives managers a better understanding of consumers within the sharing economy, providing insight into their similarities and differences, and alerting managers to the implications.

In this study, three different types of sharing-economy consumers are identified, each with different motivation, desire, and behaviour with regard sharing. First, the mobility-focused sharer exhibits relatively low levels of engagement across platforms (most engage in a one platform). Opportunity exists to encouraging this segment to engage in a wider number of sharing platforms. However, our results suggest that social norms do not successfully nudge these consumers toward increased usage of sharing, managers should consider promotions that encourage trial for those in this segment. Those in this segment, see the sharing economy as a means by which they can engage in the trial of products and services and as a way of being more sustainable (i.e. less waste generation and reduced greenhouse gas emissions). Second, the diverse-platform sharer typically engages in mobility and tourism sharing platforms. There is the opportunity to increase consumer engagement in more finance-related sharing platforms, which is currently the least sharing platform these consumers engage in. Third, the power-platform sharer has a high level of engagement across all four platforms we investigate (mobility, retail, tourism, and finance). For these consumers, sharing is a strong representation of their social identity. Opportunity exists to build social connections amongst those in this segment. We suggest managers strive to create consumption communities around the platforms they manage as these consumers will resonate with the community element which in-turn reflects their own identity. Those in this segment are less likely to derive the benefit from reduced waste generation or greenhouse gas emissions, particularly compared to the diverse-platform sharer. Hence, communication messages targeted at these elements will likely prove less effective for those in this segment.

There are important implications for managers with regard to the covariates identified in segment membership. First and foremost, the demographic data will indicate to managers those covariates that are not significant predictors of segment membership. This study finds that the sharing economy is somewhat democratised in that gender and income are not significant predictors of segment membership. This means that the sharing economy appeals to a wide variety of consumers regardless of gender and re-

ardless or earnings. Results further show that the psychological covariate of time pressure is not a significant driver, indicating that people are willing to engage in the sharing economy regardless of their inherent feelings of time pressure.

In terms of the covariates that are significant predictors of segment membership, results show that an individual's age and level of innovativeness can predict segment membership and, hence, usage of the sharing economy. These two variables are related to each other, with younger individuals typically displaying higher levels of innovativeness. This bodes well for the future of the sharing economy. As younger and innovative consumers come to maturity, it is likely that they will turn to the sharing economy as a viable alternative to consumption in a wide range of categories (Lim, 2020). In the meantime, managers are encouraged to consider how to encourage older consumers to trial the sharing platforms.

Finally, this study provides insight into the ways by which consumers currently engage in the sharing economy. Results show that mobility platforms currently have the most active customer engagement with 74% of consumers engaging in some form of mobility sharing. While finance sharing platforms currently have the lowest level of engagement, they still have a relatively high level of engagement (41%). Managers will need to take stock of existing consumer behaviour and consider ways by which engagement can be facilitated by platform providers in the sharing economy. One method of increasing engagement could be by providing generous guarantees, such as the Host Guarantee offered by Airbnb which provides property damage protection of up to USD\$1 million for every host. Furthermore, the managers of sharing economy platforms may soon need to contend with growing concerns such as security issues (Abbruzzese, 2019) and sexual harassment allegations at a brand level (Griffith, van Esch, and Trittenbach, 2018). For Uber, this has meant that the mobility company has had to add extra safety features to the platform. For instance, there is now an emergency 911 feature akin to a "panic button", and users are able to share their location with friends. Such measures will likely empower customers within the sharing economy and may mitigate recent fears (Siddiqui, 2018).

#### 4.3. Research limitations and future considerations

Like all research, this research is not without limitations. The study attempted to acquire a better understanding of how users

engaged in the sharing economy can be nudged toward greater participation. However, future research is needed to understand how consumers could be encouraged to make the transition to other segments. For instance, how can non-users be encouraged to transition to a user segment, and how can lower-usage members like the mobility-focused sharer be encouraged to transition to a higher-usage segment? Such knowledge would give managers additional insight into the ways that consumers could be encouraged to engage in higher levels of usage.

We investigated the role of social norms in order to understand how consumers can be 'nudged' toward increased adoption of sharing platforms. In doing so, we limited our experimental study to one sharing platform (Airbnb) and two levels of social norm (weak and strong). Further research could extend social norm research into other new and emerging sharing platforms to understand how less prominent platforms could exploit social norms. In addition, various other levels of weak and strong nudges could be investigated, and importantly, further research should be conducted to compare these nudge conditions with more stringent control conditions where no nudge is presented.

Further, while this study investigated sharing usages across four key sharing categories (mobility, retail, tourism, and finance), there are other categories that merit investigation. Future research could consider pursuing a more in-depth understanding of usages in new and emerging sharing economy categories to better understand the tipping point at which a platform gains more mass market appeal. Further, the study was limited to consumers in the United States. In reality, the sharing economy is a global one, and there may be differences between various geographic locations and cultures. For instance, in societies with very high population densities, engagement in the sharing economy usage and perceptions may be impacted differently. Future research investigating the effect of population density and other geographic factors is encouraged. Finally, this research was completed prior to the COVID-19 pandemic which may have significant implications for how consumer perceptions of sharing evolve. Future research should consider how consumer perceptions and willingness to share change as a result of COVID-19.

#### Appendices

##### Table A1, Table B1

**Table A1**

Item measurement, factor loadings, and reliabilities.

##### *Background to the scenario*

Respondents were asked to consider a scenario in which they wanted to book accommodation for a holiday. They were presented with a mock-up of an online webpage that allowed them to search for and book accommodation, either at a hotel (via a non-sharing platform) or an Airbnb (via a sharing platform). Prior to being presented with the webpage, respondents read a statement about the behaviour of people who had previously booked accommodation via the website. Respondents were allocated to one of two scenarios: one where they were advised that a large number of previous customers had booked via the sharing platform (strong nudge), and the other where a small number of previous customers had booked via the sharing platform (weak nudge). The experiment was closely aligned with that of Demarque et al. (2015) and adapted from the context of sustainable consumption to that of the sharing economy.

##### *Weak vs strong norm conditions*

The weak norm condition advised respondents that "on the next page you will see a mock website that allows you to search for accommodation on your trip. This website lets you search and book from a wide range of accommodation alternatives. For your information, 9% of people to this site tend to book accommodation via the Airbnb sharing platform".

In contrast, the strong norm condition was varied by advising respondents that "80% of people visiting this site tend to book accommodation via the Airbnb sharing platform".

Following the presentation of the scenario, respondents were given a choice scenario and asked to state whether they were likely to: book a hotel, book via Airbnb, or were unsure about what they would book.

##### *Manipulation check*

Thinking about the accommodation booking scenario presented to you previously. Can you recall how many people had previously booked accommodation via Airbnb in similar situations?

- 9% of people
- 80% of people
- I was not advised
- I do not know/ can't recall

Table B1

Item measurement, factor loadings, and reliabilities.

	Behavioural Intention	Attitude	Social Identity	Innovati- veness	Time Pressure	Perceived Benefits	Perceived Risks
I intend to use sharing platforms often in the future	0.86						
I think that in the future I will participate more frequently in sharing platforms	0.90						
I can see myself increasingly using sharing platforms, if possible	0.90						
It is likely that I will use sharing platforms more often in the future	0.90						
Using sharing platforms is meaningful		0.66					
Using sharing platforms is a positive thing		0.77					
Using sharing platforms is a good thing		0.76					
Using sharing platforms makes sense		0.73					
Using sharing platforms is a better way of consumption		0.71					
Allows me to be part of a group of people with similar interests			0.71				
Improves my image in the community and society			0.82				
Makes me feel accepted by society			0.82				
I regularly purchase different variants of a product just for a change				0.74			
I am one of those people who try a new product firstly just after the launch				0.78			
I find it boring to use the same product (or brand) repetitively				0.63			
I like to try new and different products				0.69			
I always have the newest gadgets				0.75			
I am always busy					0.84		
I usually find myself pressed for time					0.82		
Using sharing platforms allows me to test the products/services						0.60	
Using sharing platforms provides me social recognition for using a new technology						0.60	
Using sharing platforms allows for less waste generation and greenhouse gases emission						0.73	
Using sharing platforms is compatible and consistent with values and beliefs, experiences, and needs of potential users						0.67	
Using sharing platforms is a more sustainable option						0.78	
Using sharing platforms is aligned with sustainability as a lifestyle						0.81	
I can't use the product or service when I need it							0.82
The product or service may not be suitable for use when I need it (i.e. condition, cleanliness)							0.75
Cronbach's alpha	0.97	0.92	0.86	0.81	0.70	0.84	0.73
% variance explained	20.2%	32.9%	43.0%	52.7%	58.9%	64.5%	69.8%

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