

THE STRANGER FACTOR: HOW FAMILIARITY INFLUENCES SHARING BEHAVIOUR ACROSS GENERATIONS

Pelech, P., Dědková, J.

Pavel Pelech / Technical University of Liberec, Faculty of Economics, Department of Marketing and Trade, Studentská 1402/2, Liberec, Czech Republic. Email: pavel.pelech@tul.cz (corresponding author)

Jaroslava Dědková / Technical University of Liberec, Faculty of Economics, Department of Marketing and Trade, Studentská 1402/2, Liberec, Czech Republic. Email: jaroslava.dedkova@tul.cz

Abstract

In the sharing economy, P2P platforms must identify the target audience for their marketing campaigns to spend their marketing budgets effectively. The challenge is to convince those who are afraid of sharing with strangers. We analyse participant behaviour by testing whether people's willingness to participate differs depending on whether they shared with known or unknown people. Our study focuses not only on sharing with strangers and exploring this phenomenon but also on sharing with people we know to verify that these people are generally willing to share idle assets. We define four groups of sharing economy participants depending on whether they know the counterparty: (1) active participants afraid of sharing with strangers, (2) active participants indifferent, (3) active participants preferring to share with strangers, and (4) inactive participants. Generation Z will most likely share their idle assets with strangers, while Generation Y does not mind who they share with. Generation X prefers to share with strangers but is also the most inactive. The demand side is more complicated: Generation Z does not care who they demand from, but other generations' preferences depend on the asset type. Again, Generation X is the most inactive. We assume that a generational perspective is essential for P2P marketing mix settings. We summarise new findings from not only a theoretical but also a practical perspective.

Implications for Central European audience: We provide a new perspective on sharing idle assets in the context of sharing with strangers. We emphasize a generational perspective and use cluster analysis to define four groups of participants from the perspective of sharing with strangers. P2P platforms operating in the sharing economy can gain more insights into Czech customers' consumer behaviour depending on whether they know the counterparty. The results can also benefit managers in other Central European countries. The findings can also contribute to the theoretical knowledge of the sharing economy and its implications for reducing marketing costs.

Keywords: Barriers; generation; marketing; P2P; sharing economy; stranger; trust

JEL Classification: D16, E21, M31

Introduction

The sharing economy, where resources or services are exchanged among private individuals, has received considerable recognition in academic discussions. This economic model, encompassing businesses such as Uber and Airbnb, empowers everyday consumers to function as sellers (Narasimhan et al., 2017). This sector's significance is expanding, not just financially but also in terms of commodities, with an increasing number of participants willing to share or offer their idle assets (Bednarikova & Kostalova, 2021; Tetreanova et al., 2022; Ritch, 2019).

Despite its inherent advantages (convenience and affordability), numerous barriers hinder engagement in the sharing economy (Narasimhan et al., 2017; Hong et al., 2019). Comprehending these barriers and devising strategies to surmount them is vital for the ongoing evolution and development of the sharing economy (Narasimhan et al., 2017).

Although several authors have called for further research on sharing economy barriers, their elimination and research directions (Belk, 2010; Eckhardt et al., 2019; Govindan et al., 2020; Lin et al., 2019), there are still only a few studies that address the sharing economy from the perspective of sharing with strangers, or what explicitly creates trust between people in the sharing economy. Based on secondary research, we have identified a knowledge gap that may reveal another challenge of the sharing economy: finding out whether people are concerned about sharing with strangers while being comfortable sharing with people they know. We decided to investigate this phenomenon from the demand side and supply side regarding what idle assets are involved.

Experts address barriers to the sharing economy from different perspectives. Tran et al. (2022) explored sharing with strangers, focusing on how self-disclosure affects consumers' trust formation, perception of risk and intention to behave in a certain way in the sharing economy. They found that when the owner of an idle asset knows in advance who will be allowed to share their asset, consumer trust increases and the perceived risk associated with sharing decreases. Trust in the platform to which one provides information about oneself is essential (Lazakidou et al., 2008). Nakamura et al. (2020) also discussed the sharing economy, particularly concerns about strangers. They delved into why participation in the sharing economy is low in Japan, attributing it mainly to people's apprehension about sharing idle assets with strangers. However, the study was only concerned with the demand side of idle assets, not the supply side. Tran et al. (2022), while also focusing on the demand side, linked it marginally to the supply side of idle assets. Mittendorf (2016) explored the concept of trust from a platform perspective, suggesting that for a booming sharing economy, customers must trust not only the provider of the idle asset but also the platform facilitating the sharing. Szabó and Gupta (2020) considered trust crucial in the sharing economy. They mentioned that while previously sharing was focused on family, friends or local communities, in a global world, sharing occurs with strangers who often do not speak the same language or live in a different country. Therefore, sharing is now based on digital identities—what individuals disclose about themselves online.

The quantitative research was conducted in the Czech Republic from December 2021 to March 2022. Six hundred and fifty-seven respondents participated in the research, evenly

split between Generation X, Generation Y and Generation Z. We asked respondents to identify, for nine groups of idle assets, their willingness to share these assets, not only from the perspective of a customer or owner but also regarding whether they are sharing with people they know or do not know. We consider the generational solution to this problem necessary because there is a shift a demographic, psychographic (Kotler & Armstrong, 2010) and age segmentation of customers, or a combination of these (Chaney et al., 2017), to generational segmentation. Generational segmentation appears more appropriate for identifying consumer motivations stemming from shared values and beliefs across generations (Khare et al., 2012). Eastman and Liu (2012) even suggested that consumption depends only on an individual's generational affiliation, without demographic factors (gender, income, education) playing any role. We focus on the P2P business model. On the one side is the owner of an asset and on the other is the customer who needs the asset (Codagnone & Martens, 2016). In between stands the platform that mediates the sharing (von Richthofen & von Wangenheim, 2021).

Theoretically, a generational perspective will be necessary for platforms and their marketing communications (Chaney et al., 2017) in the sharing economy. We provide new insights for platforms that mediate sharing from a managerial perspective. With these insights, platforms can better target marketing communications to groups willing to over-supply or over-demand. Experimental replication increases the universality of our findings in the sharing economy in different countries.

1 Literature Review

In this section, we focus on the barriers to the sharing economy. These barriers can be divided into two main groups. Based on the literature review, we find a research gap and formulate scientific hypotheses.

1.1 General barriers to sharing economy

The first group is the general barriers associated with the sharing economy. We can mention technical knowledge (Benoit et al., 2017), as the customer who needs the product will have to have some technical knowledge to exploit the potential of the platform and demand the sharing economy product. The object owner will presumably have to have the same technical proficiency as the customer demanding the product, although Benoit et al. (2017) did not explicitly state this assumption.

We also include barriers related to attitudes towards ownership based on country-specific characteristics. In some nations, we can observe a deep desire for ownership that may stem from a particular country's past (Druica et al., 2015; Demela & Mikula, 2015), limiting some people's willingness to participate in the sharing economy.

The barriers are also related to the platform through which P2P sharing is conducted. The platform must retain sufficient supply-side customers to satisfy the maximum demand (Akhmedova & Mas-Machuca, 2020). At the same time, it must build relationships concerning the platform and between the supply and demand sides. In addition, the customers will have to trust the platform through which they want to share the object. A platform's prerequisite for participation in the sharing economy will be sufficient knowledge of the market on which it has chosen to operate. The customers' loyalty is crucial for the functioning of the platforms. Customers must be loyal on both the supply and demand sides (Hazée et al., 2019).

Hazée et al. (2017) defined additional barriers preventing subjects from effectively participating in the sharing economy. At the same time, they set up procedures through which these barriers can be mitigated or removed with the help of these subjects. Another barrier the subjects perceive is their fear of becoming dependent on whether the product will be available (customers who need it) or whether the customers return it to them in time to use it (asset owners). Another barrier is the fear of difficulty in accessing the product they need. The fear that limits the subjects also relates to the fact that, in society, ownership of a product is a sign of a particular social status. We assume that subjects can mitigate or remove some barriers. They are related to the fact that subjects will have to change their behaviour – for example, they will have to postpone their need if the product is unavailable or postpone their need to a time when the product is cheaper. Furthermore, subjects are concerned that the product will be damaged or they will not understand how to use it.

Risk, in general, is an essential factor influencing consumer decision-making and behaviour (Godovykh et al., 2021). Rehman et al. (2019) described risks specific to the online environment, such as privacy, caution and online safety concerns. The sharing economy introduces further risks. For instance, Mao et al. (2020) discussed risks tied to an individual's personality traits and their level of seriousness and opportunism. Yi et al. (2020) also highlighted physical and security risks.

Spindeldreher et al. (2018) identified eight barriers through semi-structured interviews that could deter individuals from engaging in the sharing economy. These obstacles and barriers are viewed from both the asset owner's and the customer's perspectives. Their work addressed barriers, including effort expectancy, independence through ownership, lack of trust in participants and the platform, performance risk, physical risk, privacy risk, process risk and undesired social interaction (fear of strangers).

These barriers are often fundamental to subjects who prefer to refrain from participating in the sharing economy. For marketing communications, the sharing economy presents a significant challenge. The barriers to entry into the sharing economy are more significant than those preventing subjects from leaving the sharing economy (Bradley & Pargman, 2017).

1.2 Barriers to sharing with strangers

The second group of barriers is related to barriers that arise because the sharing economy often involves sharing with strangers. For the purpose of this paper, it is essential to explain who strangers (unknown people) are. We will use Georg Simmel's concept of the foreigner, mentioned for example by Rogers (1999). The stranger is described as an individual who is part of the system but has no substantial connection to this system. In our context, a stranger is any member of society but has no relationship to a specific individual. There are several types of articles that address this issue from different perspectives. We divide them into four subgroups.

Authors have looked at the risks of sharing with strangers in the first subgroup. Hong et al. (2019) examined the risk associated with sharing. Specifically, they focused on physical risk, which arises from security concerns and performance risk, which is associated with the customer not being satisfied with the quality of service. Privacy concerns were mentioned by Islam and Kundu (2018). They dealt with the risk associated with sharing real estate. This research took a technical direction.

The second subgroup of authors sees the key to removing the fear of sharing with strangers in the amount and transparency of information the supply and demand sides will have about each other. Venkateswaran et al. (2021) stated that the significant disadvantage of the sharing economy is the low identifiability of the providers of idle assets and the customers. The latter states that secrecy, or not sharing information about oneself, does not benefit any stakeholder. Not sharing information about oneself deepens distrust of the sharing economy and increases the risk that sharing of idle assets will not occur. Tran et al. (2022) focused on verifying the relationship between the similarity between the owner of an idle asset and the customer in terms of the amount of information they need to know about each other. If the two entities are similar, trust increases and the perceived sharing risk decreases. Shalvi et al. (2022) discussed the psychological aspects of sharing. Research suggests that transparent information about oneself provided by both the supply and demand sides is essential to overcome the fear of sharing with strangers. Transparent information creates a safe space for sharing. Nakamura et al. (2020) studied the barriers that prevent people from participating in the sharing economy. Fear of sharing with strangers was considered a significant barrier. The research suggested that platforms should focus on removing this barrier by encouraging sharing of supply and demand side information. The better the quality of this information, the better the platforms will be able to build trust between the customer and the provider of the idle asset (Ho & Tai, 2008). Building trust among consumers positively affects consumers' willingness to engage in a particular activity (Swani et al., 2021). Relationships can be strengthened through empathy, personalization and value creation based on analytical information (Mahmoud et al., 2017). The organization's transparency, authenticity and interaction are essential (Greenberg, 2010).

The third subgroup of authors considers community building to be necessary. The importance of community building is mentioned in studies such as Huurne et al. (2020). The findings suggest that when sharing occurs in a community, trust is increased. More substantial increases in trust have been found by research on the supply side, where owners of idle assets prefer to entrust them to someone in the community to share. The research also mentions that platforms should encourage the creation of communities, increasing the identification of the supply and demand sides. Although this research only focused on real estate sharing, it is necessary as community building can be vital to creating trust in the sharing economy. Sharing food with strangers was the focus of research by Veen (2019). The research also mentions the word community, which has a vital meaning. With community, anonymity is lost in the sharing process. However, it will be essential to balance participation in the community and maintaining the anonymity of the participants in the sharing economy (Milanova & Maas, 2017). Nakamura et al. (2020) supported the creation of communities too. Platforms should support the development of local or online communities.

The fourth subgroup of authors believes that platforms will need to foster the creation of trust between the supply and demand sides. This issue was addressed, for example, by Barbosa et al. (2020). The study mentioned that it would benefit platforms if they can understand their customers' needs in terms of trust. This trust also needs to be measured and monitored. It is necessary for platforms to carefully identify the customer groups that need to increase trust in the sharing economy through precisely targeted interventions. Rossmannek et al. (2022) supported customer segmentation. Barbosa et al. (2020) proposed a behavioural framework for measuring users' propensity to trust in the sharing economy. Szabó and Gupta (2020) also supported the creation of trust in online environments. The study mentioned the so-

called digital identity, i.e., the information one provides about oneself in the online environment. This information can be important for so-called reputation systems, which platforms can use to evaluate participants in the sharing economy and predict their future behaviour (Prada & Iglesias, 2020). Interestingly, Mittendorf (2016) suggested that it is not only the activity of platforms to address this issue that is important for building trust but also sharing economy participants' disposition to trust.

However, the mechanisms that create trust between participants in the sharing economy have yet to be fully explored (Cohen & Muñoz, 2016). Digital trust, or indications of it, is said to immediately increase consumer trust in relationships (Möhlmann, 2021). Peer reviews of sharing economy participants (Zervas et al., 2015) and pictures and textual information (Clemons et al., 2016) can help. Möhlmann (2021) identified six cues that help build trust among sharing economy participants: (1) the information content of participants' profiles; (2) participants' peer reviews; (3) the quality of platforms' customer service; (4) platforms' large user base; (5) the appearance of platforms' websites; and (6) security deposits. The first two trust features relate to people and the other four to the platform.

1.3 Research gap and research questions

All of this information is valuable for research question development. We know from previous research that one element that builds trust between people is the amount of information that people have about each other. However, we need to determine whether these substantively significant relationships are statistically significant because previous research has not compared the same group of respondents by asking whether it makes a difference to them whether they offer or demand an idle asset from someone they know or do not know. Existing research has focused purely on fact-checking, essential for building trust. However, it is yet to be investigated whether people are willing to participate in the sharing economy even if they do not have enough information about the other party. At the same time, previous research has not considered the generational perspective of respondents, which must be considered significant if the information is used by platforms for marketing purposes (Chaney et al., 2017). At the same time, authors have done minimal research focusing on a specific type of idle asset (e.g., Huurne et al., 2020; Islam & Kundu, 2018; Veen, 2019). Following these facts, we formulated the following research questions:

- *RQ1: Do generations differ in their willingness to supply their idle assets to people they know and those they do not know?*
- *RQ2: Do generations differ in their willingness to demand idle assets from people they know and those they do not know?*

There needs to be more information on the detailed segmentation of sharing economy participants in the marketing field. Previous studies have emphasized the significance of segmentation in marketing (Venkatesan, 2008; Caruso et al., 2018; Ližbetinová et al., 2019). Understanding the barriers to supply and demand for P2P platforms in the sharing economy is crucial to creating an effective marketing strategy. Any supply and demand imbalance may cause the gap on the market to be filled by another entity with better information about its customers (Rich, 2007). Platforms must adequately define the customer segment afraid of sharing with strangers. They need to target this segment with effective marketing communications to increase supply or demand on the P2P platform.

However, there needs to be more research to determine the size of the segment of customers with a large difference in their willingness to supply/demand idle assets from participants they know/do not know (fearful customers). Similarly, we need to determine the size of the segment of customers willing to supply/demand idle assets regardless of how well they know the counterparty (indifferent customers). Sharing economy platforms will have to spend higher marketing costs on a customer who is primarily afraid of sharing with strangers than on a customer who does not care. Understanding how consumers behave is essential for determining the market orientation, marketing strategies and marketing communication for consumer products and services. A company selects its target customers and the products it offers to them based on its knowledge of consumer behaviour (Kita et al., 2021). Based on this information, we have formulated the following research question:

- *RQ3: What segments of asset owners and customers exist concerning their relationship to supply or demand idle assets? Do certain generations dominate specific segments?*

Our research, therefore, took a different direction, where we tried to be more specific. Not only is there no comprehensive information in the literature on supply and demand in terms of whether it is supply and demand given that the counterparties know each other, but there needs to be more generational comparison, i.e., whether each generation approaches the issue of sharing differently.

2 Data and Methodology

In this section, we provide more information on the design of the questionnaire, its content, data collection, profile of the sample of respondents and methods used.

2.1 Questionnaire development

We used an anonymous structured online questionnaire to obtain information. In constructing the questionnaire, we relied on a literature search and similar research in marketing to ensure content validity (Colton & Covert, 2015; Yusoff et al., 2021). We analysed 36 questions related to supply and demand, to which four demographic questions were added (gender, year of birth, size of residence and educational attainment).

We structured the questionnaire into various separate parts. This paper works with the second and fourth parts of the questionnaire. In the second part, respondents first provided information about their mobility. Then, their theoretical willingness to supply and demand for selected asset groups was measured. We tested their theoretical willingness under the assumption that they know the counterparty and also assuming that they do not know the counterparty. In examining supply and demand, we selected these assets in light of research by other authors: (1) cars (Tian et al., 2019); (2) other small vehicles (Dill & McNeil, 2020); (3) special sports equipment or clothing (Kim & Lee, 2022); (4) garden equipment or tools (Claudelín et al., 2022); (5) real estate (apartment, house) (Xiang et al., 2022); (6) handbags, jewellery, watches (Liu et al., 2022); (7) gaming consoles, computer equipment, cameras (Kauffman & Naldi, 2020); (8) musical instruments (Turchet & Bouquet, 2021); (9) pets (Su et al., 2022). These authors have looked at one or more assets (mainly from the perspective of one aspect, e.g., supply, demand, different generations, other aspects). However, these assets were not examined concerning supply, demand and the three selected generations.

Respondents could express their willingness to supply and demand idle assets in the sharing economy on an ordinal scale as follows: (1) definitely not; (2) rather not; (4) rather yes; (5) definitely yes. We recoded these answers into numerical values. The questionnaire intentionally omitted the middle option (3) to get an authentic response about the willingness to offer or request an idle asset and to prevent a neutral answer (neither yes nor no). Some research supports using a middle point to prevent respondents from leaning towards one side (Furr, 2011) or suggests that surveys with a middle point have higher reliability (Adelson & McCoach, 2010). However, other research opposes using a midpoint, stating that it allows respondents to avoid answering the question (Sturgis et al., 2014). We agree with Lucian's (2016) view that it is impossible to have neutral attitudes because one automatically leans towards one side. Nadler et al. (2015) claimed that it is irrelevant in research whether a midpoint is included, as both types of scales produce similar results. Research by Østerås et al. (2008) showed that both four-item (no middle point) and five-item scales have good data quality and internal consistency. Research shows that some respondents may use a middle point as a dumping ground, i.e., the middle point may lead to incorrect data. Chyung et al. (2017) mentioned that it is better to omit this option if researchers need to minimize abuse of the middle point.

The fourth part included the demographic characteristics of our respondents. For the demographic characteristics, respondents chose four levels of education (elementary, secondary, higher professional and university). In addition, respondents chose the size of the municipality in which they live (up to 10,000 inhabitants, up to 50,000, up to 100,000 and over 100,000 inhabitants). We grouped the birth year into generational groups, i.e., respondents directly assigned themselves to a specific generation according to their birth year. The distribution of generations by year of birth is based on the classification used by Dimock (2022) in the Pew Research Center, i.e., generations are defined as follows: (1) Generation X: 1965–1980, (2) Generation Y: 1981–1996, (3) Generation Z: 1997–2012. For the last demographic question on gender, in addition to female and male, an option was added for respondents who did not want to give us this information.

2.2 Data collection and sample profile

We collected data for this research from December 2021 to March 2022 across the Czech Republic. During this period, we collected 794 completed questionnaires, of which we discarded 137 questionnaires because the respondents were older than we needed for this research or the respondents had failed to fill in all the fields. Details of the remaining 657 respondents are shown in Table 1.

Table 1 | Sample details

Demographic information		Generation X		Generation Y		Generation Z		Comparison (%)	
		N	%	N	%	N	%	Sample	Population
Gender	male	107	50.71	109	50.46	90	39.13	46.58	51.42
	female	103	48.82	104	48.15	138	0.87	52.51	48.58
	not important	1	0.47	3	1.39	2	60.00	0.91	x
City size	up to 10,000	79	37.44	42	19.44	66	28.70	28.46	52.12
	up to 50,000	61	28.91	56	25.93	46	20.00	24.81	20.91
	up to 100,000	33	15.64	58	26.85	30	13.04	18.42	8.03
	over 100,000	38	18.01	60	27.78	88	38.26	28.31	18.94
Education	elementary	0	0.00	0	0.00	5	2.17	0.76	12.00
	secondary	132	62.56	78	36.11	134	58.26	52.36	63.58
	higher professional	15	7.11	17	7.87	5	2.17	5.63	2.27
	university	64	30.33	121	56.02	86	37.39	41.25	22.15

Source: Authors; Census, 2021; Ministry of the Interior of the Czech Republic (2022)

The Czech Republic conducts a population census every ten years. The last census was in 2021. We used other statistics from the Ministry of Interior of the Czech Republic and CEIC for the same year so that the official data are from the same year, even though the research was conducted in 2022.

The data were collected via an online Google form. We used the snowball sampling method to reach respondents from Generations X, Y and Z. This method is helpful, as mentioned by Kirchherr and Charles (2018). First, we identified “seeds” from our neighbourhood to answer our online questionnaire. Then, we asked them to share the link or invitation with other people from their network who also meet our criteria and might be interested in participating. We repeated this process until we reached our desired respondent structure. The sample mirrors the gender structure of the Czech population (Generations X, Y, Z) and, to some extent, the education composition of the Czech population. In the case of education, the results are biased because we can find people 15+ in the official statistics of the Czech population, but they did not participate in our research. It was intended for people 18+.

Another statistical assessment of the population of the Czech Republic supported the sample representativeness. Official statistics from 2021 (CEIC, 2021) showed that 47.3% of the people over 25 years old who have primary education use ICT. The statistics for the secondary educated population report ICT use at 88.8%. For university-educated people, we identified 95.9% of users who use ICT. This fact means that the higher a person's education level, the more likely the population is to use ICT, i.e., to access the internet through a device and more easily participate in the sharing economy. While the internet enhances the scale and efficiency of this economy (Anwar, 2022; Quattrone et al., 2022), individuals' willingness to share resources forms its foundation. Without such willingness, the sharing economy would not be viable (Bednarikova & Kostalova, 2021).

Our sample almost reflects a generational perspective. According to official statistics (Census, 2021), 26.02% of the population in the Czech Republic in 2021 is from Generation Z (35.01% in our sample), 33.94% from Generation Y (32.88% in our sample) and 40.04% from Generation X (32.12% in our sample).

For settlement size, we had population statistics for 15+. We acknowledge that the agreement of the data is not excellent. However, we can observe from the structure of the different strata that the structure shows relative representativeness.

2.3 Methods

We verified the reliability of the data analysed for this paper. We tested the reliability for 36 questions, with the results of which the research works. There were nine types of underutilized assets at baseline. For each asset, we asked how willing respondents are to demand or offer this asset to people they know or do not know (2 supply/demand groups, with a known or unknown person parameter for each, i.e., 36 questions in total).

The data were evaluated in the statistical program IBM SPSS. We used descriptive statistics, Wilcoxon test and *k*-means cluster analysis.

3 Results

First, we describe the supply and demand sides using descriptive statistics (min, max, mean, standard deviation). The results are reported in Tables 2 and 3.

Table 2 | Supply side – descriptive statistics

Idle assets	Indicator	Generation X (supply to people)		Generation Y (supply to people)		Generation Z (supply to people)	
		unknown	known	unknown	known	unknown	known
1	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	1.97	3.39	2.49	3.98	1.90	3.81
	SD	1.183	1.360	1.447	1.135	1.067	1.136
2	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.65	3.77	3.09	4.25	3.09	4.47
	SD	1.377	1.256	1.429	1.026	1.265	0.785
3	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.31	3.49	2.65	3.94	2.36	3.97
	SD	1.318	1.385	1.403	1.215	1.279	1.156
4	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.89	3.87	3.25	4.27	3.55	4.53
	SD	1.301	1.241	1.419	1.084	1.262	0.768
5	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.35	3.26	2.72	3.76	2.29	3.52
	SD	1.431	1.458	1.515	1.299	1.340	1.311
6	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	1.79	2.81	2.06	3.26	1.80	3.12
	SD	1.027	1.443	1.247	1.466	1.038	1.427
7	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.13	3.34	2.31	3.79	2.24	3.79
	SD	1.192	1.440	1.295	1.224	1.247	1.215
8	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.36	3.25	2.52	3.68	2.73	4.00
	SD	1.266	1.444	1.401	1.324	1.447	1.231
9	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	1.98	2.82	2.22	3.22	1.39	2.57
	SD	1.402	1.585	1.606	1.630	0.795	1.451

Source: Authors

Table 3 | Demand side – descriptive statistics

Idle assets	Indicator	Generation X (supply to people)		Generation Y (supply to people)		Generation Z (supply to people)	
		unknown	known	unknown	known	unknown	known
1	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.94	3.68	3.33	4.04	3.35	4.37
	SD	1.384	1.352	1.423	1.149	1.332	0.871
2	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	3.36	3.97	3.57	4.19	3.94	4.52
	SD	1.370	1.274	1.409	1.115	1.130	0.769
3	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.87	3.61	3.03	3.92	2.97	3.99
	SD	1.390	1.331	1.461	1.238	1.432	1.206
4	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	3.27	3.88	3.52	4.15	4.05	4.48
	SD	1.444	1.332	1.421	1.153	1.120	0.880
5	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	3.07	3.56	3.33	3.82	3.43	4.03
	SD	1.454	1.394	1.500	1.311	1.427	1.200
6	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.12	2.82	2.23	2.96	2.25	3.31
	SD	1.138	1.399	1.313	1.553	1.255	1.462
7	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.65	3.24	2.78	3.62	3.31	4.06
	SD	1.352	1.405	1.464	1.399	1.337	1.098
8	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	2.56	3.11	2.67	3.35	3.15	3.83
	SD	1.356	1.446	1.500	1.490	1.434	1.276
9	min; max	1; 5	1; 5	1; 5	1; 5	1; 5	1; 5
	mean	1.85	2.44	1.70	2.40	2.10	3.01
	SD	1.088	1.451	1.076	1.522	1.303	1.593

Source: Authors

If the mean values are less than the missing middle value 3, respondents tend to lean towards not supplying/demanding to/from unknown/known people. If the mean values are greater than the missing middle value 3, respondents tend to lean towards supplying/demanding to/from unknown/known people.

To answer RQ1 and RQ2, we set these hypotheses:

- Null hypothesis H0 for RQ1: The median of differences between generations in their willingness to supply idle assets depending on whether they know the counterparty to whom they are lending the assets equals 0.
- Null hypothesis H0 for RQ2: The median of differences between generations in their willingness to demand idle assets depending on whether they know the counterparty from whom they are borrowing equals 0.

To test these hypotheses, we used the Wilcoxon test. The Wilcoxon test showed that for all the assets and all the generations, $p < 0.001$, i.e., we reject the null hypotheses set for RQ1 and RQ2 and accept the alternative hypotheses, i.e., the median of differences between generations in their willingness to supply/demand idle assets depending on whether they know the counterparty to whom they are lending/from whom they are borrowing the assets does not equal 0. The r value (effect size) varies from 0.4347 to 0.5287 on the supply side and from 0.2732 to 0.3943 on the demand side. The effect size $r \geq 0.10$ is considered a small effect, $r \geq 0.30$ is a medium effect and $r \geq 0.50$ is a large effect size (Rosenthal, 1994).

Tables 2 and 3 show that the average supply-side and demand-side differences vary depending on which idle asset and generation is involved. From a marketing perspective, it is essential to find out whether some groups are more similar than others, i.e., to segment the participants in the sharing economy in some way. We decided to use cluster analysis. One of the objectives of cluster analysis is to identify groups of similar observations within a dataset. To answer RQ3, we set this hypothesis according to Chouikhi et al. (2015) as follows:

- *H0: No subgroups of our respondents are closer to each other than other respondents.*

This null hypothesis means that the distances between any pair of respondents are randomly distributed and do not depend on their group membership. If we reject this hypothesis, we can conclude that some clusters of respondents are more similar to each other than to the rest of the dataset.

As mentioned above, we use cluster analysis (*k*-means) for this purpose, where we assume that there are four groups of sharing economy participants in terms of fear of sharing with strangers:

- Cluster 1: Active participants afraid of sharing with strangers,
- Cluster 2: Active participants indifferent,
- Cluster 3: Active participants preferring to share with strangers,
- Cluster 4: Inactive participants.

By active participants, we mean those participants whose average willingness to offer or demand is greater than the value of 3.

At the beginning of the cluster analysis, we defined four clusters with different initial cluster centres. IBM SPSS performed two iterations for each cluster analysis. The number of respondents (N) in each cluster and dominant generation (DG) is captured in Table 4 (supply side) and Table 5 (demand side).

Table 4 | Supply side – cluster analysis

Idle assets	Indicator	Cluster 1	Cluster 2	Cluster 3	Cluster 4
1	N	355	148	3	151
	DG; %	Z; 42.54	Y; 53.38	X; 66.67	X; 44.37
	min; max (unknown)	1; 2	4; 5	4; 4	1; 2
	min; max (known)	4; 5	4; 5	2; 2	1; 2
	mean (unknown)	1.57	4.26	4.00	1.25
2	mean (known)	4.22	4.69	2.00	1.67
	N	244	326	8	79
	DG; %	Z; 36.07	Z; 39.57	X; 50.00	X; 56.96
	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
	min; max (known)	4; 5	4; 5	2; 2	1; 2
3	mean (unknown)	1.69	4.22	4.13	1.46
	mean (known)	4.30	4.73	2.00	1.71
	N	284	219	7	147
	DG; %	Z; 41.54	Y; 40.64	X; 42.86	X; 43.54
	min; max (unknown)	1; 2	4; 5	4; 4	1; 2
4	min; max (known)	4; 5	4; 5	2; 2	1; 2
	mean (unknown)	1.62	4.18	4.00	1.34
	mean (known)	4.28	4.68	2.00	1.68
	N	183	394	75	5
	DG; %	X; 37.70	Z; 41.12	X; 60.00	X; 54.67
5	min; max (unknown)	1; 2	4; 5	4; 4	1; 2
	min; max (known)	4; 5	4; 5	2; 2	1; 2
	mean (unknown)	1.73	4.27	4.00	1.47
	mean (known)	4.38	4.69	2.00	1.64
	N	222	215	10	210
6	DG; %	Z; 41.00	Y; 41.86	X; 50.00	X; 39.05
	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.62	4.33	4.20	1.32
	mean (known)	4.21	4.65	1.80	1.70
7	N	232	100	3	322
	DG; %	Z; 40.52	Y; 45.00	Y; 66.67	X; 38.51
	min; max (unknown)	1; 2	4; 5	4; 4	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.66	4.21	4.00	1.30
8	mean (known)	4.32	4.67	1.67	1.68
	N	306	169	3	179
	DG; %	Z; 37.91	Z; 37.28	X; 66.67	X; 43.02
	min; max (unknown)	1; 2	4; 5	4; 4	1; 2
	min; max (known)	4; 5	4; 5	2; 2	1; 2
9	mean (unknown)	1.65	4.17	4.00	1.36
	mean (known)	4.29	4.60	2.00	1.68
	N	221	243	5	188
	DG; %	Z; 38.91	Z; 41.56	X; 80.00	X; 43.62
	min; max (unknown)	1; 2	4; 5	4; 4	1; 2
10	min; max (known)	4; 5	4; 5	2; 2	1; 2
	mean (unknown)	1.63	4.21	4.00	1.41
	mean (known)	4.30	4.63	2.00	1.67
	N	186	123	4	344
	DG; %	Z; 42.47	Y; 52.03	X/Z; 50.00	Z; 40.12
11	min; max (unknown)	1; 2	4; 5	4; 4	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.42	4.47	4.00	1.12
	mean (known)	4.25	4.75	1.75	1.45

Source: Authors

The cluster analysis on the supply side shows that Cluster 1 (active participants afraid of sharing with strangers) is dominated by Generation Z for most idle assets. Only for asset number 4, Generation X dominates with a share of 37.71%, with Generation Z in second place with a share of 31.69%. This cluster is characterised by a lower willingness to supply idle assets to people unknown to the asset owner. At the same time, this cluster is characterised by a higher willingness to supply idle assets to those known to the owner.

The generational distribution differs in Cluster 2 (active participants indifferent). It is dominated by Generation Z and Generation Y, for whom we can see minimal differences between their willingness to supply idle assets to known or unknown people. For this cluster, it is evident that their indifference depends on the specific idle asset. While Generation Z does not care whether it will supply assets 2, 4, 7 or 8 to known or unknown people, Generation Y shows this indifference for assets 1, 3, 5, 6 and 9. Therefore, for this cluster, the generational segmentation must be complemented by segmentation by the type of asset supplied.

Cluster 3 (active participants preferring to share with strangers) is interesting from both theoretical and practical perspectives. These idle asset owners would be willing to share them on condition that they supply them to share with people they do not know. This group of asset owners has never been mentioned in any of the analysed literature. Hence, this research is vital as we have identified a group where Generation X predominates that would be willing to supply idle assets under certain conditions. Only for asset 6 was Generation Y predominant and for asset 9, Generations X and Z were predominant.

Cluster 4 (inactive participants) supports the authors' previous research in which we identified Generation X as the least likely to supply idle assets. For this generation, this research extends the knowledge about this generation and anchors theoretical and practical insights in the sense that Generation X will be more likely an inactive participant in the sharing economy.

Table 5 | Demand side – cluster analysis

Idle assets	Indicator	Cluster 1	Cluster 2	Cluster 3	Cluster 4
1	N	183	363	14	97
	DG; %	Z; 39.89	Z; 38.57	X; 50.00	X; 51.55
	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.80	4.34	4.36	1.49
2	mean (known)	4.20	4.67	1.71	1.69
	N	118	456	11	72
	DG; %	X/Y; 35.59	Z; 40.57	Y; 54.55	X; 51.39
	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
3	mean (unknown)	1.83	4.42	4.27	1.49
	mean (known)	4.25	4.69	1.82	1.65
	N	209	299	16	133
	DG; %	Z; 37.80	Z; 35.45	X; 37.50	X; 40.60
	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
4	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.78	4.37	4.13	1.49
	mean (known)	4.26	4.63	1.75	1.68
	N	119	440	20	78
	DG; %	X; 37.82	Z; 41.59	Z; 40.00	X; 52.56
5	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.83	4.47	4.25	1.44
	mean (known)	4.24	4.72	1.85	1.63
	N	139	354	27	137
6	DG; %	Y; 35.97	Z; 39.55	Y; 55.56	X; 43.07
	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.81	4.45	4.52	1.51
	mean (known)	4.21	4.63	1.74	1.69
7	N	187	139	11	320
	DG; %	Z; 45.99	Z; 36.69	Z; 45.45	X; 37.19
	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.76	4.29	4.27	1.48
8	mean (known)	4.34	4.60	1.73	1.64
	N	177	288	21	171
	DG; %	Y; 36.16	Z; 44.79	X; 42.86	X; 45.03
	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
9	mean (unknown)	1.81	4.35	4.10	1.53
	mean (known)	4.20	4.61	1.81	1.69
	N	150	270	12	225
	DG; %	Z; 35.33	Z; 45.56	X; 50.00	X; 40.89
	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
10	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.77	4.39	4.25	1.51
	mean (known)	4.20	4.59	1.67	1.65
	N	167	97	11	382
	DG; %	Z; 43.71	Z; 49.48	X; 54.55	Y; 36.65
11	min; max (unknown)	1; 2	4; 5	4; 5	1; 2
	min; max (known)	4; 5	4; 5	1; 2	1; 2
	mean (unknown)	1.66	4.30	4.27	1.31
	mean (known)	4.28	4.66	1.64	1.42

Source: Authors

The analysis of the demand-side clusters shows that Cluster 1 (active participants afraid of sharing with strangers) is very complicated from a generational perspective. Here, we find different generations dominating according to the type of idle asset.

Cluster 2 (active participants indifferent) is simpler from this perspective. This cluster is dominated by Generation Z regardless of the type of asset demanded, i.e., we find more demanders in Generation Z who do not care whether they borrow the asset from a stranger or a friend.

Cluster 3 (active participants preferring to share with strangers) behaves similarly to Cluster 1. Here, we find different generations dominating according to the type of idle asset.

Cluster 4 (inactive participants) supports the authors' previous research in which we identified Generation X as the least willing to supply idle assets. This research extends the findings for this generation. It anchors the theoretical and practical insights that Generation X is more likely to be an inactive participant in the sharing economy. Only for asset 9 did we identify Generation Y as the dominant generation (36.65%), but Generation X is second with a difference of 0.013%.

4 Discussion

This section will discuss the implications and limitations of the research, as well as directions for future research.

4.1 Research implications

Our study fills a knowledge gap. The analysed previous research did not address the generational point of view or the segmentation of customers regarding their concern about sharing with strangers or whether people perceive a difference between sharing an idle asset with someone they know or do not know. For that reason, it was necessary to describe the groups of participants in the sharing economy regarding their concerns about sharing with strangers.

We have identified four groups of participants on both the supply and demand sides: (1) active participants afraid of sharing with strangers, (2) active participants indifferent, (3) active participants preferring to share with strangers and (4) inactive participants. For some groups (clusters), we demonstrated the dominance of one generation for all the analysed assets. Other groups (clusters) were complicated regarding generations and idle assets, i.e., dominance of one generation within the cluster and analysed assets did not show.

We first summarize the results for the supply side. Cluster 1 (active participants afraid of sharing with strangers) consists mainly of representatives of Generation Z (except for asset number 4, where the supply consists mainly of Generation X). Cluster 2 (active participants indifferent) shows that Generation Z (assets 2, 4, 7 and 8) and Generation Y (assets 1, 3, 5, 6 and 9) are mainly indifferent. Cluster 3 (active participants preferring to share with strangers) is attractive not only because it mainly consists of representatives of Generation X (except assets 6 and 9) but also because we did not find information in the available literature that there is a group of people who prefer sharing with strangers, which our research proves. Cluster 4 (inactive participants) consists mainly of representatives of Generation X, which agrees with the authors' previous research.

Next, we summarize the results for the demand side. Cluster 1 (active participants afraid of sharing with strangers) is very complicated, as the willingness of people who fear strangers to request an asset varies by asset type. We cannot unequivocally establish generational dominance in this cluster. Cluster 2 (active participants indifferent) is more straightforward, as Generation Z predominates here. Cluster 3 (active participants preferring to share with strangers) is also complicated, where the type of shared asset depends again. Cluster 4 (inactive participants), just like on the supply and demand sides, is made up mainly of Generation X.

It was necessary to show that people are generally afraid to engage in the sharing economy because they do not want to share idle assets with strangers, even though they have no problem sharing them with people they know. Therefore, we can consider this research necessary to combine known theoretical foundations with new knowledge. These findings create a tangible link between the sharing economy and marketing.

Another strength of this research is that it reinforces the claim that the sharing economy has several barriers, the most important of which is the sharing economy's fear of strangers. Previous research has looked at this barrier in general terms without linking it more closely to respondents' willingness to share idle assets. This research suggests that if sharing economy participants know enough about each other not to perceive the counterparty as a stranger, their willingness to participate in the sharing economy will increase. These findings are valuable for platforms operating or planning to operate in the sharing economy and the practitioner community as they help theoretically anchor the sharing economy.

4.2 Limitations and future research

Our research is subject to constraints that open the way for future research. The first limitation is that we need to know accurately what information people need to know to consider the opposing party a known party, not a stranger. This limitation can be the subject of further research, where we can investigate what specific information about the counterparty increases people's willingness to participate in the sharing economy.

We also see a limiting factor of this research in focusing only on the three selected generations of respondents. Chaney et al. (2017) argued that the generational perspective will be necessary for platforms and their marketing communications in the sharing economy. However, we did not determine whether other socio-demographic factors influence the willingness to supply or demand idle assets.

Another limiting condition is that the research was conducted in the Czech Republic. In general, European culture is known to have a high degree of uncertainty avoidance, whereas Asian culture has a low degree of uncertainty avoidance. Research in Europe and Asia will likely provide different results and the differences between supply and demand for known and unknown people will not be as marked in Asia (Ndubisi et al., 2012).

We are aware of the subsequent limitations of this study. We note that this is not a fully representative survey based on which the study results can be generalized; instead, they only apply to a given sample of respondents. At the same time, we cannot determine the return rate of the questionnaires as the survey was conducted using the snowball method.

There are a large number of authors who look at the issue of the distribution of generations by year of birth in different ways. The period when Generation X was born can include the following years: 1965–1976 (Ting et al., 2017), 1961–1979 (Gurău, 2012), 1965–1976 (Norum, 2003), 1961–1981 (Fishman, 2016), 1965–1980 (Alemi et al., 2018), 1965–1980 (Dimock, 2022). The period when Generation Y was born may include the following years: 1977–1994 (Ting et al., 2017), 1980–1999 (Gurău, 2012), 1977–1987 (Norum, 2003), 1982–2000 (Fishman, 2016), 1981–1997 (Alemi et al., 2018), 1981–1996 (Dimock, 2022). The period when Generation Z was born may include the following years: 1995–2012 (Jaleniauskiene & Juceviciene, 2015) and 1997–2012 (Dimock, 2022).

It is important to mention another limiting factor of our research. The limitation of this research may be that some assets are conceived as groups of assets and a person may have a different willingness to share each asset. This limiting factor also opens up the scope for further research.

The last limitation is that the research is a year and a half old and trends in this field can change significantly over such a period. The post-COVID period, in particular, has had far-reaching impacts across various sectors, potentially influencing the results of this study.

Conclusions

The results of this study show that participants in the sharing economy on the supply and demand sides have different willingness to offer or demand idle assets depending on whether it is a person they know or do not know. Thus, we confirm the research of several other authors (e.g., Venkateswaran et al., 2021; Tran et al., 2022; Shalvi et al., 2022; Nakamura et al., 2020; Ho & Tai, 2008; Swani et al., 2021; Mahmoud et al., 2017; Greenberg, 2010). However, these authors did not investigate whether these concerns about sharing with strangers are the same or different for individual assets or different groups of respondents of different age. Our research shows that the fear of sharing with strangers applies to all generations (X, Y, Z) and all assets studied, supported by statistical calculations.

In the future, it will be essential to identify whether the trust-enhancing mechanisms among sharing economy participants described by Cohen and Muñoz (2016) are perceived equally by people depending on their age or the generation to which they belong. This information will be needed for marketing communication platforms to use targeted marketing messages to help remove distrust in the sharing economy, create and correctly apply mechanisms that encourage entry into the sharing economy and support business in general (Kolouchová & Rožek, 2014).

The differences in supply and demand that we have examined regarding sharing with people known and unknown (strangers), show that managing the supply-demand relationship may be vital to increasing the numbers of participants in the sharing economy. This will enable the sharing economy to perform better its essential function of conserving resources, reducing waste and supporting sustainability.

Acknowledgement

Funding: This article was supported by a dedicated undergraduate research grant under the student projects SGS-2022-1049 and SGS-2023-1320.

Conflict of interests: The authors do not have any conflict of interest.

References

- Adelson, J. L., & McCoach, D. B. (2010). Measuring the mathematical attitudes of elementary students: The effects of a 4-point or 5-point Likert-type scale. *Educational and Psychological Measurement*, 70(5), 796–807. <https://doi.org/10.1177/0013164410366694>.
- Akhmedova, A., Marimon, F., & Mas-Machuca, M. (2020). Winning strategies for customer loyalty in The sharing economy: A mixed-methods study. *Journal of Business Research*, 112, 33–44. <https://doi.org/10.1016/j.jbusres.2020.02.046>.
- Alemi, F., Circella, G., Handy, S., & Mokhtarian, P. (2018). What influences travelers to use uber? exploring the factors affecting the adoption of on-demand ride services in California. *Travel Behaviour and Society*, 13, 88–104. <https://doi.org/10.1016/j.tbs.2018.06.002>.
- Anwar, S. T. (2022). The sharing economy and collaborative consumption: Strategic issues and global entrepreneurial opportunities. *Journal of International Entrepreneurship*, 21(1), 60–88. <https://doi.org/10.1007/s10843-022-00323-0>.
- Barbosa, N. M., Sun, E., Antin, J., & Parigi, P. (2020). Designing for trust: A behavioral framework for sharing economy platforms. *Proceedings of The Web Conference 2020* (pp. 2133–2143). <https://doi.org/10.1145/3366423.3380279>.
- Bednarikova, M., & Kostalova, J. (2021). Sharing economy in the Czech Republic. 19th International Scientific Conference on Hradec Economic Days. Hradec Králové: University of Hradec Králové. <https://doi.org/10.36689/uhk/hed/2021-01-004>.
- Belk, R. (2010). Sharing. *Journal of Consumer Research*, 36(5), 715–734. <https://doi.org/10.1086/612649>.
- Benoit, S., Baker, T. L., Bolton, R. N., Gruber, T. & Kandampully, J. (2017). A triadic framework for collaborative consumption (CC): Motives, activities and Resources & capabilities of actors. *Journal of Business Research*, 79, 219–227. <https://doi.org/10.1016/j.jbusres.2017.05.004>.
- Bradley, K., & Pargman, D. (2017). The sharing economy as the Commons of the 21st Century. *Cambridge Journal of Regions, Economy and Society*, 10(2), 231–247. <https://doi.org/10.1093/cjres/rsx001>.
- Caruso, G., Gattone, S. A., Fortuna, F., Di Battista, T. (2018). Cluster Analysis as a Decision-Making Tool: A Methodological Review. In: Bucciarelli, E., Chen, SH., Corchado, J. (eds) Decision Economics: In the Tradition of Herbert A. Simon's Heritage. DCAI 2017. Advances in Intelligent Systems and Computing, 618. Springer, Cham. https://doi.org/10.1007/978-3-319-60882-2_6.
- CEIC (2021). Czech Republic ICT usage: Internet users: Age: 16 and above. CEIC. Retrieved on 29 August 2022 from <https://www.ceicdata.com/en/czech-republic/information-and-communication-technology-usage/ict-usage-internet-users-age-16-and-above>.
- Claudelin, A., Tuominen, K., & Vanhamäki, S. (2022). Sustainability Perspectives of the sharing economy: Process of creating a library of things in Finland. *Sustainability*, 14(11), 6627. <https://doi.org/10.3390/su14116627>.

- Clemons, E. K., Wilson, J., Matt, C., Hess, T., Ren, F., Jin, F., & Koh, N. S. (2016). Global differences in online shopping behavior: Understanding factors leading to trust. *Journal of Management Information Systems*, 33(4), 1117–1148. <https://doi.org/10.1080/07421222.2016.1267531>.
- Census 2021. Vzdělání | Sčítání 2021. Retrieved on 29 August 2022 from <https://www.czso.cz/csu/scitani2021/vzdelani>.
- Codagnone, C., & Martens, B. (2016). Scoping the sharing economy: Origins, definitions, impact and regulatory issues. *Institute for Prospective Technological Studies Digital Economy Working Paper 2016/01*. <https://doi.org/10.2139/ssrn.2783662>.
- Cohen, B., & Muñoz, P. (2016). Sharing cities and sustainable consumption and production: Towards an integrated framework. *Journal of Cleaner Production*, 134, 87–97. <https://doi.org/10.1016/j.jclepro.2015.07.133>.
- Colton, D., & Covert, R. W. (2015). Designing and constructing instruments for Social Research and evaluation. San Francisco: John Wiley & Sons.
- Demela, J., & Mikula, Š. (2015). Private property in Communist Czechoslovakia. *Review of Economic Perspectives*, 15(3), 327–343. <https://doi.org/10.1515/revecp-2015-0023>.
- Dill, J., & McNeil, N. (2020). Are shared vehicles shared by all? A review of equity and Vehicle Sharing. *Journal of Planning Literature*, 36(1), 5–30. <https://doi.org/10.1177/0885412220966732>.
- Dimock, M. (2022). Defining generations: Where millennials end and generation Z begins. Pew Research Center. Retrieved on 29 August 2022 from <https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/>.
- Druica, E., Valsan, C., & Ianole, R. (2015). Residential Real Estate in Europe: An exploration of common risk factors. *Review of Economic Perspectives*, 15(4), 413–429. <https://doi.org/10.1515/revecp-2015-0028>.
- Eastman, J. K., & Liu, J. (2012). The impact of generational cohorts on status consumption: An exploratory look at generational cohort and demographics on status consumption. *Journal of Consumer Marketing*, 29(2), 93–102. doi:10.1108/07363761211206348.
- Eckhardt, G. M., Houston, M. B., Jiang, B., Lamberton, C., Rindfleisch, A., & Zervas, G. (2019). Marketing in the sharing economy. *Journal of Marketing*, 83(5), 5–27. <https://doi.org/10.1177/0022242919861929>.
- Fishman, A. A. (2016). How generational differences will impact America's aging workforce: Strategies for dealing with aging millennials, Generation X and Baby Boomers. *Strategic HR Review*, 15(6), 250–257. <https://doi.org/10.1108/shr-08-2016-0068>.
- Furr, M. (2011). *Scale construction and psychometrics for social and personality psychology*. London: SAGE Publications Ltd.
- Godovykh, M., Pizam, A., & Bahja, F. (2021). Antecedents and outcomes of Health Risk Perceptions in tourism, following the covid-19 pandemic. *Tourism Review*, 76(4), 737–748. <https://doi.org/10.1108/tr-06-2020-0257>.
- Govindan, K., Shankar, K. M., & Kannan, D. (2020). Achieving Sustainable Development Goals through identifying and analyzing barriers to industrial sharing economy: A framework development. *International Journal of Production Economics*, 227, 107575. <https://doi.org/10.1016/j.ijpe.2019.107575>.
- Greenberg, P. (2010). The impact of CRM 2.0 on customer insight. *Journal of Business & Industrial Marketing*, 25(6), 410–419. <https://doi.org/10.1108/08858621011066008>.

- Gurău, C. (2012). A Life-stage analysis of Consumer Loyalty Profile: Comparing Generation X and millennial consumers. *Journal of Consumer Marketing*, 29(2), 103–113. <https://doi.org/10.1108/07363761211206357>.
- Hazée, S., Delcourt, C., & Van Vaerenbergh, Y. (2017). Burdens of access: Understanding Customer Barriers and Barrier-Attenuating Practices in Access-Based Services. *Journal of Service Research*, 20(4), 441–456. <https://doi.org/10.1177/1094670517712877>.
- Hazée, S., Van Vaerenbergh, Y., Delcourt, C., & Warlop, L. (2019). Sharing goods? yuck, no! an investigation of consumers' contamination concerns about access-based services. *Journal of Service Research*, 22(3), 256–271. <https://doi.org/10.1177/1094670519838622>.
- Ho, C.-F., & Tai, Y.-M. (2008). Effects of information sharing on corporate customer's attitude towards loyalty. 2008 4th International Conference on Wireless Communications, Networking and Mobile Computing (pp. 1-4). Dalian, China. <https://doi.org/10.1109/wicom.2008.2816>.
- Hong, J. H., Kim, B. C., & Park, K. S. (2019). Optimal Risk Management for the sharing economy with Stranger Danger and Service Quality. *European Journal of Operational Research*, 279(3), 1024–1035. <https://doi.org/10.1016/j.ejor.2019.06.020>.
- Huurne, M. T., Ronteltap, A., & Buskens, V. (2020). Sense of community and trust in the sharing economy. *Tourism Analysis*, 25(1), 43–61. <https://doi.org/10.3727/108354220x15758301241639>.
- Chaney, D., Touzani, M., & Slimane, K. B. (2017). Marketing to the (new) generations: summary and perspectives. *Journal of Strategic Marketing*, 25(3), 179-189. <https://doi.org/10.1080/0965254X.2017.1291173>.
- Chouikhi, H., Charrad, M., & Ghazzali, N. (2015). A comparison study of clustering validity indices. 2015 Global Summit on Computer & Information Technology (GSCIT) (pp. 1-4). Sousse, Tunisia. <https://doi.org/10.1109/gscit.2015.7353330>.
- Chyung, S. Y., Roberts, K., Swanson, I., & Hankinson, A. (2017). Evidence-based survey design: The use of a midpoint on the Likert scale. *Performance Improvement*, 56(10), 15–23. <https://doi.org/10.1002/pfi.21727>.
- Islam, M. N., & Kundu, S. (2018). Poster abstract: Preserving IOT privacy in sharing economy via smart contract. 2018 IEEE/ACM Third International Conference on Internet-of-Things Design and Implementation (IoTDI) (pp. 296-297). Orlando, FL, USA. <https://doi.org/10.1109/iotdi.2018.00047>.
- Jaleniauskiene, E., & Juceviciene, P. (2015). Reconsidering University educational environment for the learners of generation Z. *Social Sciences*, 88(2). <https://doi.org/10.5755/j01.ss.88.2.12737>.
- Kauffman, R. J., & Naldi, M. (2020). Research directions for sharing economy issues. *Electronic Commerce Research and Applications*, 43, 100973. <https://doi.org/10.1016/j.elerap.2020.100973>.
- Khare, A., Khare, A., & Singh, S. (2012). Attracting shoppers to shop online—challenges and opportunities for the Indian retail sector. *Journal of Internet Commerce*, 11(2), 161–185. doi:10.1080/15332861.2012.689570.
- Kim, S., & Lee, K. (2022). Influence of the characteristics of sports sharing economy services on intention of use: The mediating effect of Consumer Attitude and Trust. *Social Sciences*, 11(2), 57. <https://doi.org/10.3390/socsci11020057>.
- Kirchherr, J., & Charles, K. (2018). Enhancing the sample diversity of Snowball Samples: Recommendations from a research project on anti-dam movements in Southeast Asia. *PLOS ONE*, 13(8). <https://doi.org/10.1371/journal.pone.0201710>.

- Kita, P., Žambochová, M., Strelinger, J., & Kitová Mazalánová, V. (2021). Consumer behaviour of Slovak households in the sphere of organic food in the context of sustainable consumption. *Central European Business Review*, 10(1), 1–17. <https://doi.org/10.18267/j.cebrev.256>.
- Kolouchová, D., & Rožek, J. (2014). Is it possible to improve the relationship between marketing and sales? *Central European Business Review*, 3(4), 30–36. <https://doi.org/10.18267/j.cebrev.100>.
- Kotler, P., & Armstrong, G. M. (2010). *Principles of marketing*. Pearson Education India.
- Lazakidou, A., Ilioudi, S., & Siassiakos, K. (2008). Electronic customer relationship management applications and consumer trust in e-commerce. *International Journal of Electronic Customer Relationship Management*, 2(3), 262. <https://doi.org/10.1504/ijecrm.2008.020411>.
- Lin, M., Miao, L., Wei, W., & Moon, H. (2019). Peer engagement behaviors: Conceptualization and research directions. *Journal of Service Research*, 22(4), 388–403. <https://doi.org/10.1177/1094670519865609>.
- Liu, N., Lin, J., Guo, S., & Shi, X. (2022). Fashion platform operations in the sharing economy with digital technologies: Recent development and real case studies. *Annals of Operations Research*, 329, 1175–1195. <https://doi.org/10.1007/s10479-022-04544-3>.
- Ližbetinová, L., Štarchoň, P., Lorincová, S., Weberová, D., & Průša, P. (2019). Application of cluster analysis in marketing communications in small and medium-sized enterprises: An empirical study in the Slovak Republic. *Sustainability*, 11(8), 2302. <https://doi.org/10.3390/su11082302>.
- Lucian, R. (2016). Rethinking the use of Likert scale: tradition or technical choice? *Brazilian Journal of Marketing, Opinion, and Media Research*, 9(1), 11–26.
- Mahmoud, M. A., Kastner, A. N., & Lartey, J. O. (2017). Internet-based Relationship Marketing: A sub-Saharan African perspective. *Journal of Relationship Marketing*, 16(3), 179–196. <https://doi.org/10.1080/15332667.2017.1349555>.
- Mao, Z. (Eddie), Jones, M. F., Li, M., Wei, W., & Lyu, J. (2020). Sleeping in a stranger's home: A trust formation model for Airbnb. *Journal of Hospitality and Tourism Management*, 42, 67–76. <https://doi.org/10.1016/j.jhtm.2019.11.012>.
- Milanova, V., & Maas, P. (2017). Sharing intangibles: Uncovering individual motives for engagement in a sharing service setting. *Journal of Business Research*, 75, 159–171. <https://doi.org/10.1016/j.jbusres.2017.02.002>.
- Ministry of the Interior of the Czech Republic. (2022). Informativní počty obyvatel v obcích – Ministerstvo vnitra České republiky. Retrieved on 29 August 2022 from <https://www.mvcr.cz/clanek/informativni-pocty-obyvatel-v-obcich.aspx>.
- Mittendorf, C. (2016). What Trust means in the Sharing Economy: A provider perspective on Airbnb.com. 22nd Americas Conference on Information Systems (AMCIS) (pp. 1-10). San Diego, California, USA.
- Möhlmann, M. (2021). Unjustified Trust beliefs: Trust conflation on sharing economy platforms. *Research Policy*, 50(3), 104173. <https://doi.org/10.1016/j.respol.2020.104173>.
- Nadler, J. T., Weston, R., & Voyles, E. C. (2015). Stuck in the Middle: The Use and Interpretation of Mid-Points in Items on Questionnaires. *The Journal of General Psychology*, 142(2), 71–89. <https://doi.org/10.1080/00221309.2014.994590>.
- Nakamura, H., Abe, N., & Mizunoya, T. (2020). Factors inhibiting the use of sharing economy services in Japan. *Journal of Cleaner Production*, 278, 123981. <https://doi.org/10.1016/j.jclepro.2020.123981>.

- Narasimhan, C., Papatla, P., Jiang, B., Kopalle, P. K., Messinger, P. R., Moorthy, S., Proserpio, D., Subramanian, U., Wu, C., & Zhu, T. (2017). Sharing Economy: Review of Current Research and Future Directions. *Customer Needs and Solutions*, 5(1-2), 93-106. <https://doi.org/10.1007/s40547-017-0079-6>.
- Ndubisi, N. O., Malhotra, N. K., Ulas, D., & Ndubisi, G. C. (2012). Examining uncertainty avoidance, relationship quality, and customer loyalty in two cultures. *Journal of International Consumer Marketing*, 24(5), 320–337. <https://doi.org/10.1080/08961530.2012.741477>.
- Norum, P. S. (2003). Examination of generational differences in household apparel expenditures. *Family and Consumer Sciences Research Journal*, 32(1), 52–75. <https://doi.org/10.1177/1077727x03255901>.
- Østerås, N., Gulbrandsen, P., Garratt, A., Benth, J., Dahl, F. A., Natvig, B., & Brage, S. (2008). A randomised comparison of a four- and a five-point scale version of the Norwegian Function Assessment Scale. *Health and Quality of Life Outcomes*, 6(1), 14. <https://doi.org/10.1186/1477-7525-6-14>.
- Prada, A., & Iglesias, C. A. (2020). Predicting reputation in the sharing economy with Twitter Social Data. *Applied Sciences*, 10(8), 2881. <https://doi.org/10.3390/app10082881>.
- Quattrone, G., Kusek, N., & Capra, L. (2022). A global-scale analysis of the Sharing Economy Model – an Airbnb case study. *EPJ Data Science*, 11(1). <https://doi.org/10.1140/epjds/s13688-022-00349-3>.
- Rehman, Z. U., Baharun, R., & Salleh, N. Z. (2019). Antecedents, consequences, and reducers of perceived risk in social media: A systematic literature review and directions for further research. *Psychology & Marketing*, 37(1), 74–86. <https://doi.org/10.1002/mar.21281>.
- Rich, M. K. (2007). Managing business marketing and sales: An international perspective. *Journal of Business & Industrial Marketing*, 22(5). <https://doi.org/10.1108/jbim.2007.08022eae.001>.
- Ritch, E. L. (2019). „From a mother to another“: creative experiences of sharing used children’s clothing. *Journal of Marketing Management*, 35(7-8), 770-794. <https://doi.org/10.1080/0267257X.2019.1602555>.
- Rogers, E. M. (1999). Georg Simmel's concept of The stranger and intercultural communication research. *Communication Theory*, 9(1), 58–74. <https://doi.org/10.1111/j.1468-2885.1999.tb00162.x>.
- Rosenthal, R. (1994). *Parametric Measures of Effect Size*. In: Cooper H, Hedges LV, Valentine JC. The Handbook of Research Synthesis. New York: Russell Sage Foundation, 231-244.
- Rossmannek, O., David, N., & Schramm-Klein, H. (2022). Suppliers' loyalty to their sharing platform: The influence of multiple roles. *Journal of Business Research*, 143, 272–281. <https://doi.org/10.1016/j.jbusres.2022.01.072>.
- Shalvi, S., Mol, J. M., Molho, C., Vu, L., Leib, M., & Soraperra, I. (2022). Psychological science for a responsible sharing economy. *Current Opinion in Psychology*, 44, 100–105. <https://doi.org/10.1016/j.copsyc.2021.08.032>.
- Spindeldreher, K., Fröhlich, J., Schlagwein, D. (2018). I Won't share!: Barriers to participation in the sharing economy. In *Proceedings of the 22nd Pacific Asia Conference on Information Systems – Opportunities and Challenges for the Digitized Society: Are We Ready?* PACIS 2018 (pp.1-8). Yokohama, Japan.
- Sturgis, P., Roberts, C., & Smith, P. (2012). Middle alternatives revisited. *Sociological Methods & Research*, 43(1), 15–38. <https://doi.org/10.1177/0049124112452527>.

- Su, B.-C., Lin, H., & Wang, Y.-M. (2022). The business model of digital platforms for the Sharing Economy: Intensive Case Study Methodology for Rover.com Pet Boarding Platform. *Sustainability*, 14(23), 16256. <https://doi.org/10.3390/su142316256>.
- Swani, K., Milne, G. R., & Slepchuk, A. N. (2021). Revisiting trust and privacy concern in consumers' perceptions of marketing information management practices: Replication and extension. *Journal of Interactive Marketing*, 56, 137–158. <https://doi.org/10.1016/j.intmar.2021.03.001>.
- Szabó, K., & Gupta, G. S. (2020). In trust we thrive: What drives the sharing economy? *Corvinus Journal of Sociology and Social Policy*, 11(2), 49–68. <https://doi.org/10.14267/cjssp.2020.2.3>.
- Tetrevova, L., Kopriva, J., & Zahorska, A. (2022). Sharing Economy and Corporate Social Responsibility: Systematic Literature Review. *12th International Scientific Conference "Business and Management 2022."* (pp. 242-250), Vilnius, Lithuania. <https://doi.org/10.3846/bm.2022.734>.
- Tian, J. J., Xie, D. F. & Ding, F. J. (2019). Mining Spatiotemporal Characteristics of Car-sharing Demand. *Journal of Physics: Conference Series*, 1187(5). <https://doi.org/10.1088/1742-6596/1187/5/052047>.
- Ting, H., Lim, T.-Y., de Run, E. C., Koh, H., & Sahdan, M. (2018). Are we baby boomers, gen X and gen Y? A qualitative inquiry into generation cohorts in Malaysia. *Kasetsart Journal of Social Sciences*, 39(1), 109–115. <https://doi.org/10.1016/j.kjss.2017.06.004>.
- Tran, T. T., Robinson, K., & Paparoidamis, N. G. (2022). Sharing with perfect strangers: The effects of self-disclosure on consumers' trust, risk perception, and behavioral intention in the sharing economy. *Journal of Business Research*, 144, 1–16. <https://doi.org/10.1016/j.jbusres.2022.01.081>.
- Turchet, L., & Bouquet, P. (2021). Smart musical instruments preset sharing: An ontology-based data access approach. 2021 IEEE 7th World Forum on Internet of Things (WF-IoT (pp. 1-6). New Orleans, LA, USA). <https://doi.org/10.1109/wf-iot51360.2021.9595417>.
- Veen, E. J. (2019). Fostering community values through meal sharing with strangers. *Sustainability*, 11(7), 2121. <https://doi.org/10.3390/su11072121>.
- Venkatesan, R. (2008). Cluster Analysis for Segmentation. *Darden Case No. UVA-M-0748*. <https://doi.org/10.2139/ssrn.1280638>.
- Venkateswaran, V., S Kumar, D., & Gupta, D. (2021). 'to trust or not': Impact of camouflage strategies on trust in the sharing economy. *Journal of Business Research*, 136, 110–126. <https://doi.org/10.1016/j.jbusres.2021.07.023>.
- von Richthofen, G., & von Wangenheim, F. (2021). Managing service providers in the Sharing Economy: Insights from Airbnb's host management. *Journal of Business Research*, 134, 765–777. <https://doi.org/10.1016/j.jbusres.2021.06.049>.
- Xiang, D., Jiao, G., Sun, B., Peng, Ch. & Ran., Y. (2022). Prosumer-to-customer exchange in the Sharing Economy: Evidence from the P2P accommodation context. *Journal of Business Research*, 145, 426–441. <https://doi.org/10.1016/j.jbusres.2022.02.077>.
- Yi, J., Yuan, G., & Yoo, C. (2020). The effect of the perceived risk on the adoption of the sharing economy in the tourism industry: The case of Airbnb. *Information Processing & Management*, 57(1), 102108. <https://doi.org/10.1016/j.ipm.2019.102108>.
- Yusoff, M. S., Arifin, W. N., & Hadie, S. N. H. (2021). ABC of questionnaire development and validation for survey research. *Education in Medicine Journal*, 13(1), 97–108. <https://doi.org/10.21315/eimj2021.13.1.10>.

Zervas, G., Proserpio, D., & Byers, J. (2015). A first look at online reputation on Airbnb, where every stay is above average. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2554500>.

The research paper passed the double-blind review process. | Received: 27 June 2023; **Revised:** 12 October 2023; **Accepted:** 19 October 2023; **Available online:** 22 December 2023; **Published in the regular issue:** 29 July 2024.