Pakistan Islamicus

An International Journal of Islamic and Social Sciences

(Bi-Annual)

Trilingual: Urdu, Arabic, and English

pISSN: 2789-9365 eISSN: 2790-4911

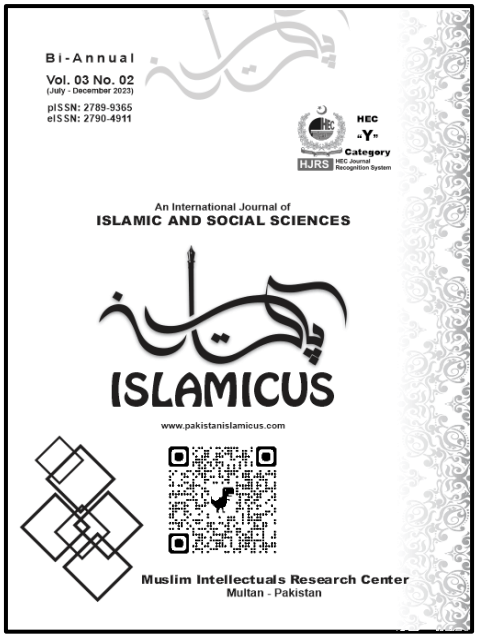
https://pakistanislamicus.com/index.php/home

Published by:

Muslim Intellectuals Research Center

Multan-Pakistan

website: www.mircpk.net



TOPIC

THE EFFECT OF PERCEIVED RISK AND PERCEIVED VALUE ON INTENTION TO USE IN PLATFORM ECONOMY IN THE CASE OF PAKISTAN

AUTHORS

Maryam Batool

Lecturer

Department of Economics, Division of Management and Administrative Science, University of Education, Lahore.

maryam.batool@ue.edu.pk

Professor Dr Muhammad Azmat Hayat

Professor

School of Economics, University of the Punjab, Lahore

azmathayat.eco@pu.edu.pk

How to Cite

Batool, Maryam, and Professor Dr Muhammad Azmat Hayat. 2023.

"THE EFFECT OF PERCEIVED RISK AND PERCEIVED VALUE ON INTENTION TO USE IN PLATFORM ECONOMY IN THE CASE OF PAKISTAN".

PAKISTAN ISLAMICUS (An International Journal of Islamic & Social Sciences)

3 (2):83-94.

Retrieved from:

https://pakistanislamicus.com/index.php/home/article/view/48.

THE EFFECT OF PERCEIVED RISK AND PERCEIVED VALUE ON INTENTION TO USE IN PLATFORM ECONOMY IN THE CASE OF PAKISTAN

Maryam Batool

Lecturer
Department of Economics, Division of Management and Administrative Science,
University of Education, Lahore.
maryam.batool@ue.edu.pk

Professor Dr Muhammad Azmat Hayat

Professor, School of Economics, University of the Punjab, Lahore
azmathayat.eco@pu.edu.pk

Abstract

This study uses survey data from users of the online platform economy in Pakistan to understand the effect of perceived risk and perceived utility on their participation. The platform economy is a type of business that matches the demand and supply of users using digital tools. Pakistan is a growing market with platforms such as Uber, In-drive, Food Panda, Daraz, etc. The survey was conducted in 9 cities in Pakistan to understand the effect of perceived risk and perceived utility on intention to use online platforms. Structured Equation Modelling (SEM) estimation technique is applied and results show that the economic benefit and mobility have a positive impact on perceived utility while perceived risk negatively impacts it. Perceived utility in turn is a major determinant of intention to participate in the online platform economy. The results of this study show that the government and platforms should come together to make these platforms secure thus enhancing the perceived utility and intention to use of platform economy.

Keywords: Platform Economy, Sharing Economy, Perceived Value, Perceived Risk, Structured Equation Modelling

Introduction

Platform economy (hereafter referred to as PE) describes the recent business model in which anyone can become a seller. This model has platform in the central of transaction that works as digital matchmaker, matching demand and supply for different goods and services (Evans and Schmalensee, 2016). The use of online platforms are expanding day by day and it is changing resource allocation, business models, and consumer behaviour in many industries including tourism and hospitality (Puschmann and Alt, 2016).

PE involve the more efficient utilization of physical assets (such as vehicle, home, equipment), or time (e.g., doing small tasks such as cleaning, e.g. through tasks such as catering, housework, doing shopping for others). Therefore, literature has suggested that the use of PE can be helpful in eradicating issues of hyper-consumption, poverty, and pollution (Hamari et al., 2015). It also enhances sustainability (Heinrichs, 2013).

Such platforms are available for a wide range of goods and services, however, PE is most commonly used in the transportation sector with the use of ride-hailing apps like Uber, Lyft, Careem, and Airlift (a Pakistani micro-transit start-up with the aim of replacing the traditional public transportation system). Platform markets have massive online stores for the sale and purchase of new and old goods. Amazon, Alibaba, and Daraz.pk are commonly used to buy/sell different consumer goods. EBay, OLX, etc. are used for the sale/purchase of second-hand goods. The use of platform markets for renting is also on the rise with the use of Airbnb and other similar apps that let you rent a room for a night or more using a mobile app. Such rental platforms are a great substitute for traditional hotels (Zervas et al. 2017), however, rental platforms are currently inactive in Pakistan. Food and grocery delivery platforms are also growing very fast in Pakistan and in the rest of the world. COVID-19 has played a major role in fuelling the demand of these platforms (Batool et al., 2021; Hayat et al., 2022).

There are many potential economic impacts of such markets. PE services are offered at a lower price thus providing monetary benefits to the consumers. The platform markets eliminate the longer distribution process thus resulting in cost saving. An intensive rating-based system helps to ensure a better quality of goods and services. SE is particularly famous for its potential environmental impacts (Zamani et al., 2017). The transportation sector in particular has massive potential for environmental benefits. Car sharing has been found to reduce the number of cars on the road (Martin et al., 2010), which then reduces traffic congestion and greenhouse gas emissions by up to 50% (Shaheen & Cohen, 2013). All these factors contribute in enhancing perceived value of PE for consumers.

However, all these benefits are tied to potential risks that are faced in the use of these platforms. As PE involves direct interaction between strangers, it poses monetary and security risks (Grewal et al., 2003, Guttentag, 2015). Particularly, in a developing country like Pakistan, these platforms are relatively new and people avoid using it due to perceived risks. These risks range from wastage of time, financial risks, privacy risks and most importantly security risks (Lee et al., 2018; Yi et al., 2020).

This study aims to analyse the perceived utility and perceived risk involved in the use of online PE in Pakistan. The literature on PE currently focuses on developed countries and there are

scarce studies on investigating the perceived utility of PE in context of a developing nation. This study aims to bridge this knowledge gap as participation in PE by developing countries is increasing rapidly and it poses different challenges than those faced in first world countries. For this purpose, authors collect survey data from users of PE in Pakistan to understand the factors behind perceived utility and perceived risk in using PE. The findings of this research yields great insights to researchers and policy makers.

The study is organized in five sections. Section 1 is introductory section, while literature review is presented in second section. Section 3 provides theoretical insights into the topic while research design and methodology are discussed in 4th section. Lastly, conclusion and policy remarks are presented in 5th section.

Literature Review

Just like the use of online platforms, the literature on the platform economy is also growing. Earlier studies tried to understand the dynamics of the platform economy. However, the focus of the literature has been shifted towards empirical studies to understand the factors behind the success of SE.

Kamal & Chen (2016) investigated the factors that determine the trust of people and their willingness to participate in the sharing economy. 71 students were asked to fill an open-ended questionnaire and the results showed that SE has started to gain momentum. The research showed that the risk of physical security is the biggest concern of participants in SE. It highlighted the importance of extensive background checks on trust and willingness to participate.

Schoenbaum (2016) highlights the gender differences in the SE, particularly in the ride-hailing and transportation sector. Female users and service providers both face the danger of privacy and other risks and there is a need to take steps towards gender inclusion.

Kooti et al. (2017) used large-scale data of uber users and service providers in the U.S. to check the factors affecting participation decisions. They used email receipts sent by Uber on Yahoo servers. They found out average rider is young and 38% riders have an age of is 18 to 27 years and above-average income. Rides that have price surge often result in a lower rating of the driver.

Yang et al. (2017) analysed the factors behind the loyalty of customers in the sharing economy. The study conducted a focus group interview along with an online survey from respondents in China. Structural equation modelling was used for hypothesis testing. The results showed that

confidence and social benefits are two major determinants of commitment in the sharing economy.

Bocker & Meelan (2017) checked the motives behind participation in the different forms of SE. A survey of 1330 people from Amsterdam was conducted. The study explored the relative importance of economic, social, and environmental benefits for the users and the service providers in the SE. The estimation shows that users are more motivated by the economic benefits of SE than the service providers. Different sectors of SE also bring different importance to social, economic, and environmental benefits.

Berger et al. (2018) analysed the effect of the Uber on the earning of taxi workers. The study uses the data set of the entry of Uber in fifty megacities of the United States. The difference-in-differences design was used and the results showed a ten percent decrease in the earning of taxi drivers following the entry of Uber in the taxi markets.

Lee et al. (2018) investigated the motives behind using Uber as a preferred mode of transportation. A Survey of 295 users from Hong Kong was conducted to check the factors affecting the user's intentions to participate in SE. The study shows that monetary incentives along with the trust on the platform are two of the biggest factors behind the user's participation. While perceived risk alters the intention of users in choosing Uber.

Jin et al. (2018) presented a systematic review of the literature about the impact of ridesharing on urban efficiency. The study showed that ride-sourcing enhanced economic efficiency by reaching the areas where the taxi service was unavailable. It supports as well as competes with public transport. It also brings some negative impacts on urban development like safety concerns due to insufficient training of drivers and the creation of a digital divide.

Yang et al. (2018) used Aristotle's rhetorical theory to identify the main persuasive cues and their role in the establishment of trust in Airbnb hosts. The study used a sample of 171 Airbnb users and showed that credibility, emotional bonding, and accommodation characteristics are three main cues that helped them in trusting Airbnb hosts.

Boateng et al. (2018) analysed the determinants of using Uber in Ghana. Data was collected through a questionnaire from 500 users of Uber. The estimation technique used was SEM and results were consistent with previous literature. Trust, economic benefits, and convenience were the key determinants of using Uber in Ghana.

Broughton et al (2018) report the findings of a research project about the workers of the gig economy in the UK. The study conducted phone and face-to-face interviews with 150 gig economy workers. The findings of this study showed that workers enjoy the ease to work on

their own schedule but they might face financial vulnerability due to the temporary nature of employment.

Banik (2019) explored the nature of the gig economy and its impact on labour productivity and income distribution. The study concludes that engaging in the gig economy can enhance the productivity of labour due to the higher labour force participation rate and easy access to cross-border skilled workers. He also states that workers from developing countries can enjoy equal compensation as their developed countries counterpart. Although developing countries will need to invest in ICT-infrastructures to fully enjoy the benefits of the gig economy.

Sung et al. (2018) attempted to find the reasons behind using and providing services in the sharing economy. They do so by constructing an integrated model for consumers and service providers. Data was collected by survey from 322 users and 100 service providers of Airbnb in South Korea. The estimation was done using the Structural Equation Model (SEM) and results revealed that only the network effect was common in both models. It also showed that economic, social, environmental, and network benefits were main motives behind providing services. On the other hand, consumers use Airbnb because of enjoyment and network benefits.

Revinova et al. (2020) analysed the current status of sharing economy in Russia. The study used open internet sources and a survey from university students to check the awareness about SE in the country. Analysis showed that the use of SES is currently in the initial stage but it has great potential to grow. Digital sharing platforms are essential components for the growth of SE.

Zhu et al. (2017) explored the motivates behind using a ride-sharing application in China. Data was collected from 314 users using a questionnaire. The result showed that self-efficiency is the key determinant of perceived value along with functional value, emotional value and social value.

The review of existing literature shows that most of the studies are done in the context of developed nations. Developing countries are a growing market for the online platform. Pakistan also has a great scope for utilizing the benefits of platform economies, however, the literature on this topic is very limited in the context of Pakistan. This study will fill the research gap in numerous ways. It will highlight the determinants behind the use of PE in Pakistan and identify the factors that should be improved to reap full benefits.

Theoretical framework

Many terms and definitions circulate to describe the so-called “sharing turn” in the economy: the trend that more and more products are shared rather than privately owned (Botsman, 2013;

Grassmuck, 2012). This paper focuses on peer-to-peer exchanges of goods between consumers. We use the term "platform economy" rather than "access-based consumption" (Bardhi and Eckhardt, 2012) or "collaborative consumption" (Belk, 2014) because this also refers to large-scale business-to-consumer services such as Spotify or Zipcar. In the nascent literature on the platform economy, there is an increasing interest in the motivations driving participation.

Perceived Value Theory is also a well-known theory about the value that a person gets from using a service. Consumers' perceived value is viewed as their overall assessment of product utility based on perceptions of what is received (benefits) compared to what is given (costs) in a service encounter (Zeithaml, 1988). In the marketing literature, researchers have used different terms to describe the value, such as consumption value, customer value, consumer value, and perceived value (Kim et al., 2007).

In this study, with reference to the literature above and considering the characteristics of online platforms, we use a framework that incorporates perceived value, intrinsic and extrinsic determinants of participating in the platform economy.

Research Framework and Model

This study employs a survey research method to analyse different aspects of the use of PE in Pakistan. Primary data is collected through a well-developed questionnaire that is targeted to the users of online platforms. A sample of 641 was collected from 9 different cities in Pakistan, namely, Lahore, Faisalabad, Gujranwala, Rawalpindi, Multan, Karachi, Haidarabad, Peshawar, and Islamabad. These cities were chosen because major platforms like Uber, Careem, and Foodpanda were operating in these cities only.

Survey Instruments Used

Table 1 provides the details of the survey instruments used in the study.

Construct	Item
Perceived Risk (Grewal et al., 2003, Birinci et al. 2017)	Online booking of goods/services takes too much time
	There are financial risks to participating in online platforms
	Using online platforms is insecure
Mobility of labour and good	Online platform reduces travel time
	Using online platforms enable consumers to travel to places where public transport is unavailable

(Constructed by the authors. Please refer to this study.)	Using online platforms enable consumers to order goods and services from faraway places
Perceived utility (Boateng et al., 2018)	Online platforms are always accessible
	It is easy to search for goods/services using the mobile applications of online platforms
	Using online platforms is convenient
	The online platforms perform reliably
Economic benefit (Kim et al. 2009, Zhang 2018)	Online platforms offer economical deals to users
	Goods and services are cheaper in online platforms than in traditional markets
	Using online platform gives financial benefit to costumers
Intention to use (Boateng et al., 2018)	I will continue to use online platforms
	I encourage others to use online platforms
	I will use online platforms more often

All the items were measured on a five-point Likert scale anchored on; 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. Besides these, different sociodemographic characteristics such as age, gender, education and income were also collected from respondents.

Frequency to use is measured by the following questions:

Please select an option from 1 to 5 to describe your frequency of use of online platforms. Note that 1 indicate the least use and 5 indicate the most frequent use.	Answer
Ride hailing platforms such as InDrive, Uber, Careem, Swvl etc	
Food delivery platforms such Foodpanda, Cheetay, Eat Mubarak etc	
Grocery delivery platforms such as Airlift express, Grocer app etc	
E-commerce platforms such as Daraz.pk, Amazon, OLX.pk etc	

Methodology

SEM analysis is used for econometric analysis. This analysis technique is used in cases where there are a large number of latent variables in the model. The SEM framework used in this study is presented below: The UDHR: A Cornerstone of Human Dignity and Equality.

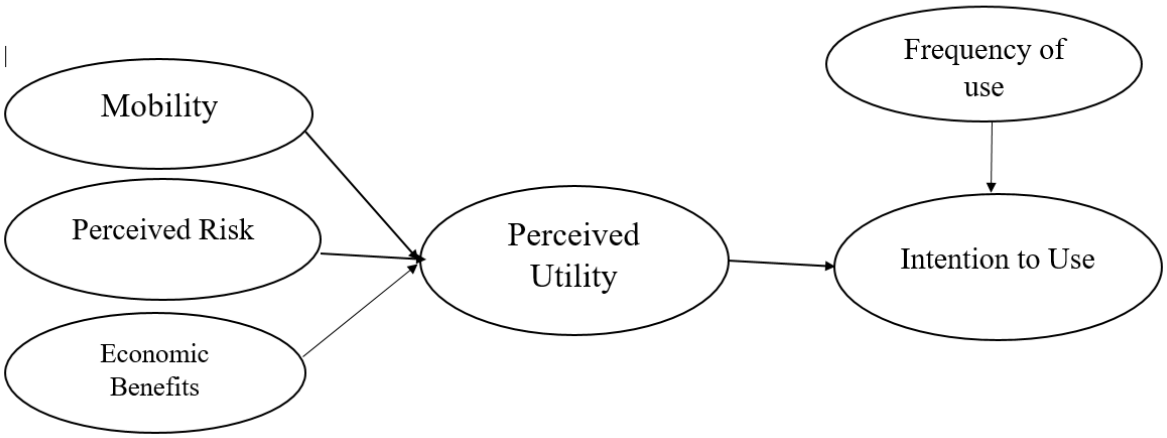


Figure 1: SEM framework

Following hypothesis are tested in this analysis:

H1: Mobility is positively related to Perceived Utility (PU)

H2: Perceived Risk (PR) is negatively related to Perceived Utility (PU)

H3: Economic benefit (EB) is positively related to Perceived Utility (PU)

H4: Perceived Utility (PU) is positively related to Intention to use (IU)

H5: Frequency is positively related to Intention to use (IU)

Results

The results of the SEM analysis are presented in Table 1:

Hypothesis	Path Coefficient	S.E.	p	Hypothesis Verification
H1. Mobility →PU	0.48	0.04	0.000	Supported
H2. PR→ PU	-0.08	0.04	0.078	Supported
H3. EB→ PU	0.65	0.06	0.000	Supported
H4. PU → IU	1.01	0.07	0.000	Supported
H5. Frequency →PU	0.10	0.04	0.010	Supported

Note: PU=Perceived Utility, PR=Perceived Risk, EB=Economic Benefit, IU=Intention to Use.

Results of the SEM analysis shows that all the hypothesis are supported in the model. Hypothesis no 1. is that increase in user's mobility enhances the perceived utility that the consumer gets from using online platforms. The path coefficient for this hypothesis is positive and highly significant at 0.48. On the other hand, the perceived risk of using online platforms negatively impacts the perceived utility of users of PE. Economic benefits also positively and significantly affect the utility of PE. Hypothesis no 4 and 5 are related to the intention to use of PE. The perceived utility is a highly significant determinant of intention to use, it means that the higher the utility that a consumer gets from using PE, the higher will be his/her use of PE. Frequency of use PE is also a major determinant of intention to use as those who are using online platforms frequently are more likely to continue using it in the future, results on this study also support this hypothesis.

Policy Implications and Conclusion

This study provides vital theoretical and empirical insights into the emerging literature about online platforms. The relationship between perceived utility, perceived risk, and intention to use is explored in this research. The empirical model is formed using the theoretical basis of Perceived Value Theory. The major underlying principle of this theory is that people's use of a good/service depends on the perceived utility that they get from its use. Online platforms offer monetary benefits to users in the form of promotions and coupon codes (Hamari et al., 2016; Zhang 2018). PE also enhances the mobility of labour by allowing them to easily and economically travel to the areas where public transport is unavailable. It also enhances the mobility of goods through delivery services all over the country. However, there are certain financial and security risks involved in the use of PE (Birinci et al., 2017). These risks mitigate the above-listed benefits and make users skeptical of the use of PE thus decreasing the overall perceived utility. The survey was conducted in 9 cities of Pakistan to check the determinants of users of PE. Results show that economic benefits and mobility are highly significant determinants of Perceived utility that in turn in a major determinant of Intention to use PE. The negative relation between PU and risk shows that the risk is a major deterrent factor behind lack of use of PE in Pakistan, therefore, the platforms and government should come together to form and enforce rules and regulations to secure the users. Pakistan has a great potential to become a major market for PE, however, the platforms will have to provide a protection to secure the financial and security concerns of users.

References

Banik, N. (2019). Could Online Gig Work Drive Economic Growth ? *World Economy Brief*, *9*(17).

Batool, M., Ghulam, H., Azmat Hayat, M., Naeem, M. Z., Ejaz, A., Imran, Z. A., ... & Horațiu Gorun, T. (2021). How COVID-19 has shaken the sharing economy? An analysis using Google trends data. *Economic Research-Ekonomska Istraživanja*, *34*(1), 2374-2386.

Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online. *Journal of business research*, *67*(8), 1595-1600.

Berg, J. (2016). Income Securiti in the on-demand economy: findings and Policy lessons from a survey of crowdworkers. *Comparative Labor Law and Policy Journal*, *37*(3), 506–543.

Berger, T., Chen, C., & Frey, C. B. (2018). Drivers of disruption? Estimating the Uber effect. *European Economic Review*, *110*, 197–210.

Boateng, H., Kosiba, J. P. B., & Okoe, A. F. (2019). Determinants of consumers' participation in the sharing economy: A social exchange perspective within an emerging economy context. *International Journal of Contemporary Hospitality Management*, *31*(2), 718–733. https://doi.org/10.1108/IJCHM-11-2017-0731

Böcker, L., & Meelen, T. (2017). Sharing for people, planet or profit? Analysing motivations for intended sharing economy participation. *Environmental Innovation and Societal Transitions*, *23*, 28–39. https://doi.org/10.1016/j.eist.2016.09.004

Böckmann, M. (2013). The Shared Economy: It is time to start caring about sharing; value creating factors in the shared economy. *University of Twente, Faculty of Management and Governance*, *350*.

Botsman, R., & Rogers, R. (2010). What's mine is yours. *The rise of collaborative consumption*.

Brancati, U., Pesole, A., M.C, Fernández-Macías, E., Biagi, F., & González Vázquez, I. (2018). Platform Workers in Europe: Evidence from the COLLEEM Survey. In *JRC Science For Policy Report*. https://doi.org/10.2760/742789

Broughton, A., Gloster, R., Marvell, R., Green, M., Langley, J., & Martin, A. (2018). The experiences of individuals in the gig economy. *Department for Business, Energy & Industrial Strategy (BEIS), February*, 108. https://www.gov.uk/government/publications/gig-economy-research

Dredge, D., & Gyimóthy, S. (2015). The collaborative economy and tourism: Critical perspectives, questionable claims and silenced voices. *Tourism recreation research*, *40*(3), 286-302.

Evans, D. S., & Schmalensee, R. (2016). *Matchmakers: The new economics of multisided platforms*. Harvard Business Review Press.

Grassmuck, V. R. (2012). The sharing turn: Why we are generally nice and have a good chance to cooperate our way out of the mess we have gotten ourselves into.

Hamari, J., Sjöklint, M., & Ukkonen, A. (2016). The sharing economy: Why people participate in collaborative consumption. *Journal of the association for information science and technology*, *67*(9), 2047-2059.

Heinrichs, H. (2013). Sharing economy: a potential new pathway to sustainability. *GAIA-Ecological Perspectives for Science and Society*, *22*(4), 228-231.

Jin, S. T., Kong, H., Wu, R., & Sui, D. Z. (2018). Ridesourcing, the sharing economy, and the future of cities. *Cities*, *76*(January), 96–104. https://doi.org/10.1016/j.cities.2018.01.012

Kooti, F., Grbovic, M., Aiello, L. M., Djuric, N., Radosavljevic, V., & Lerman, K. (2017, April). Analyzing Uber's ride-sharing economy. In *Proceedings of the 26th International Conference on World Wide Web Companion* (pp. 574-582).

Lee, Z. W., Chan, T. K., Balaji, M. S., & Chong, A. Y. L. (2018). Why people participate in the sharing economy: an empirical investigation of Uber. *Internet Research*.

Martin, E., Shaheen, S. A., & Lidicker, J. (2010). Impact of carsharing on household vehicle holdings: Results from North American shared-use vehicle survey. *Transportation Research Record*, *2143*(1), 150-158.

Puschmann, T., & Alt, R. (2016). Sharing economy. *Business & Information Systems Engineering*, *58*, 93-99.

Puschmann, T., & Alt, R. (2016). Sharing economy. *Business & Information Systems Engineering*, *58*(1), 93-99.

Revinova, S., Ratner, S., Lazanyuk, I., & Gomonov, K. (2020). Sharing economy in Russia: Current status, barriers, prospects and role of universities. *Sustainability*, *12*(12), 4855.

Schoenbaum, N. (2016). Gender and the sharing economy. *Fordham Urb. LJ*, *43*, 1023.

Shaheen, S. A., & Cohen, A. P. (2013). Carsharing and personal vehicle services: worldwide market developments and emerging trends. *International journal of sustainable transportation*, *7*(1), 5-34.

Sung, E., Kim, H., & Lee, D. (2018). Why do people consume and provide sharing economy accommodation?—A sustainability perspective. *Sustainability*, *10*(6), 2072.

Yang, S. B., Lee, H., Lee, K., & Koo, C. (2018). The application of Aristotle's rhetorical theory to the sharing economy: an empirical study of Airbnb. *Journal of Travel and Tourism Marketing*, *35*(7), 938–957. https://doi.org/10.1080/10548408.2018.1455622

Yang, S., Song, Y., Chen, S., & Xia, X. (2017). Why are customers loyal in sharing-economy services? A relational benefits perspective. *Journal of Services Marketing, 31*(1), 48–62. https://doi.org/10.1108/JSM-01-2016-0042

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.

Zamani, B., Sandin, G., & Peters, G. M. (2017). Life cycle assessment of clothing libraries: can collaborative consumption reduce the environmental impact of fast fashion?. *Journal of cleaner production*, *162*, 1368-1375.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of marketing*, *52*(3), 2-22.

Zervas, G., Proserpio, D., & Byers, J. W. (2017). The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry. *Journal of marketing research*, *54*(5), 687-705.

Zhang, T. C., Jahromi, M. F., & Kizildag, M. (2018). Value co-creation in a sharing economy: the end of price wars?. *International Journal of Hospitality Management*, *71*, 51-58.

Zhu, G., So, K. K. F., & Hudson, S. (2017). Inside the sharing economy. *International Journal of Contemporary Hospitality Management*.