PARTICIPATION IN THE SHARING ECONOMY:

THE ROLE OF NATIONAL CULTURE

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Participation in the Sharing Economy:

The Role of National Culture

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DECLARATION OF ORIGINALITY

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ABSTRACT

Participation in the Sharing Economy:

The Role of National Culture

Sharing economy, a disruptive way of doing business, is providing which is ours to other people for their use. Technological developments especially on internet technologies let a convenient space to rising of sharing economy, thus it has become very popular in the last decade. Companies like Uber and Airbnb created a new and disruptive business model in their areas, respectively ride sharing and house sharing. This research focuses on accommodation and ride sharing parts of sharing economy. We examined the possible relation of national cultural values with participation in the sharing economy. On a national scale Hofstede's data for national culture values and Statista's eTravel Market Report data for sharing economy participation for nations were used. Along with cultural characteristics, the possible effect of country specific variables on participation in sharing economy was also examined. Multiple definitions for participation in sharing economy were used. Results of the study show that different variables have significant effect on ride sharing and house sharing. The significant variables showed discrepancy depending on the different definitions for participation in ride sharing and house sharing.

ÖZET

Paylaşım Ekonomisine Katılım:

Ulusal Kültürün Rolü

Yıkıcı bir iş modeli olan paylaşım ekonomisini bizim olanı başkalarının kullanımına sunmak olarak tanımlayabiliriz. Teknolojik gelişmeler özellikle de internet teknolojilerinde olan gelişmeler paylaşım ekonomisinin yükselişi için uygun ortamı yaratmış ve paylaşım ekonomisi son on yılda oldukça popülerlik kazanmıştır. Airbnb ve Uber gibi popüler şirketler kendi çalışma alanlarında yeni ve yıkıcı iş modelleri yaratmışlardır; çalışma alanlarından kasıt sırasıyla yolculuk veya araç paylaşımı ve ev paylaşımı olarak tanımlanabilir. Bu çalışma paylaşım ekonomisinin konaklama ve yolculuk paylaşımı kısımlarına odaklanmaktadır. Bu çalışmada ulusal kültürel değerler ile paylaşım ekonomisine katılım arasındaki olası ilişki incelenmektedir. Ulusal düzeyde yapılan bu çalışmada ulusal kültürel değerler için Hofstede'nin verileri, paylaşım ekonomisi katılımı için ise Statista'nın Turizm Endüstrisi Raporu kullanılmaktadır. Ayrıca kültürel değerlerin dışında, ülkelere özgü bazı değişkenlerin de paylaşım ekonomisiyle ilişkisi incelenmektedir. Çalışmada paylaşım ekonomisine katılım için birden fazla tanımlama kullanılmaktadır. Sonuçlar konaklama paylaşımı ve yolculuk paylaşımı için farklı değişkenlerin anlamlı etkisi olduğunu göstermektedir. Ek olarak paylaşım ekonomisine katılımın farklı tanımlamaları da anlamlı ilişkilerin farklılaşmasına sebep olmaktadır.

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CHAPTER 1

INTRODUCTION

In the last decade the sharing economy has gained massive popularity and user base. Developments of internet technologies changed the way people communicate and this change enabled rising of peer to peer sharing platforms. If we consider the sharing economy in tourism and travel markets, Airbnb and Uber are pioneering in this change of consumption style. Currently they are massive companies considering their customer base and economic figures.

The sharing economy seems big and growing fast. In 2015, PriceWaterhouseCoopers estimated that, from $15 billion in global revenue in 2014, car and room sharing, crowd-funding, personal services, and video and audio streaming would reach $335 billion by 2025 (Davidson, Habibi, & Laroche, 2017). These numbers extrapolate from the growth rates of Uber and Airbnb. The rise of the sharing economy brings some questions about whether they are a threat for existing markets or creating new ones (Tussyadiah, 2015).

Since sharing economy is a new phenomenon, existing studies about it are not numerous. Even though there are some studies aiming to find the motivations to participate in sharing economy (Albinsson & Perera, 2012; Balck & Cracau, 2015; Bardhi & Eckhardt, 2012; Bellotti et al., 2015; Davidson, Habibi, & Laroche, 2017; Hamari, Sjöklint, & Ukkonen, 2016; Hawlitschek, Teubner, & Gimpel, 2016; Lamberton & Rose, 2012; Matzner, Chasin, & Todenhöfer, 2015; Moeller & Wittkowski, 2010; Ozanne & Ballantine, 2010; Rowe, 2017; Tussyadiah, 2015), they do not investigate sharing economy considering the potential effect of culture. Thus, this study aims to contribute to this gap in sharing economy literature.

This thesis has five chapters which are: introduction, literature survey, methodology, results of the analysis and conclusion. The structure of the thesis is described below.

The first chapter presents an introduction to our study. Chapter 2 includes the literature survey section of the study, which has two main parts namely sharing economy and culture. In this chapter, barriers to sharing economy, and Airbnb and Uber are discussed in detail. Likewise concept of culture and specifically Hofstede's (2001) study about national culture are discussed.

Chapter 3 explains the study's research methodology, data collection method, models, descriptive statistics and analyses used to explore the research questions. In Chapter 4, we discuss and summarize the findings of the study, present the results of the analysis.

Chapter 5 includes conclusion of the study. In this chapter research outcomes are discussed and suggestions for sharing economy platforms are offered. Finally, limitations of the study and recommendations for further research are presented.

CHAPTER 2

LITERATURE SURVEY

This chapter presents the literature survey for the study. First the concept of sharing economy is discussed. Secondly, barriers for sharing economy and then Airbnb and Uber, which are the most popular companies of the sharing economy, are discussed. Finally, culture part of the literature survey includes discussions about national culture, Hofstede's culture dimensions, critics about Hofstede's work, comparison of GLOBE's and Hofstede's works, culture and innovation studies, culture and technology acceptance studies, and culture and hotel penetration studies.

Sharing economy, essentially providing which is ours to other people for their use, still lacks a common definition agreed upon by all researchers. Belk (2014) criticizes some definitions of sharing economy existing in literature; for example "those events in which one or more persons consume economic goods or services in the process of engaging in joint activities with one or more others" (Felson & Spaeth, 1978, p. 614) and "traditional sharing, bartering, lending, trading, renting, gifting, and swapping." (Botsman, & Rogers 2010, p. 15). The author proposes that these two definitions are too broad and lack the main attribute of the sharing, which is "the act and process of distributing what is ours to others for their use" (Belk, 2007, p. 126). He also underlines the importance and unstoppable rising of the sharing economy. He recommends companies to be ready for that change, stating that owning is becoming less attractive than having access to a good for customers.

From another perspective Schor (2014) underlines that sharing was a thing between familiar people in the past, but the sharing we are dealing with now happens between strangers. Thus the risk you take is respectively bigger.

2.1 Sharing economy studies

Habibi, Davidson, and Laroche (2016) highlight the importance of understanding an activity's position on sharing-exchange continuum. Figure 1 shows how practices are placed on the sharing-exchange continuum depending on their attributes over sharing. Habibi et al. (2016) give recommendations to managers for promoting and dealing with each positioned activity on sharing-exchange continuum.

Our study focuses on the mid range of sharing-exchange continuum, for example Airbnb and Uber, which are the main practices considered on this research. These show balanced sharing and exchange characteristics, which means that they consist of half sharing and half exchange attributes, in other words they are dual mode practices. Habibi et al. (2016) recommend promoting both attributes for these practices since, for example, Uber is offering more community building than Zipcar but also both Uber and Airbnb are seeking to achieve maximum consumer surplus just like the pure exchange practices.

Ganksy (2010) underlines that in the USA cars sit unused 23 hours a day and a person saves 400-600 dollars on insurance, maintenance and other costs through car sharing. Also a huge amount of carbon dioxide emission is saved with the help of car-sharing. Therefore economic crisis and environmental factors, such as climate change and shrinking natural resources, drive us to change how we consume, so we need to share our resources in order to be more efficient.

Figure 2 shows how Ganksy (2010) categorizes products depending on their appropriateness for sharing. Ganksy (2010) simply explains that if a product is costly and less frequently used, then it is the perfect product for sharing. Figure 2 presents this area as the mesh sweet spot. In other words, high cost and high idle capacity products are the most suitable ones for sharing. Considering room sharing and

car/ride sharing, they are also on the mesh sweet spot, due to their costly and high idle capacity structures.

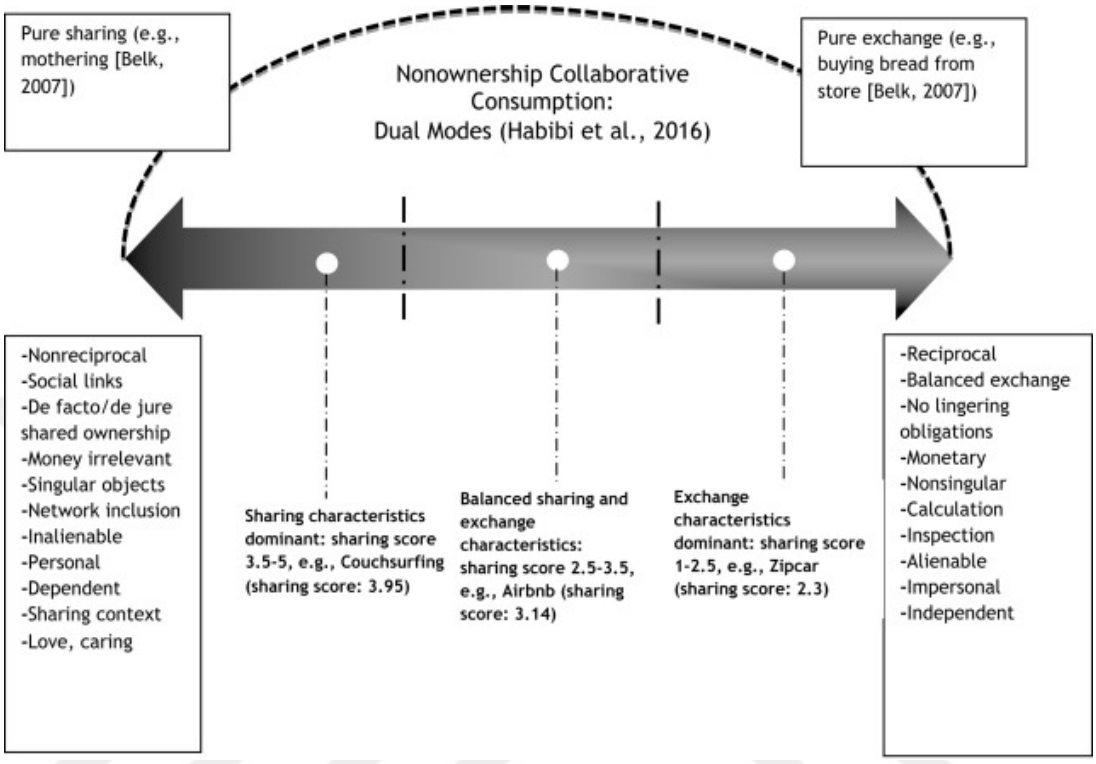

Figure 1. The sharing/exchange continuum
(Habibi, Davidson, & Laroche, 2016)

Tussyadiah (2015) defines lack of trust as a combination of lack of trust between users, between users and technology, and trust between users and the company.

The author identifies three deterrents for the accommodation sector of sharing economy. These are trust, efficacy and economic benefits. Further, for the travel sector the factors identified as drivers of sharing economy are sustainability, community and economic benefits. Even though findings of the research imply economic benefits is an important driver, sharing economy also attracts high income, highly educated consumers. That consumer type is open to try new things (innovative) considering traveling. As a result, collaborative consumption is not only

a low cost alternative but also a new way of travelling. Collaborative consumption of both goods and services deserve attention in research.

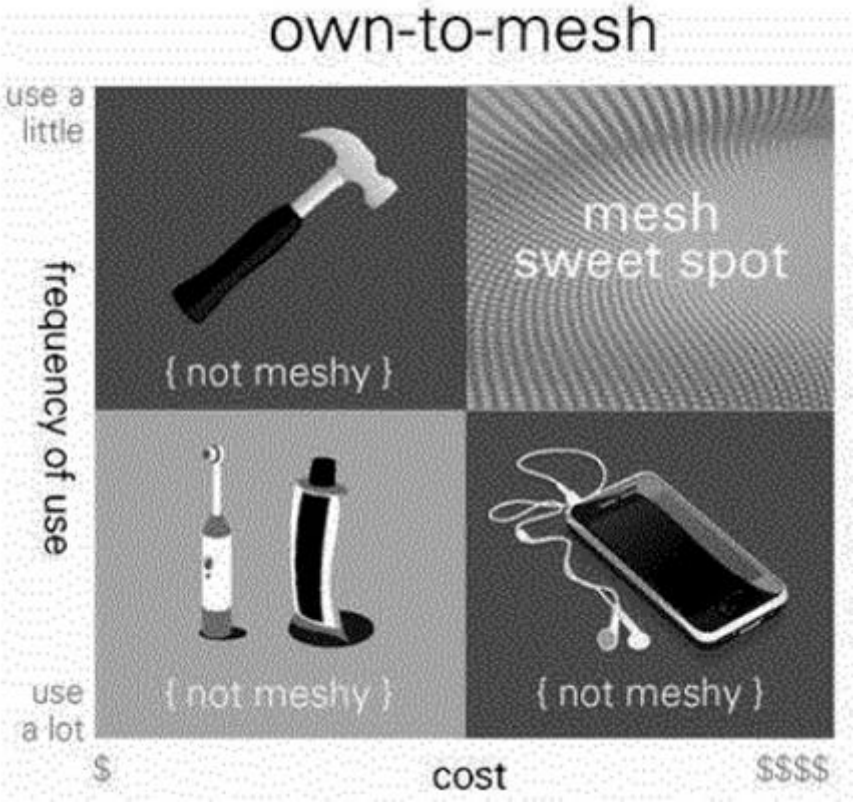

Figure 2. The Mesh

Ganksy (2010)

Considering car sharing, Zipcar is a whole different story from Uber or Blablacar. Bardhi and Eckhardt (2012) focus on Zipcar in their research and they state that intentions to use access based consumption in car sharing is different from collaborative consumption types such as Blablacar or Uber. In Zipcar, the cars are owned by the company itself and there exists no social interaction, whereas in collaborative consumption type of car sharing, cars are owned by other users and users and providers have social interaction during the sharing activity. These differences are also mentioned by Habibi et al. (2016). While Uber and BlaBlacar are

in the middle of the sharing/exchange continuum as shown in Figure 1, Zipcar is more on the right side of the continuum which shows that it is more exchange focused rather than sharing.

Lamberton and Rose (2012) also examined Zipcar in their research as a car sharing practice and found that cost reduction is the determinant for using car sharing services, but environmentalism, social benefits or anti-industry motivations have not been found effective on participation in sharing services. That has occurred because of the Zipcar's way of doing business, Zipcar is a car sharing service placed on the exchange side of the sharing-exchange continuum, so it does not have much social interaction, and people prefer it due to lower cost rather than owning and mobility utility.

Bardhi and Eckhardt (2012) underline the change of the view of consumers to ownership. Previously products owned were a reflection of the identity and personality of the owner as a common view but now it is changing from owning to accessing. Moreover, alternative ways of consuming do not arise because people cannot afford to buy things, but it is more likely to be a more logical choice for consumers, as this way will get rid of burdens of ownership.

Balck and Cracau (2015) have conducted a cross-sectoral research on motives of customers for sharing economy practices, which shows some insights about why customers participate in the sharing economy. The research includes commodities and clothes sharing as well, but we will only consider their results about accommodation renting and car sharing, because only these are related to our research.

They have used five customer motives which are; cost, access, environment, rarity and no ownership in the research. Cost is the main motive for accommodation

sharing while no ownership is the least important motive, this is simply because the alternative way for it is renting, not buying the place. Environment and access are the most important motives for car sharing. Environment motive is very reasonable when we consider using idle capacity; it is more efficient than its alternatives. Access appears to be the second important motive for car sharing because they have selected business to consumer car sharing pools in their research. These car pool companies are different from Blablacar and Uber which are our consideration as car sharing. Therefore the results about car sharing of this study are not directly related to our research, as we mentioned above we are focused on the middle part of the sharing-exchange continuum. Similarly the environment motive probably is not so different for our definition of car sharing as well. Thus, both car sharing ways provide a more efficient alternative to traditional transportation alternatives.

Even though their research is on non-monetary sharing practices (pure sharing), Albinsson and Perera (2012) imply that sharing activities create an environment for participants to meet new people. Therefore it is like a tool for socializing, sharing becomes popular for community building and it arises because of today's people's lack of community sense.

Matzner, Chasin and Todenhöfer (2015) create a model using Theory of Planned Behavior, their model is seeking relationship between both intention to use, and intention to provide together and separately with participation in sharing services.

Hawlitschek, Teubner and Gimpel (2016) identify motives and deterrents for participating in sharing economy. Their work implies sustainability, community, and economic benefits as main motives, lack of trust, lack of efficacy and lack of economic benefits as main deterrents for participating in collaborative consumption

(sharing economy).

Davidson et al. (2017) investigate materialism's effect on willingness to participate in the sharing economy. Their sample includes Indian and American people, therefore they also investigate the concept cross culturally. Despite the fact that previous literature (e.g. Belk, 2007) shows materialism as the main barrier to sharing, their work implies it is not the case. For the American sample in the study materialism leads to willing to participate by improving their self image and well-being. On the other hand, for the Indian sample materialism leads to willing to participate by increased perceived utility.

Hamari, Sjöklint and Ukkonen (2016) also investigate participation motives for collaborative consumption. They have researched attitude for and behavioral intention for collaborative consumption and they have also checked attitude's effect on behavioral intention. They have found that perceived sustainability is important for positive attitudes for collaborative consumption, but economic benefits are a stronger motivator to behavioral intention to participate in collaborative consumption, while perceived enjoyment is the second motivator to positive attitude towards and best motivator for behavioral intention towards collaborative consumption. They have also found that there exists a gap between attitude and behavioral intention but it is relatively small compared to other studies about technology adoption.

Ozanne and Ballantine (2010) investigate motivations for joining a toy sharing library by looking at four different consumer groups. These four groups are socialites, market avoiders, quiet anti-consumers and passive members. Socialites are motivated by social benefits of active participation, market avoiders are also motivated by social benefits plus they are interested in sharing and they are the least

materialistic ones. Quiet anti-consumers' motivations are: sense of belonging to a group, sharing values, cost reduction, and anti-consumption values. Passive members do not socially involve and it was found that they also do not have strong anti-consumption values.

Another approach to group sharing economy customers is made by Hellwig, Morhart, Girardin and Hauser (2015) they grouped consumers by examining trait-related, motivational and perceived socioeconomic variables. Thus, they have found four different consumer segments sharing idealists, sharing opponents, sharing pragmatists, and sharing normatives.

Rowe (2017) investigates a sharing platform, MamaBake, which let mothers cook for their group and share the meals. By doing this they do not exchange any money, but they save their time and have a sense of belonging; these two are both motivations and outcomes of this activity. We can also consider Couchsurfing (free accommodation sharing platform) to be similar to MamaBake for some attributes, these are being free and sense of belonging to a community. Both sharing practices are successful without involving any monetary transactions.

Bellotti et al. (2015) investigate peer to peer sharing systems by dividing users and providers. They imply motivations to participate are different for providers and users. Users' main motivation comes from satisfying their basic needs, which is similar to hierarchy of Maslow (1970), for a competitive price with maximum convenience. While providers are motivated by more complex things like being more sustainable by sharing resources they have and also helping others. Both users and providers motivated by social connection. These results somehow explain the success of Couchsurfing as providers achieve their motivation factors - being sustainable and helping other people, while users satisfy their basic need of free accommodation.

Moeller and Wittkowski (2010) imply that, trend orientation and convenience orientation affect positively the demand of non-ownership services, while possession importance affects it negatively. Experience orientation, price consciousness and environmentalism are found not effecting choosing non-ownership consumption. The authors of this study compare preference of ownership vs. non-ownership so it does not show preference of classical renting solutions vs. sharing services.

Zervas, Proserpio and Byers (2017) research the effect of sharing economy platforms to incumbent firms. One of the results is the dramatically decreasing price of taxi license for New York; it was 1.3 million US Dollars in 2014 but decreased to 250.000 US Dollars in 2016 due to the rise of ride sharing platforms like Uber and Lyft.

On the other hand Airbnb affects hospitality industry, hotel revenue decreased about 8-10% in Austin, because of Airbnb's existence. Airbnb lowered the price of hotel rooms because of the rising competition, and the effect is more significant for budget hotels. Therefore, seasonal peak prices are also affected because of the supply flexibility of Airbnb pressures on the rising of the price.

Wallsten (2015) researched Uber's effects on taxi industry of USA. Results imply that taxi service quality increased due to competition with Uber. On the other hand, the reason for shifting to sharing economy alternatives from legacy providers is sharing providers' flexibility of adjusting supply to catch the fluctuating demand. Thus, sharing economy increases availability for unserved markets.

2.1.1 Barriers to sharing economy

Shaheen, Mallery and Kingsley (2012) focused on car sharing, which is different from ride sharing, in their work about vehicle sharing. They listed the main barriers

to expansion for car sharing as insurances and trust among owners and renters according to their results.

Owyang (2013) suggests barriers to sharing economy as follows; disruption of existing regulation, lack of trust between users, lack of reputation and standard opposition from existing businesses. Olson (2013) suggests trust as the most common barrier for sharing economy. Botsman and Rogers (2010) state that to participate in sharing economy, trust is a must, as expected for staying in a strangers guest room, you need to trust him/her.

Furthermore, Keymolen (2013) argues the information and communication technologies' role in sharing. Information and communication technologies act as the centre of sharing activity so trust to that system plays a significant role as a barrier to use.

2.1.2 Airbnb and Uber

Airbnb company value is calculated as 38 billion dollars for 2018 by Forbes experts, they have projected growth rate of their numbers of booking and by calculating that with their average fee for booking, it implies a projection value of 38 billion $. In fact Airbnb was valued at 31 billion $ in 2017 already, so that projection is a normal assumption.

On the other side, Uber's value is 76 billion $ thanks to latest investment from Toyota in 2018. Despite net yearly loss figures of company, growing driver base and number of rides delivered yearly figures and mainly expectations about profitable future of the company, due to the upcoming era of driverless cars and also growing base of both users and drivers, make Uber attractive to investors. Rumors about the expected initial public offering in 2019 is about a valuation of around 120 billion

$ for the company. These figures about both Airbnb and Uber clearly show the potential of the sharing economy.

Table 1 shows the ride sharing market statistics, four most notable ride sharing companies around the world is included. These four companies' total valuation is 154 billion US Dollars according to Table 1.

Table 1. Top Four Ride Sharing Companies Statistics

Ride Sharing Companies Stats	UBER	LYFT	GRAB	DIDI
Area of operation	600 cities in 65 countries worldwide	300 US cities, 2 Canadian	Southeast Asia	400 Chinese cities, Brazil, Japan, Mexico, Australia, Hong Kong, Taiwan
Launched	March 2009	June 2012	June 2012	June 2012
Headquarters	San Francisco, US	San Francisco, US	Singapore	Beijing, China
Users	75 million	23 million	36 million	550 million
Drivers	3 million	1.4 million	2.6 million (all time)	21 million
Rides per day	15 million	1 million	4 million	30 million
Total trips	5 billion	500 million	2 billion	7.4 billion in 2017
Revenue	$7.5 billion (2017)	Over $1 billion (2017)	$1 billion (2018 forecast)	$25-27 billion gross; net estimated at 16% of this
Valuation	$72 billion	$15 billion	$11 billion	$56 billion

(businessofapps, 2018)

Uber's financial figures from first quarter of 2017 to second quarter of 2018 can be observed from Figure 3; company's gross booking figure is increasing constantly but

the company still has net losses for all quarters shown in the figure, except quarter one in 2018. This exception is a result of sales of two international units, a total of $2.94 billion for selling its Russian operation to Yandex, and South-east Asian unit to Grab.

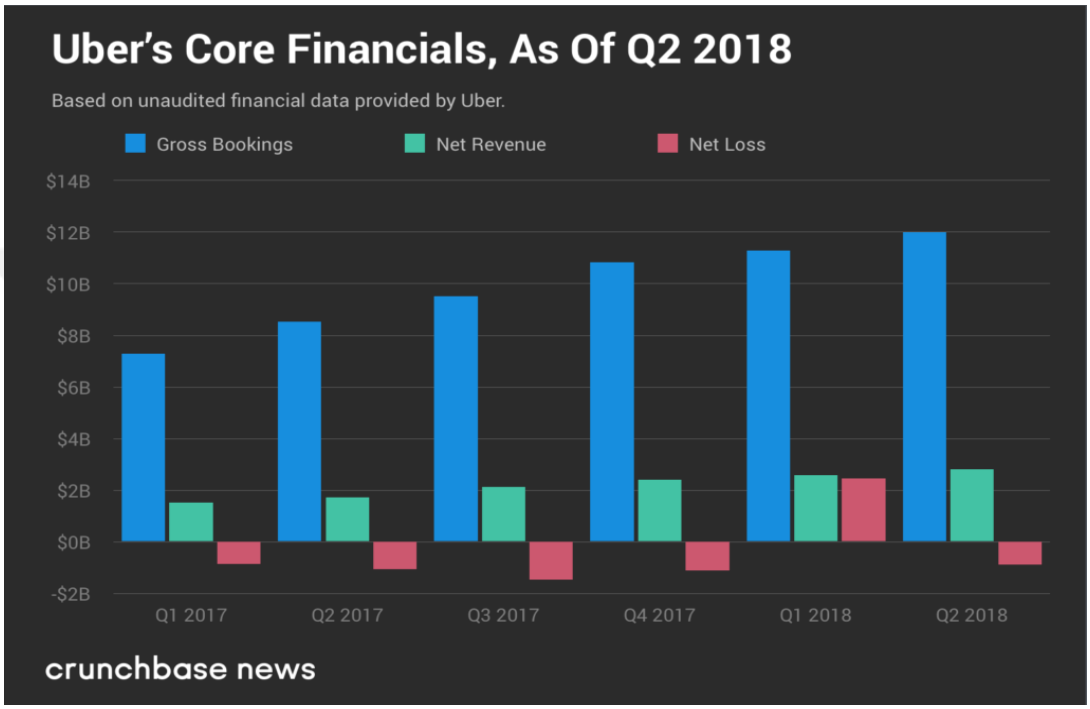

Figure 3. Uber's core financials, as of Q2 2018
(Crunch Base, 2018)

Participating in sharing economy as a provider sometimes gives providers more than a side income. Figure 4 shows Airbnb providers' room sharing average monthly incomes ratio to their rents. Houston Airbnb providers earn more than their rents, so basically they are living rent free with providing their idle rooms to Airbnb users. Philadelphia, Chicago, Dallas, San Diego and Miami providers may also pay %90 of their rents via their average monthly incomes, which they get from Airbnb.

Average and median monthly income per sharing economy worker figures are

observable for each sharing economy company in Figure 5. Airbnb is the leading company for comparison of average incomes while Uber is the fourth company. On the other hand Lyft, which is another ride sharing company and a rival of the Uber, is the third company, their providers earn slightly better average monthly incomes than Uber providers. Even though these are average incomes they are still notable side incomes for people who participate in sharing economy as providers.

smartasset

PAYING THE RENT
AIRBNB PRIVATE ROOM LISTINGS

City	Average Monthly Rent (2 bedroom)	Average Airbnb Private Room Rate	Average Occupancy Rate	Percent of Monthly Rent Paid
Houston	$ 1,293	$ 70	64 %	106 %
Philadelphia	$ 1,489	$ 72	64 %	94 %
Chicago	$ 1,727	$ 75	71 %	93 %
Dallas	$ 1,305	$ 66	60 %	92 %
San Diego	$ 2,017	$ 85	71 %	91 %
Miami	$ 1,879	$ 91	61 %	91 %
Oakland	$ 2,140	$ 74	83 %	88 %
Seattle	$ 2,109	$ 72	77 %	79 %
San Jose	$ 2,469	$ 84	75 %	77 %
Boston	$ 2,796	$ 87	77 %	73 %
Washington, D.C.	$ 2,586	$ 77	71 %	64 %
San Francisco	$ 4,642	$ 111	86 %	63 %
Los Angeles	$ 2,869	$ 80	72 %	61 %
New York	$ 3,732	$ 86	80 %	56 %
Averages	**$ 2,361**	**$ 81**	**72 %**	**81 %**

*Percentage of monthly rent calculated based on expected revenue of a single private room (shared-apartment) listing on Airbnb.

Figure 4. Paying the rent, Airbnb private room listings.

(smartasset.com, 2018)

Figure 5. Average and median monthly income per sharing economy worker (earnest.com, 2017)

2.2 Culture

Hofstede (1991) defines culture as "the collective programming of the mind that distinguishes the members of one group or category of people from another." (p. 5)

There are broader definitions of culture, for example "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society" (Tylor, 1958, p. 1). This definition is also referred to frequently by scholars studying culture.

Kluckhohn (1951) implies that culture consists of values. Values are not visible except they reflect on behaviors, but there are other visible reflections of culture too, which are symbols, heroes and rituals as illustrated in Figure 6.

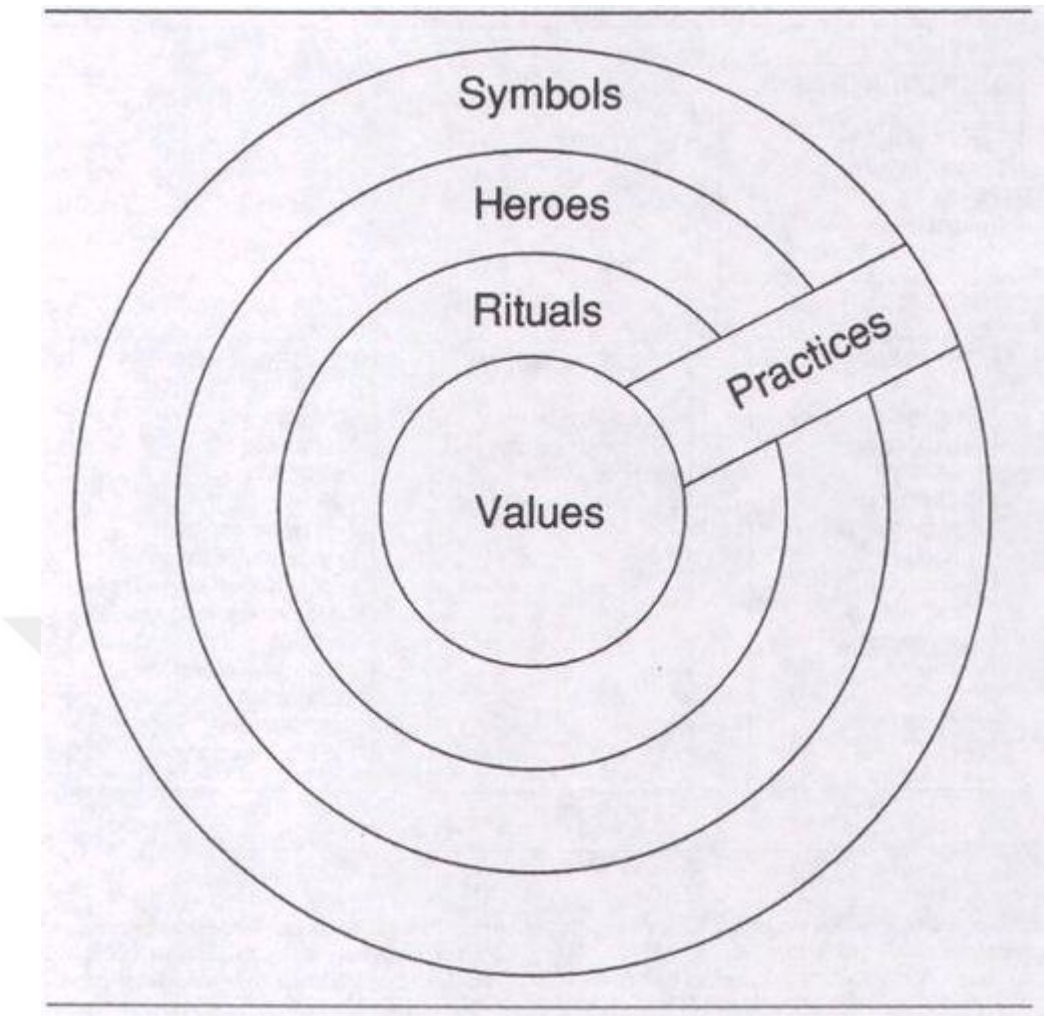

Figure 6. The "Onion Diagram": manifestations of culture at different levels of depth

(Hofstede, 2001)

Symbols are in the exterior part of the figure, therefore symbols can be transferred to other groups. Symbols include gestures, words and specific objects that mean different things for a group who are not from the same culture.

Heroes are simply the role models for a culture, which can be dead or alive or even fictional.

Rituals are greetings, showing respect etc. in summary, they are social interactions' unwritten rules in a culture. They are not necessity but can be very important and even can change a deal decision of a business meeting.

Practices in Figure 6 include symbols, heroes and rituals. Practices are visible for everyone, even someone who is a foreigner for a culture, but the meanings underlying the practices are invisible to the foreigner of that culture.

2.2.1 National culture

(Hofstede, 1980) is one of the most cited works for social sciences. He examined national culture by four universal dimensions. These four dimensions are power distance, uncertainty avoidance, femininity vs. masculinity, and individualism vs. collectivism.

His four factors for cultural structure of nations have been verified by Søndergaard (1994). Hofstede's work is the most popular culture theory for social science research (Nakata & Sivakumar, 2001).

Hofstede added a fifth dimension to his national culture model in 1991, which is long term vs. short term orientation, based on Michael Harris Bond's research. Michael Harris Bond is a social psychologist who was working in Hong Kong and he was researching values in Asia, therefore he conducted a survey among students from Asia which led the development of a fifth dimension. This fifth dimension was first named as “Confucian dynamism”, later being changed to long term vs. short term orientation.

Hofstede later added a sixth dimension, which is labeled as indulgence vs. restraint, in 2010. His research’s sample also extended to 76 countries by contribution of different scholars. His book’s 2010 edition “Cultures and Organizations: Software of the Mind” includes 76 countries’ data and six cultural dimensions.

2.2.2 Hofstede's six dimensions of culture

As stated above, the six dimensions are power distance, uncertainty avoidance, femininity vs. masculinity, individualism vs. collectivism, long term vs. short term orientation and indulgence vs. restraint. Power distance is mainly about accepting of status and power differences, it is about hierarchical order. In high power distance scored nations, people accept power differences and acts like they know their place. In contrast, in nations which have low level of power distance, they demand equal distribution of power, and more flat organizational structures are accepted and practiced.

Uncertainty avoidance defines the lack of tolerance for unclarity, being able to cope with undefined, unexpected situations. For those nations which have high levels of uncertainty avoidance, rules and policies are necessary and a need for society. On the other hand, for nations that have low levels of uncertainty avoidance, taking a risk and being in an ambiguous environment is not a problem. The need for written or unwritten rules is less for those nations which are low on uncertainty avoidance index (UAI).

Masculinity vs. femininity dimension refers to masculine and feminine characteristics of people. Gender differences which are absolute and biological are the same globally, but social gender roles vary from society to society. This dimension exists because Hofstede's other cultural dimensions did not show any differences between men and women, only femininity and masculinity dimension differs men and women. Hofstede (1991) defines a masculine society as: "emotional gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success, whereas women are supposed to be more modest, tender, and concerned with the quality of life" (p.82-83). The author defines feminine

society as: “emotional gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life” (p.82-83).

Individualism vs. collectivism dimension focuses on differences between collectivist and individualist societies. Collectivist refers to people who believe the interest of the group to be more important than their individual interests. On the other hand, individualist refers to individuals who place personal interests over their group's interests. Collectivism represents the majority of the people, whereas individualism represents minority. Family relationships are closer in collectivist societies than in individualist societies.

Long term vs. short term orientation dimension was added later to the original work of Hofstede, and is obtained from Michael Harris Bond's research on Asian cultures. The dimension is correlated with economic growth, which is not covered by the original work of Hofstede. Hofstede considered it as a necessary measurement for his work and then added it to his national culture dimensions. He defines long term orientation as: "the fostering of virtues oriented toward future rewards—in particular, perseverance and thrift" and as opposite short term orientation as: "the fostering of virtues related to the past and present—in particular, respect for tradition, preservation of “face,” and fulfilling social obligations" (Hofstede, 2001, p. 359).

Misho is the founder of indulgence vs. restraint dimension, he was affected by Inglehart's analysis of the World Values Survey, then he created this dimension by splitting well-being vs. survival dimension of Inglehart (1997). Having fun in leisure activities with friends or alone, doing what you want, spending money for having fun is related with happiness for societies which have high levels of indulgence, while these activities are considered as wrong for societies which have low levels of indulgence.

2.2.3 Critics about Hofstede's work

The main criticism about Hofstede's work is about using dichotomies to define cultural values. Hermans and Kempen (1998) suggest that globalization made culture a more complex area and the classical approach is no more meaningful for understanding the dynamics of global interconnectedness. The authors also argue that interconnectedness arises from multinational firms, internet communities etc. make culture's main theme inapplicable, which is defined as independent, coherent and stable.

Knowles, Morris, Chiu and Hong (2001) argue that viewing culture as static is not the case anymore, because globalization made it dynamic and open to change. Conway, Schaller, Tweed and Hallett (2001) argue that cultural interactions are not that easy to be simplified by cultural differences alone, individual experiences and values are better determinants of cultural interactions.

2.2.4 GLOBE study dimensions vs Hofstede dimensions

The Global Leadership and Organizational Behavior Effectiveness (GLOBE) study (House et al., 2004) includes 127 investigators from 62 countries and was conducted in the mid 1990's. Data was collected by survey from more than 17,000 middle managers from 951 organizations. The work expands on Hofstede's (1980) work plus investigates leadership issues.

The GLOBE study has nine dimensions which are: performance orientation, future orientation, gender egalitarianism, assertiveness, institutional collectivism, in-group collectivism, power distance, humane orientation and uncertainty avoidance. However the study divides these dimensions as practices and values, so actually, there are eighteen scores for every country.

Hofstede (2001) describes uncertainty avoidance as follows: “on the national cultural level, tendencies toward prejudice, rigidity and dogmatism, intolerance of different opinions, traditionalism, superstition, racism, and ethnocentrism all relate to a norm for intolerance of ambiguity that I have measured and expressed in a national Uncertainty Avoidance Index” (p. 146). On the other hand, House et al. (2004) defines uncertainty avoidance as “the extent to which members of collectives seek orderliness, consistency, structure, formalized procedures and laws to cover 10 situations in their daily lives” (p. 603).

Hofstede’s(1980) masculinity and collectivism dimensions were divided into two dimensions in the GLOBE study, these are gender egalitarianism and assertiveness for masculinity dimension and institutional collectivism (collectivism I), and in-group collectivism (collectivism II) for collectivism dimension.

GLOBE’s (House et al., 2004) future orientation dimension and Hofstede's long term vs. short term orientation are seemingly the same thing at first glance, but they actually measure different things. Venaik, Zhu and Brewer (2013) point out differences of these two dimensions as: “Hofstede long term orientation focuses on past (tradition) versus future (thrift) aspect of societies, GLOBE future orientation practices capture the present versus future (planning) practices of societies, and GLOBE future orientation values reflect societal aspirations and preferences for planning”(p. 1).

2.2.5 Culture and innovation studies

Andrijauskiene and Du (2018) investigate the relation between Hofstede's cultural dimensions and national innovation level for all EU countries except Cyprus, and find that power distance and uncertainty avoidance are negatively related, while

individualism and indulgence are positively related to countries' innovation scores. In a similar work Cox and Khan (2017) investigate national culture's relation between innovation for 77 countries around the World and find that individualism, low masculinity, long-term orientation and indulgence are attributes of innovative countries.

2.2.6 Culture and technology acceptance

Srite and Karahanna (2006) investigate the relationship between the espoused national cultural values and technology acceptance. They use cultural values in individual level, hence the expression espoused national cultural values. For the technology acceptance part, they use technology acceptance model (TAM) of Davis (1989).

Srite et al. (2006) imply that espoused masculinity/femininity values moderate perceived ease of use and behavioral intention's relation and also masculinity/femininity and uncertainty avoidance moderate the relationship between subjective norms and behavioral intention to use.

2.2.7 Culture and hotel penetration

Ivanov and Ivanova (2015) imply that individualism score of host country affects market penetration of hotel chains positively, while power distance and uncertainty avoidance affect it negatively. In addition to that long-term orientation negatively affects market penetration of hotel chains, which represents the share of rooms in affiliated hotels.

CHAPTER 3

METHODOLOGY

This chapter explains the research model, methodology, data collection method, and presents hypotheses, descriptive statistics, and analysis used to explore the research questions. The main source of data collection in this study is secondary data gathered from Hofstede (2001) and Statista's eTravel Market Report (2017).

This study has six independent variables for national culture (power distance, uncertainty avoidance, femininity vs. masculinity, individualism vs. collectivism, long term vs. short term orientation and indulgence vs. restraint), nine independent variables for country specific measures (GDP per capita, population size, international tourism departures, internet penetration as percent of population, tourism GDP as percent of total GDP, smart phone penetration, tablet penetration, number of households, and number of passenger cars per 1000 capita) and two dependent variables for sharing economy (ride sharing and house sharing). Figure 7 illustrates the main model, but the study comprises four models. Model 1 and Model 2 are the initial models for this research, then Model 3 and Model 4 were developed by changing the dependent variables in order to potentially improve the models by eliminating people who do not use online booking methods for these markets. Therefore the dependent variable for Model 3 is changed as percentage of ride sharing customers of total online transportation booked customers, and for Model 4 as percentage of house sharing customers of total online booking customers. These definitions are summarized in Table 2.

Hofstede's recent model of the research as in his book Cultures and Organizations: Software of the Mind 2010 has six dimensions of natural culture for

76 countries. Statista's research includes 161 countries. Their resources vary from academic ones to governments' statistical institutions, the details are presented in Appendix A. Statista (2017)'s data is the source for country related control variables of this study.

Datasets of the current study include 48 countries, all of which are included by both Hofstede' study and Statista.

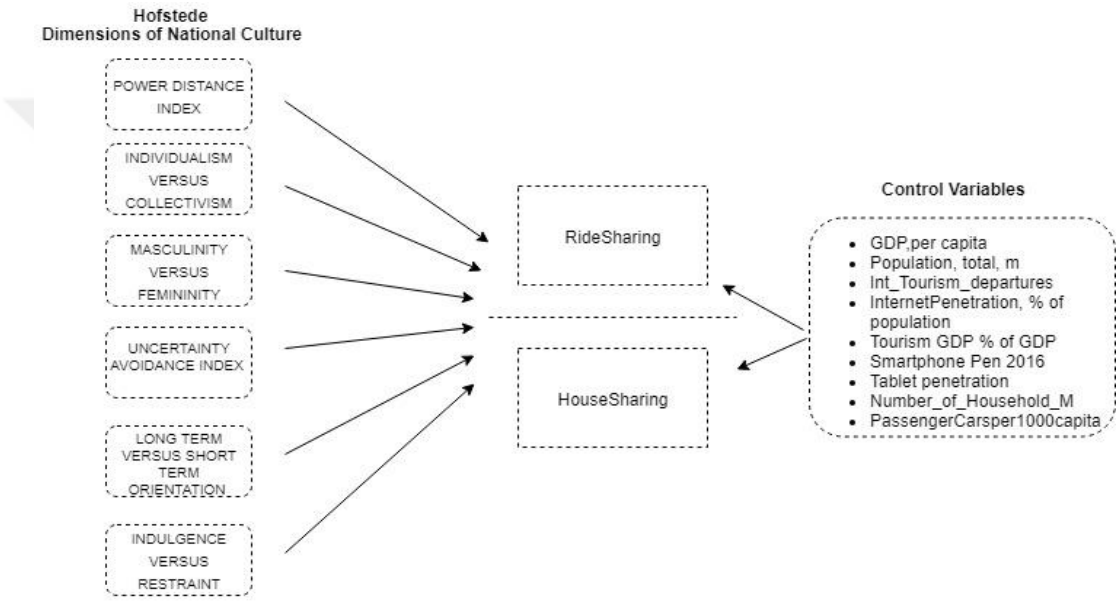

Figure 7. Model of the study

Table 2. Dependent Variables of Models

Model #	Dependent Variable Definition
Model 1	RideSharing: Ride sharing customers/Total adult population (aged 16 and older)
Model 2	HouseSharing: House sharing customers/Total adult population (aged 16 and older)
Model 3	RideSharing2: Ride sharing customers/Total online transportation booked customers
Model 4	HouseSharing2: House sharing customers/Total online accommodation booked customers

Statista also uses Google's consumer barometer survey and connected consumer survey data. Google Consumer Barometer Survey (2017) details are as follows: sample size per country is 3,000, respondents' age are at least 16 years old (Exceptions: respondents' age at least 18 years old: Argentina, Brazil, China, India, Japan, South Korea, Malaysia, Mexico, Philippines, Vietnam, United States, and sample size *n*=1,200: India, Indonesia, South Africa and Saudi Arabia). Timing of the survey for countries run via online panels, fieldwork ran from November 2014 - February 2015, and for countries run via face-to-face interviews, fieldwork started in January 2015 and continued through April 2015.

Connected consumer survey (Google/TNS)'s sample size per country is 1,000 and the respondents were at least 16 years old (Exceptions: countries with respondents at least 18 years old are, Argentina, Brazil, China, India, South Korea, Malaysia, Mexico, Philippines, Vietnam, United States, and at least 20 years old: Japan, exception for sample size *n*=4,000: India). Enumeration surveys were administered January - March 2014, January - March 2015, January - April 2016 and January - April 2017

3.1 Hypotheses

The study has four models, each model has 15 hypotheses, so the research has 60 hypotheses in total. Hypothesis number, model number and hypotheses statements are presented in Appendix B.

As presented in Figure 7, the study uses ride sharing and house sharing as dependent variables that represent sharing economy usage. The proposed independent variables that potentially have an effect on the independent variables are divided into two. The first group of independent variables is culture related variables

– power distance, individualism vs. collectivism, uncertainty avoidance, femininity vs. masculinity, indulgence vs. restraint and long term vs. short term orientation. The second group of independent variables is labeled control variables – GDP per capita, population size, international tourism departures, internet penetration as percent of population, tourism GDP as percent of total GDP, smart phone penetration, tablet penetration, number of households, and number of passenger cars per 1000 capita. Thus each model has six hypotheses for culture related variables and nine hypotheses for country related control variables.

3.2 Descriptive statistics

The dataset of the research has 48 lines, which consists of the common nations from Hofstede and Statista data. Since two out of the 48 lines have missing values for some of the dimensions, these are excluded for the regression analysis. Thus, the number of valid observations left for all specified variables together is 46 for this work. A summary table for all 46 countries is presented in Appendix C.

As a normality test, we checked skewness and kurtosis values and their ratio over standard error of skewness and standard error of kurtosis. HouseSharing and RideSharing2 variables cannot pass normality test with their ratios. Also when we consider skewness value as discussed by Hair et. al (2006), they are not in the range of -1,+1, so we also checked normal P-P plots and histograms for these. Histograms of regression standardized residuals are presented in Figure 8, Figure 10, Figure 12 and Figure 14, results of normal P-P plots are presented in Figure 9, Figure 11, Figure 13 and Figure 15. All dependent variables can be considered normal via these two tests.

Table 3 shows number of observations, range, minimum, maximum, mean, standard deviation, skewness and kurtosis for four dependent variables of our research and six independent variables, which are the dimensions of national culture.

Table 4 shows number of observations, range, minimum, maximum, mean, standard deviation, skewness and kurtosis for each of the nine independent variables, the country related control variables of the research. International tourism departures per capita and number of households variables have skewness values, which are not between -1,+1 but they are included nevertheless for the final models, since they are country specific variables and they do not match normality measures because of the population and tourism numbers of countries differ dramatically from one country to another.

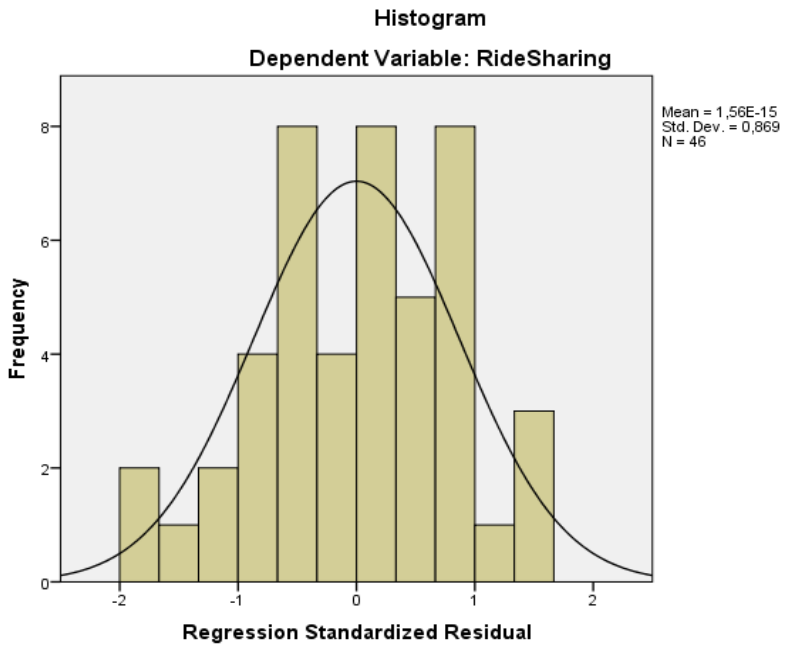

Figure 8. Histogram of RideSharing

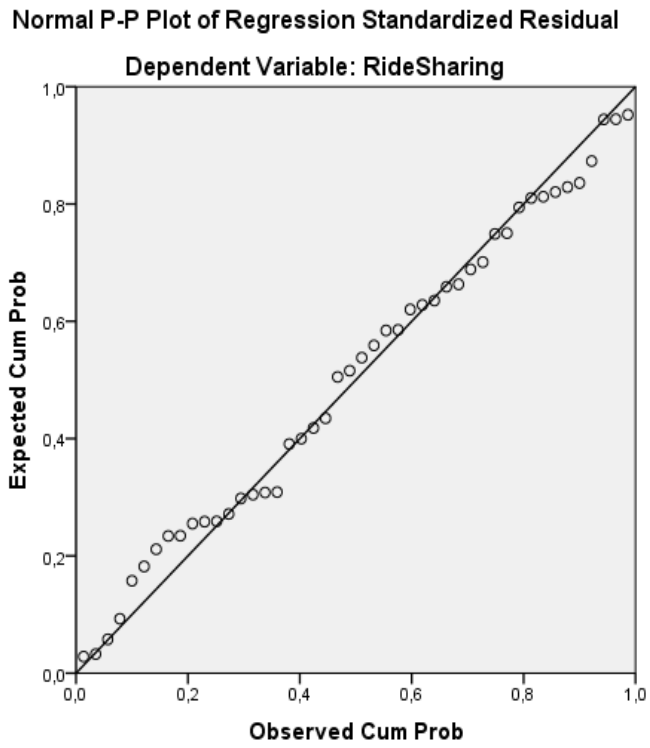

Figure 9. Normal P-P plot of regression standardized residual of RideSharing

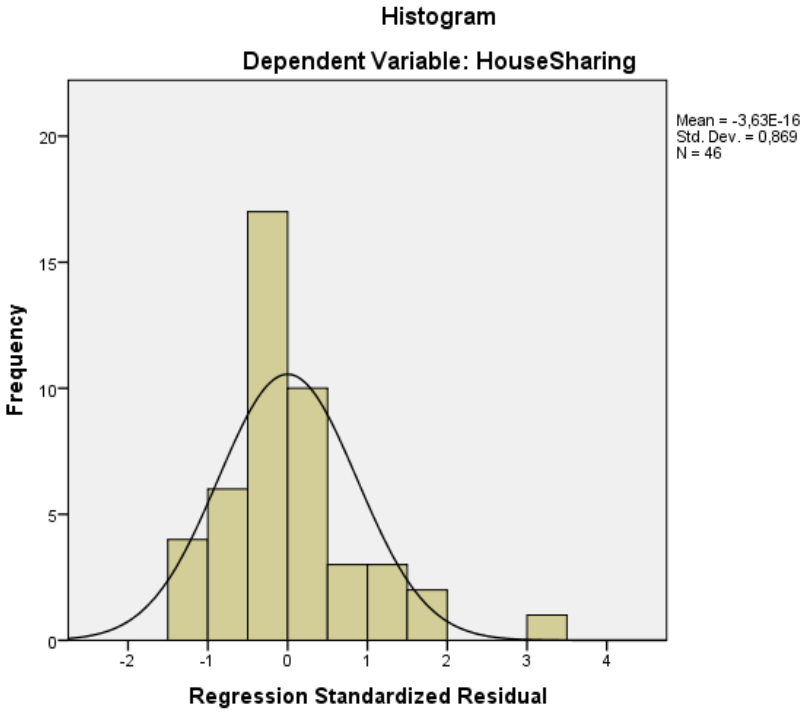

Figure 10. Histogram of HouseSharing

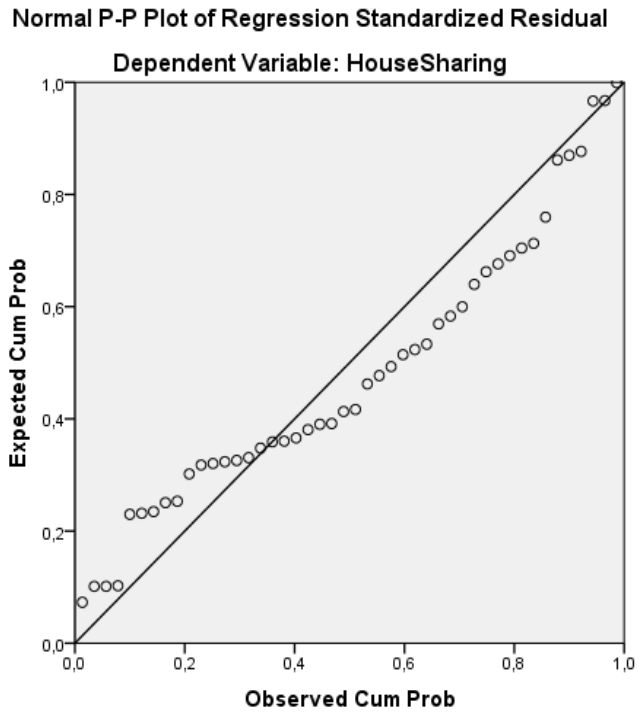

Figure 11. Normal P-P plot of regression standardized residual of HouseSharing

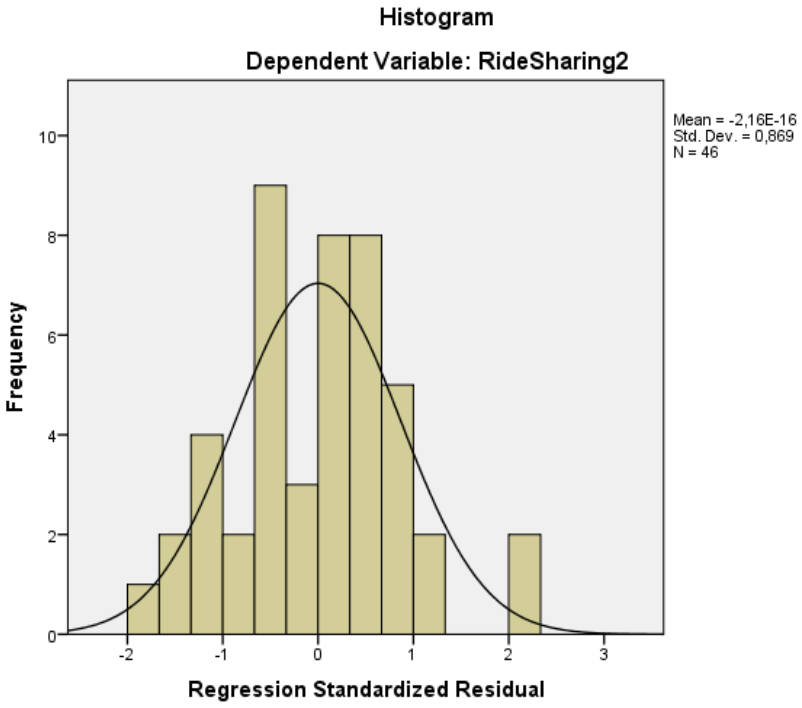

Figure 12. Histogram of RideSharing2

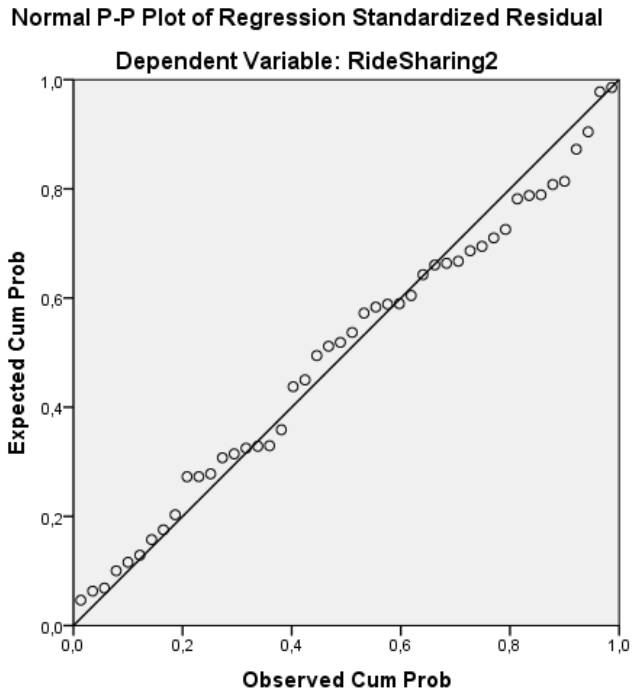

Figure 13. Normal P-P plot of regression standardized residual of RideSharing2

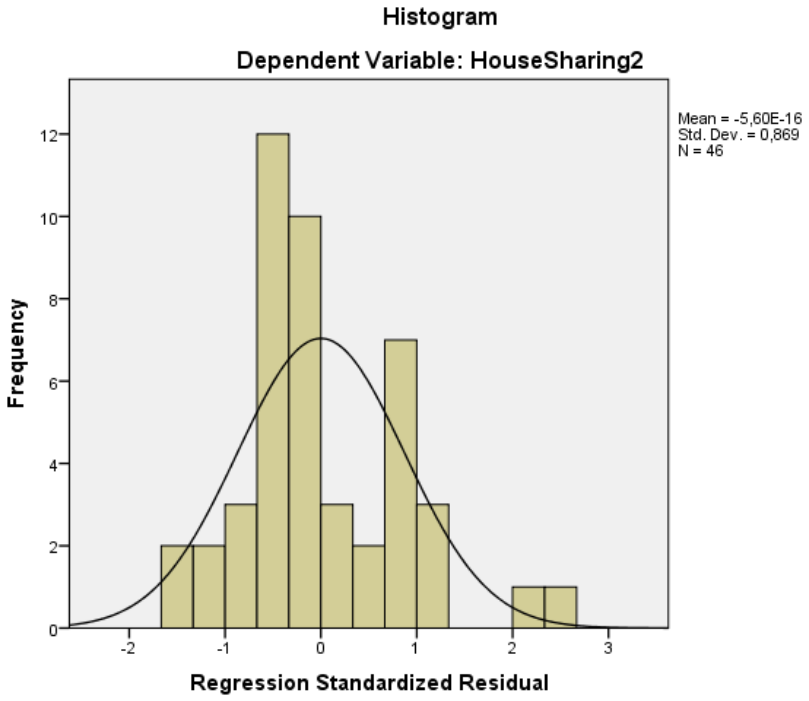

Figure 14. Histogram of HouseSharing2

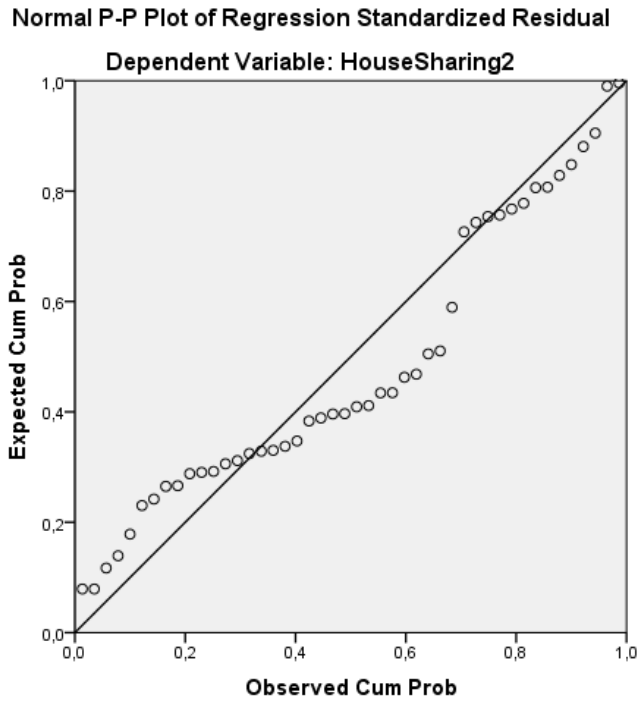

Figure 15. Normal P-P plot of regression standardized residual of HouseSharing2

Table 3. Descriptive Statistics for Dependent Variables and National Culture Dimensions

	N	Range	Minimum	Maximum	Mean	Standard Deviation	Skewness		Kurtosis	
							Statistic	Standard Error	Statistic	Standard Error
RideSharing	48	0.083	0.016	0.099	0.051	0.021	0.708	0.343	-0.478	0.674
HouseSharing	48	0.104	0.001	0.105	0.026	0.027	1.582	0.343	1.776	0.674
RideSharing2	48	0.597	0.101	0.698	0.263	0.115	1.416	0.343	3.529	0.674
HouseSharing2	48	0.466	0.003	0.470	0.145	0.102	1.042	0.343	1.077	0.674
PDI	48	89.000	11.000	100.000	57.083	22.704	-0.017	0.343	-0.704	0.674
IDV	48	77.000	14.000	91.000	51.042	22.538	0.019	0.343	-1.269	0.674
MAS	48	95.000	5.000	100.000	48.833	21.806	0.011	0.343	-0.040	0.674
UAI	48	91.000	8.000	99.000	63.438	23.483	-0.343	0.343	-0.943	0.674
LTOWVS	47	79.597	20.403	100.000	54.714	20.660	0.126	0.347	-0.881	0.681
IVR	46	84.375	12.946	97.321	44.492	20.069	0.344	0.350	-0.548	0.688
Valid N	46									

Table 4. Descriptive Statistics for Country Related Independent Variables

	N	Range	Minimum	Maximum	Mean	Standard Deviation	Skewness		Kurtosis	
							Statistic	Standard Error	Statistic	Standard Error
GDP, per capita	48	79058.000	1617.310	80675.310	26268.038	20211.463	0.744	0.343	-0.225	0.674
International tourism, departures per capita	48	12.100	0.010	12.110	0.969	1.761	5.612	0.343	35.569	0.674
Internet penetration, % of population	48	0.581	0.312	0.892	0.683	0.149	-0.580	0.343	-0.404	0.674
Passenger cars, per 1,000 capita	48	633.030	19.120	652.150	361.834	183.741	-0.445	0.343	-0.987	0.674
Number of households	48	396.420	0.480	396.900	29.423	68.860	4.304	0.343	19.866	0.674
Tourism GDP, % of GDP	48	0.091	0.016	0.108	0.045	0.022	1.185	0.343	1.101	0.674
Population	48	1370.430	1.310	1371.740	103.750	269.464	4.300	0.343	18.417	0.674
Smartphone Penetration, % of population	48	0.581	0.182	0.764	0.479	0.153	-0.194	0.343	-0.849	0.674
Tablet Penetration, % of population	48	0.531	0.034	0.564	0.285	0.134	0.438	0.343	-0.806	0.674
Valid N	48									

CHAPTER 4

RESULTS OF THE ANALYSIS

This chapter presents results of the analysis for four models of this study. Variable elimination reasons and methods are also discussed in this chapter.

Regression analysis is used in order to test the hypotheses of the study presented in Table B1. The purpose of multiple regression is to explain the relationship between several independent or predictor variables and one dependent variable. As the purpose of this study is examine the relationship between national cultural values and county related variables with participation in the sharing economy, multiple regression is the appropriate statistical analysis tool.

As stated previously, this study presents four models. Regression analysis results for each model are presented through a coefficients table, model summary and anova table. All multiple regression results for Model 1 are presented in Appendix D as the output tables are too large to present in this section. Similarly Model 2 results are in Appendix E, Model 3 results are in Appendix F, and Model 4 results are in Appendix G. For all models first coefficients table is presented including all 15 independent variables of the study, which are six cultural dimensions and nine control variables as well as constant, which represents sharing economy penetration.

Control variables are eliminated, which have VIF (Variance Inflation Factor) values higher than 10 and tolerance values lower than 0.1, from the first coefficients tables. This is done to eliminate potential multicollinearity issues.

According to Cohen et al (2003), in order to eliminate multicollinearity, independent variables should be removed if they have VIF values higher than 10 and tolerance values lower than 0.1. VIF and tolerance values are considered as

important criteria for the selection of the predictor variables to be included in the model. Thus for each model after presenting the original coefficients table, a revised coefficients table is generated by eliminating variables with multicollinearity issues.

The results of multiple regression analysis presented in Table D1, Table E1, Table F1, and Table G1 show that tablet penetration, smartphone penetration, GDP per capita and population have high VIF values and low tolerance values, therefore we excluded them for all models. In addition to that we also excluded passenger cars per 1000 capita variable for house sharing models, Model 2 and Model 4, because passenger cars per 1000 capita is not expected to be related to house sharing. We have this variable only for ride sharing models, because it shows idle capacity of cars.

Even though they have high VIF values and low tolerance values, we did not exclude number of households and internet penetration variables. The reason for this decision is that for the internet penetration variable, the problem about VIF and tolerance values occur because of the smartphone penetration and the tablet penetration variables' existence. Therefore, we chose to select the internet penetration variable between these three variables, because internet penetration is anticipated to be a better representative for technological infrastructure of a nation than smartphone penetration and tablet penetration.

All results are tested at a significance level of 0.05. All models and variables with p-values less than 0.05 are deemed to be significant.

4.1 Model 1 results

Model 1 proposes that proportion of ride sharing customers in total adult population is affected by culture and country specific variables. Regression analysis test results

presented in Table D4 show that the model is significant ($p = 0.000 < 0.05$). We made variable elimination via VIF values, so in the final model for Model 1 all variables have VIF values less than 10 and tolerance values more than 0.1. As seen in Table D2, internet penetration and number of households variables have $p = 0.000 < 0.05$, so they have statistically significant influence on RideSharing dependent variable. It also means hypotheses H1i (Internet penetration of a nation affects ride sharing market penetration rate of the same nation) and H1k (Number of households of a nation affects ride sharing market penetration rate of the same nation) are significant.

Internet penetration to be significantly affecting ride sharing market penetration is an expected result because sharing economy practices are all internet based systems, as a result internet access is mandatory to participate in a sharing activity.

Number of households is a variable directly related to population of a country, so with higher the population the need for effective use of resources is also higher than the lower population countries. Sharing economy is a great way to achieve efficiency so this is also an expected outcome of the analysis.

Our main expectations were to observe the culture related variables, specifically uncertainty avoidance and individualism vs. collectivism variables being in significant relation with ride sharing. However, these variables were not found to be significant, respectively with $p = 0.480$ and $p = 0.929$. These are surprising results for us because sharing concept's main issue is trust and trust is directly related to risk taking. Therefore uncertainty avoidance index, a measure of risk taking, not found to be a statistically significantly influence on ride sharing, was an unexpected result. Table 5 summarizes all major findings for Model 1.

Table 5. Model 1 Summary Statistics

Model 1	R Square = 0,709		Adjusted R Square = 0,615	F = 7,529	Sig. = 0.000	
	Unstandardized Coefficients		Standardized Coefficients			
	Beta	Std. Error	Beta	t	Sig.	Conclusion
(Constant)	-.021	.023		-.907	.371	
Power Distance	-1.246E-5	.000	-.013	-.086	.932	Not Significant
Individualism vs. Collectivism	.000	.000	-.174	-1.031	.310	Not Significant
Masculinity vs. Femininity	.000	.000	-.138	-1.345	.187	Not Significant
Uncertainty Avoidance	.000	.000	-.148	-1.201	.238	Not Significant
Long Term vs. Short Term Orientation	-7.536E-5	.000	-.073	-.513	.611	Not Significant
Indulgence vs. Restraint	.000	.000	.139	.934	.357	Not Significant
International Tourism, departures per capita	.001	.001	.103	.879	.386	Not Significant
Internet Penetration, % of population	.121	.028	.838	4.338	.000	Significant
Passenger Cars, per 1,000 capita	6.440E-6	.000	.055	.327	.745	Not Significant
Number of Households, m	.000	.000	.486	3.985	.000	Significant
Tourism GDP, % of GDP	.061	.106	.063	.574	.570	Not Significant

4.2 Model 2 results

Model 2 proposes that proportion of house sharing customers in total adult population is affected by culture and country specific variables. Regression analysis test results presented in Table E4 show that the model is significant ($p = 0.008 < 0.05$). We made variable elimination via VIF values, so in the final model for Model 2 all variables have VIF value less than 10 and tolerance value more than 0.1.

Unexpectedly, internet penetration has a $p = 0.053$ significance value, so it does not have statistically significant influence on HouseSharing dependent variable at the 0.05 level. It also means hypothesis H2i (Internet penetration of a nation affects house sharing market penetration rate of the same nation) is not significant as can be seen in Table E2.

While model is significant ($p = 0.008 < 0.05$) none of the variables were found to be significant. The reason behind this contradictory finding could be that tests on the individual coefficients each assume that all of the other predictors are in the model. In order to solve this problem, stepwise regression analysis conducted. Stepwise regression solves the afore-stated problem and internet penetration and uncertainty avoidance variables have $p = 0.000 < 0.05$ and $p = 0.043 < 0.05$ respectively, so they have statistically significant influence on HouseSharing dependent variable. It also means hypotheses H2i (Internet penetration of a nation affects house sharing market penetration rate of the same nation) and H2b (Uncertainty avoidance score of a nation affects House Sharing market penetration rate of the same nation) are significant. Table 6 summarizes all major findings for Model 2.

Internet penetration is a parameter that shows possible sharing economy participants, because internet access is a must for accessing to sharing economy

platforms, so internet penetration's significant influence on HouseSharing is not a surprise. Uncertainty avoidance's significant influence on HouseSharing is also an expected result of the analysis, because uncertainty avoidance is a trust related parameter and trust is one of the main issues to participate in sharing economy as implied by numerous research. The negative coefficient of uncertainty avoidance variable in the model implies that those cultures that are more uncertainty avoidant participate less in house sharing.

Table 6. Model 2 Summary Statistics

Model 2	R Square = 0,382		Adjusted R Square = 0,353	F = 4,328	Sig. = 0.043	
	Unstandardized Coefficients		Standardized Coefficients			
	Beta	Std. Error	Beta	t	Sig.	Conclusion
(Constant)	-2.115	1.915		-1.104	.276	
Internet Penetration, % of population	9.768	2.241	.528	4.359	.000	Significant
Uncertainty Avoidance	-.029	.014	-.252	-2.080	.043	Significant
Power Distance				-.535	.596	Not Significant
Individualism vs. Collectiv-ism				1.077	.288	Not Significant
Masculinity vs. Femininity				-1.041	.304	Not Significant
Long Term vs. Short Term Orientation				-.890	.379	Not Significant
Indulgence vs. Restraint				.959	.343	Not Significant
International Tourism, depar-tures per capita				-.894	.376	Not Significant
Number of Households, m				.349	.729	Not Significant
Tourism GDP, % of GDP				1.154	.255	Not Significant

4.3 Model 3 results

Model 3 proposes that proportion of ride sharing customers in total online transportation booked customers is affected by culture and country specific variables. Regression analysis test results show that the model is not significant (p= 0.173 > 0.05). Detailed results of the analysis are presented in Appendix F; Table 7 provides a summary of these results.

Table 7. Model 3 Summary Statistics

R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Significance
0.573	0.329	0.111	0.1080818	1.512	0.173

Predictors: (Constant), Tourism GDP, % of GDP, mas, ivr, International Tourism, departures per capita, Number of Households, m, Passenger Cars, per 1,000 capita, uai, ltowvs, pdi, idv, Internet Penetration, % of population

Dependent Variable: RideShare/TotalMob

These results show that none of the culture related and country specific variables significantly affect participation in ride sharing when ride sharing is defined as proportion of ride sharing customers in total online transportation booked customers

4.4 Model 4 results

Model 4 proposes that proportion of house sharing customers in total online accommodation booked customers is affected by culture and country specific variables. Regression analysis test results show that the model is not significant (p = 0.530 > 0.05). Detailed results of the analysis are presented in Appendix G; Table 8 provides a summary of these results.

Table 8. Model 4 Summary Statistics

R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Significance
0.455	0.207	-0.019	0.1017658	0.926	0.530

Predictors: (Constant), Tourism GDP, % of GDP, mas, ivr, International Tourism, departures per capita, Number of Households, m, idv, uai, ltowvs, pdi, Internet Penetration, % of population
Dependent Variable: HouseShare2

These results show that contrary to expectation, none of the culture related and country specific variables significantly affect participation in house sharing when house sharing is defined as proportion of house sharing customers in total online accommodation booked customers.

CHAPTER 5

CONCLUSION

This chapter presents research outcomes, discussions about outcomes, and suggestions for sharing economy platforms. Finally, limitations of the study and recommendations for further research are presented.

We have found that internet penetration and number of households variables have statistically significant influence on RideSharing. It also means hypothesis H1i which proposes that internet penetration of a nation affects ride sharing market penetration rate of the same nation and hypothesis H1k which proposes that number of households of a nation affects ride sharing market penetration rate of the same nation are significant. That means when the number of households of a nation is higher than another nation, its' ride sharing participation rate is also higher. Same situation is valid for internet penetration, if a nation's internet penetration is higher than another nation, it means their ride sharing participation rate is also higher. These two relationships show that people from countries with higher number of households, thus higher population sizes, have more willingness to participate in sharing economy, but we cannot derive whether this result is supply driven or demand driven. This is due to the fact that our data structure does not allow us to do this kind of discrimination. On the other hand, internet penetration rate shows the ability to access sharing economy platforms so the relation with internet penetration and sharing participation is a natural outcome.

Second model of the study results imply that uncertainty avoidance and internet penetration variables have statistically significant influence on HouseSharing. This means that hypothesis H2b which proposes that uncertainty

avoidance score of a nation affects house sharing market penetration rate of the same nation is significant. That means when the uncertainty avoidance score of a nation is higher than another nation, its' ride sharing participation rate is relatively lower. This is reflected in the negative coefficient of the variable. Uncertainty avoidance score defines the lack of tolerance for unclarity, nations that have lower levels of uncertainty avoidance have more willingness to take a risk than nations that have higher levels. Also H2i which proposes that internet penetration of a nation affects house sharing market penetration rate of the same nation is significant. This finding is parallel to Model 1 findings.

It could be an expected result that, more of the cultural variables being in a significant relationship with sharing economy participation than the results indicated. The reason behind the fact that less number of culture dimensions were found to be significant than expected can be a result of the statistics used related to tourism. We do not have any information about what proportion of the total transportation sharing and what proportion of accommodation sharing bookings are made by the locals vs. the outsiders. High proportions of outsiders can mitigate the cultural differences' effect. Considering a popular tourism country, most probably high proportions of ride sharing and house sharing bookings are made by foreigners, so these people with different cultural backgrounds can change the cultural structure of the country, as a result culture's effect can be blurred.

Individualism vs. collectivism cultural variable was one of the expected determinants of sharing economy participation, but results did not indicate such an effect. Reason behind this situation can be a result of the relation between average household size and individualist vs. collectivist societies. It was expected that collectivists have more willingness to share but collectivist societies have been

observed to have larger average household sizes, whilst individualist cultures have less willingness to share but they have low numbers of average household size. Therefore larger household size means less idle capacity of rooms, so collectivists have more willingness to share but they do not have empty rooms to share, on the other hand individualists have empty room to share but they have less willingness to share. As a result, that availability difference, which occurs because of the individualists' preference of living alone, mitigates the possible effect of the individualism vs. collectivism.

This area of study still needs more attention from both academic and marketing researchers. Different research methods and approaches can explain this relationship better and also can create useful insights for industry and countries.

The main limitation of our research is the number of available data about countries, because the appropriate data for our dataset require concurrence of both culture and sharing economy datasets. The large number of independent variables and the limited number of lines in the data set is the major limitation of the study. A new survey which covers more countries has to be conducted to cope with this problem, but such a task is beyond the attainable boundaries of this study.

This research is on the country level, so we cannot derive individual specific results with the research. Therefore, a survey based research on the personal level can give more detailed and convenient results, especially regarding the effect of culture on sharing economy participation. Such a survey would also require a tremendous budget and time.

Another limitation to this research is that it is not possible to separate users and providers of the sharing economy, so we cannot derive user specific or provider specific information for sharing economy. As with all research, limitations also offer

areas of further study. Thus for future research this can be an interesting topic and can give more insights about the sharing economy phenomenon.

Finally, suggestions for sharing economy platforms derived from this study would be focusing on high number of households and high internet penetration countries for ride sharing platforms, high internet penetration and low uncertainty avoidance countries for house sharing platforms. By doing that, they can get more customers and can grow their businesses faster, because countries with high number of households and high internet penetration rates are the most suitable environments for ride sharing platforms and countries with low uncertainty avoidance and high internet penetration rates are the most suitable environments for house sharing platforms.

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APPENDIX A

STATISTA'S RESOURCES

OUR SOURCES

Selected data providers

Access information:
- o open access
- ($) limited access
- $ only paid access

Geographic focus:
- G global coverage
- R regional coverage

Database

($) Alexa	G	
o Bank for International Settlements	G	
$ Bloomberg	G	
$ Bureau van Dijk	G	
$ CB Insights	G	
$ Creditreform	G	
($) CrunchBase	G	
$ Dealroom.co	G	
$ Dun & Bradstreet	G	
$ eMarketer	G	
o European Central Bank	G	
o Eurostat	G	
$ GlobalWebIndex	G	
o Google Consumer Barometer	G	
$ Hoovers	G	
$ IBIS World	G	
o IMF	G	
$ ITU	G	
($) OECD	G	
o OICA	G	
$ Oxford Economics	G	
$ PrivCo	G	
$ Sensor Tower	G	
$ SimilarWeb	G	
$ The Economist	G	
$ Thomson Reuters	G	
$ Trendwatching.com	G	
o United Nations Statistics Division	G	
o World Health Organization (WHO)	G	
o World Tourism Organization (UNWTO)	G	
o World Trade Organization (WTO)	G	
o Worldbank	G	
($) AGOF	R	
o Australia: Australian Bureau of Statistics	R	
o Austria: Central Statistics Office	R	
o Belgium: National Institute of Statistics	R	
o Brazil: IBGE	R	
o Bulgaria: National Statistical Institute	R	
o Canada: Statistics Office Canada	R	
o China: National Bureau of Statistics	R	
o Croatia: Central Bureau of Statistics	R	
o Czech Republic: Statistical Office	R	
o Data Center of China Internet	R	
o Denmark: Statistics Denmark	R	
o Estonia: Statistical Office of Estonia	R	
o Federal Reserve	R	
o Finland: Statistics Finland	R	
o France: Institut National de la Statistique	R	
o Germany: Federal Statistical Office	R	
o Hong Kong: Census & Statistics Depart.	R	
o Hungary: Central Statistical Office	R	
o India: Ministry of Statistics	R	
o Indonesia: Statistics Institute	R	
o Ireland: Central Statistics Office	R	
o Israel: Central Bureau of Statistics	R	
o Italy: National Statistical Institute	R	
o Japan : Japanese Statistics Bureau	R	
o Korea: National Statistical Office	R	
o Lithuania: Statistics Lithuania	R	
o Malaysia: Department of Statistics	R	
o Mexico: INEGI	R	
o Netherlands: Statistics Netherlands	R	
o Norway : Statistics Norway	R	
o Philippines: National Statistics Office	R	
o Poland: Central Statistical Office	R	
o Romania: Nat. Commission for Statistics	R	
o Russia: State Committee for Statistics	R	
o Saudi Arabia: Ministry of Finance	R	
$ Scarborough Research	R	
o Singapore: Department of Statistics	R	
o Slovak Republic: Statistical Office	R	
o Slovenia: Statistical Office	R	
o Spain: Institute of Statistics	R	
o Statistics South Africa	R	
o Sweden: Intern. Devel. Coop. Agency	R	
o Switzerland: Federal Statistics Bureau	R	
o Thailand: National Statistical Office	R	
o Turkey: State Institute of Statistics	R	
o U.S. Department of Commerce	R	
o UK: Office for National Statistics	R	
o United States: Census Bureau	R	

Market Research

$ GfK	G	
$ IPSOS	G	
$ Kantar Media	G	
$ MB-Research	G	
$ Nielsen	G	
$ NPD Group	G	
$ TNS Infratest	G	
$ YouGov	G	

News

o Automotive IT News	G
o Bank Innovation	G
o BankNXT	G
o Business Insider	G
o cnet.com	G
o ConnectedCarTech	G
o Crowdfund Insider	G
o DigitalTrends.com	G
$ Financial Times	G
($) Forbes	G
$ GigaOm	G
($) Harvard Business Review	G
o MarketWatch	G
o Mashable	G
$ Meltwater Group	G
o Tech in Asia	G
o TechCrunch	G
o TechRadar.com	G
o The Motley Fool	G
o The Verge	G
o Trends der Zukunft	G
o VentureBeat	G
$ WallStreet Journal	G
o Wired.com	G
o ZDNet	G

As of July 2016

OUR SOURCES

Selected data providers

Access information:

- o open access
- ($) limited access
- $ only paid access

Geographic focus:

- G global coverage
- R regional coverage

News

o Basic Thinking	R	
o China.org.cn	R	
o deutsche startups	R	
o etailment	R	
o Exciting Commerce	R	
o Gründerszene	R	
o Payment & Banking	R	
o Smarthomewelt.de	R	
o TechWeb.com.cn	R	
o The Guardian	R	
o Times of India	R	
o VC Magazine	R	
o WirtschaftsWoche	R	

Reports / Statistics

o A.T. Kearny	G	
$ ABI Research	G	
o Accenture	G	
$ Analysys Mason	G	
($) App Annie	G	
o AppBrain	G	
o AppZapp	G	
$ Berg Insight	G	
$ BI Intelligence	G	
o Boston Consulting Group	G	
$ BSRIA	G	
o Capgemini	G	
o Center for the Digital Future	G	
($) Centre for Retail Research	G	
o Cisco Systems	G	
$ ComScore	G	
o Deloitte	G	
($) Dentsu	G	
o Digital Entertainment Group	G	
($) eCommerce Europe	G	
($) Econsultancy	G	
$ EHI Retail Institute	G	
o Ericsson	G	
o Ernst & Young	G	
o European Banking Federation	G	
o European Comission	G	
($) FIPP	G	
$ Forrester Research	G	
$ Frost & Sullivan	G	
$ Gartner	G	
o Global Entrepreneurship Monitor	G	
($) Goldman Sachs	G	
($) GSMA Intelligence	G	
o Healthcare Informatics	G	
$ Horvath & Partner	G	
($) IAB Europe	G	
$ IDATE	G	
($) IDC	G	
$ IFPI	G	
$ IHS	G	
$ Informa Telecoms & Media	G	
o International Organization for Migration	G	
$ Internet Retailer	G	
o Internet World Stats	G	
$ Juniper Research	G	
$ JWT (J. Walter Thompson)	G	
o Kienbaum	G	
o KPMG	G	
$ Leichtman Research Group	G	
$ Machina Research	G	
$ Magna Global	G	
$ Markets & Markets	G	
o McKinsey	G	
$ Mind Commerce	G	
$ Ovum	G	
o Oxford Internet Institute	G	
$ Pierre Audoin Consultants	G	
($) PwC	G	
o Research ICT Africa	G	
($) research2guidance	G	
($) RetailMeNot	G	
($) RetailNext	G	
($) ROI Research	G	
o Statistic Brain Research Institute	G	
$ Strategy Analytics	G	
o Strategy&	G	
($) SuperData Research	G	
$ TDG Research	G	
($) TrendOne	G	
o United Nations Office on Drugs & Crime	G	
o University of Cambridge	G	
($) Zenith Optimedia	G	
o Association de l'Économie Numérique	R	
o Bank of England	R	
($) bevh (Germany)	R	
($) Börsenverein d. Deut. Buchhandels	R	
($) Bundesverband der Musikindustrie e.V.	R	
o Canadian's Internet Business	R	
o Centre for Econmic Performance	R	
o Consumer Technology Association	R	
o eco	R	
($) e-tailing	R	
($) FEVAD (France)	R	
($) Foro de Economía Digital	R	
o HM Treasury	R	
($) IAB.com	R	
o Interactive Media in Retail Group (UK)	R	
($) iResearch Consulting Group	R	
($) J.P. Morgan	R	
o Media Perspektiven	R	
o Nat. Inst. of Economic & Social Research	R	
o Nesta	R	
($) Ofcom	R	
o OVK	R	
($) Pew Research Center	R	
o RIAA (Recording Industry Association)	R	
$ Zukunftsinstitut	R	

As of July 2016

APPENDIX B

HYPOTHESES OF THE STUDY

Table B1. Hypotheses Statements

Hypothesis #	Model#	Hypothesis Statement
H1a	1	PDI score of a nation affects Ride Sharing market penetration rate of the same nation.
H1b	1	UAI score of a nation affects Ride Sharing market penetration rate of the same nation.
H1c	1	MAS score of a nation affects Ride Sharing market penetration rate of the same nation.
H1d	1	IDV score of a nation affects Ride Sharing market penetration rate of the same nation.
H1e	1	LTO score of a nation affects Ride Sharing market penetration rate of the same nation.
H1f	1	IVR score of a nation affects Ride Sharing market penetration rate of the same nation.
H1g	1	GDP of a nation affects Ride Sharing market penetration rate of the same nation.
H1h	1	Int. Tourism Dep. of a nation affects Ride Sharing market penetration rate of the same nation.
H1i	1	Internet Pen. of a nation affects Ride Sharing market penetration rate of the same nation.
H1j	1	Passenger Cars P.C. of a nation affects Ride Sharing market penetration rate of the same nation.
H1k	1	No. of Households of a nation affects Ride Sharing market penetration rate of the same nation.
H1l	1	Tourism GDP of a nation affects Ride Sharing market penetration rate of the same nation.
H1m	1	Population of a nation affects Ride Sharing market penetration rate of the same nation.
H1n	1	Smartphone Pen. of a nation affects Ride Sharing market penetration rate of the same nation.
H1o	1	Tablet Pen of a nation affects Ride Sharing market penetration rate of the same nation.
H2a	2	PDI score of a nation affects House Sharing market penetration rate of the same nation.
H2b	2	UAI score of a nation affects House Sharing market penetration rate of the same nation.
H2c	2	MAS score of a nation affects House Sharing market penetration rate of the same nation.
H2d	2	IDV score of a nation affects House Sharing market penetration rate of the same nation.
H2e	2	LTO score of a nation affects House Sharing market penetration rate of the same nation.
H2f	2	IVR score of a nation affects House Sharing market penetration rate of the same nation.
H2g	2	GDP of a nation affects House Sharing market penetration rate of the same nation.
H2h	2	Int. Tourism Dep. of a nation affects House Sharing market penetration rate of the same nation.
H2i	2	Internet Pen. of a nation affects House Sharing market penetration rate of the same nation.

H2j	2	Passenger Cars P.C. of a nation affects House Sharing market penetration rate of the same nation.
H2k	2	No. of Households of a nation affects House Sharing market penetration rate of the same nation.
H2l	2	Tourism GDP of a nation affects House Sharing market penetration rate of the same nation.
H2m	2	Population of a nation affects House Sharing market penetration rate of the same nation.
H2n	2	Smartphone Pen. of a nation affects House Sharing market penetration rate of the same nation.
H2o	2	Tablet Pen of a nation affects House Sharing market penetration rate of the same nation.
H3a	3	PDI score of a nation affects Ride Sharing market penetration rate of the same nation.
H3b	3	UAI score of a nation affects Ride Sharing market penetration rate of the same nation.
H3c	3	MAS score of a nation affects Ride Sharing market penetration rate of the same nation.
H3d	3	IDV score of a nation affects Ride Sharing market penetration rate of the same nation.
H3e	3	LTO score of a nation affects Ride Sharing market penetration rate of the same nation.
H3f	3	IVR score of a nation affects Ride Sharing market penetration rate of the same nation.
H3g	3	GDP of a nation affects Ride Sharing market penetration rate of the same nation.
H3h	3	Int. Tourism Dep. of a nation affects Ride Sharing market penetration rate of the same nation.
H3i	3	Internet Pen. of a nation affects Ride Sharing market penetration rate of the same nation.
H3j	3	Passenger Cars P.C. of a nation affects Ride Sharing market penetration rate of the same nation.
H3k	3	No. of Households of a nation affects Ride Sharing market penetration rate of the same nation.
H3l	3	Tourism GDP of a nation affects Ride Sharing market penetration rate of the same nation.
H3m	3	Population of a nation affects Ride Sharing market penetration rate of the same nation.
H3n	3	Smartphone Pen. of a nation affects Ride Sharing market penetration rate of the same nation.
H3o	3	Tablet Pen of a nation affects Ride Sharing market penetration rate of the same nation.
H4a	4	PDI score of a nation affects House Sharing market penetration rate of the same nation.
H4b	4	UAI score of a nation affects House Sharing market penetration rate of the same nation.
H4c	4	MAS score of a nation affects House Sharing market penetration rate of the same nation.
H4d	4	IDV score of a nation affects House Sharing market penetration rate of the same nation.
H4e	4	LTO score of a nation affects House Sharing market penetration rate of the same nation.
H4f	4	IVR score of a nation affects House Sharing market penetration rate of the same nation.
H4g	4	GDP of a nation affects House Sharing market penetration rate of the same nation.
H4h	4	Int. Tourism Dep. of a nation affects House Sharing market penetration rate of the same nation.

H4i	4	Internet Pen. of a nation affects House Sharing market penetration rate of the same nation.
H4j	4	Passenger Cars P.C. of a nation affects House Sharing market penetration rate of the same nation.
H4k	4	No. of Households of a nation affects House Sharing market penetration rate of the same nation.
H4l	4	Tourism GDP of a nation affects House Sharing market penetration rate of the same nation.
H4m	4	Population of a nation affects House Sharing market penetration rate of the same nation.
H4n	4	Smartphone Pen. of a nation affects House Sharing market penetration rate of the same nation.
H4o	4	Tablet Pen of a nation affects House Sharing market penetration rate of the same nation.

Table B2. Hypotheses Results

Hypothesis #	Model #	Hypothesis Statement	Conclusion	Sig Val.
H1a	1	PDI score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject	.932
H1b	1	UAI score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject	.310
H1c	1	MAS score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject	.187
H1d	1	IDV score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject	.238
H1e	1	LTO score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject	.611
H1f	1	IVR score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject	.357
H1g	1	GDP of a nation affects Ride Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H1h	1	Int. Tourism Dep. of a nation affects Ride Sharing market penetration rate of the same nation.	Reject	.386
H1i	1	Internet Pen. of a nation affects Ride Sharing market penetration rate of the same nation.	DO NOT REJECT	.000
H1j	1	Passenger Cars P.C. of a nation affects Ride Sharing market penetration rate of the same nation.	Reject	.745
H1k	1	No. of Households of a nation affects Ride Sharing market penetration rate of the same nation.	DO NOT REJECT	.000
H1l	1	Tourism GDP of a nation affects Ride Sharing market penetration rate of the same nation.	Reject	.570
H1m	1	Population of a nation affects Ride Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H1n	1	Smartphone Pen. of a nation affects Ride Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H1o	1	Tablet Pen of a nation affects Ride Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H2a	2	PDI score of a nation affects House Sharing market penetration rate of the same nation.	Reject	.596
H2b	2	UAI score of a nation affects House Sharing market penetration rate of the same nation.	DO NOT REJECT	.043

H2c	2	MAS score of a nation affects House Sharing market penetration rate of the same nation.	Reject	.304
H2d	2	IDV score of a nation affects House Sharing market penetration rate of the same nation.	Reject	.288
H2e	2	LTO score of a nation affects House Sharing market penetration rate of the same nation.	Reject	.379
H2f	2	IVR score of a nation affects House Sharing market penetration rate of the same nation.	Reject	.343
H2g	2	GDP of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H2h	2	Int. Tourism Dep. of a nation affects House Sharing market penetration rate of the same nation.	Reject	.376
H2i	2	Internet Pen. of a nation affects House Sharing market penetration rate of the same nation.	DO NOT REJECT	.000
H2j	2	Passenger Cars P.C. of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model	
H2k	2	No. of Households of a nation affects House Sharing market penetration rate of the same nation.	Reject	.729
H2l	2	Tourism GDP of a nation affects House Sharing market penetration rate of the same nation.	Reject	.255
H2m	2	Population of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H2n	2	Smartphone Pen. of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H2o	2	Tablet Pen of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H3a	3	PDI score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.701
H3b	3	UAI score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.653
H3c	3	MAS score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.948
H3d	3	IDV score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.542

H3e	3	LTO score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.971
H3f	3	IVR score of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.703
H3g	3	GDP of a nation affects Ride Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H3h	3	Int. Tourism Dep. of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.832
H3i	3	Internet Pen. of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.561
H3j	3	Passenger Cars P.C. of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.736
H3k	3	No. of Households of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.003
H3l	3	Tourism GDP of a nation affects Ride Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.567
H3m	3	Population of a nation affects Ride Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H3n	3	Smartphone Pen. of a nation affects Ride Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H3o	3	Tablet Pen of a nation affects Ride Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H4a	4	PDI score of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.477
H4b	4	UAI score of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.514
H4c	4	MAS score of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.142
H4d	4	IDV score of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.091

H4e	4	LTO score of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.821
H4f	4	IVR score of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.677
H4g	4	GDP of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H4h	4	Int. Tourism Dep. of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.956
H4i	4	Internet Pen. of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.685
H4j	4	Passenger Cars P.C. of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model	
H4k	4	No. of Households of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.602
H4l	4	Tourism GDP of a nation affects House Sharing market penetration rate of the same nation.	Reject because ANOVA result of the model is not significant	.205
H4m	4	Population of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H4n	4	Smartphone Pen. of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	
H4o	4	Tablet Pen of a nation affects House Sharing market penetration rate of the same nation.	Not included in the final model because of high VIF value	

APPENDIX C

COUNTRY CLASSIFICATION

Region / Country	Country classification	Per Capita GNI Classification	RideSharing	HouseSharing	pdi	idv	mas	uai	ltowvs	ivr	Internet Penetration, % of population	Number of Households, m
Argentina	Developing	High Income	0.0420	0.0304	49	46	56	86	20	62	0.6766	12.14
Australia	Developed	High Income	0.0660	0.0154	38	90	61	51	21	71	0.7961	9.15
Austria	Developed	High Income	0.0767	0.0059	11	55	79	70	60	63	0.757	3.69
Belgium	Developed	High Income	0.0529	0.0057	65	75	54	94	82	57	0.7922	4.57
Brazil	Developing	Upper Middle Income	0.0280	0.0126	69	38	49	76	44	59	0.5485	63.57
Bulgaria	Developed	Upper Middle Income	0.0373	0.0132	70	30	40	85	69	16	0.5441	2.79
Canada	Developed	High Income	0.0532	0.0423	39	80	52	48	36	68	0.8046	13.65
China	Developing	Upper Middle Income	0.0945	0.0106	80	20	66	30	87	24	0.4903	396.9
Croatia	Developed	High Income	0.0401	0.0158	73	33	40	80	58	33	0.6811	2.56
Czech Republic	Developed	High Income	0.0435	0.0066	57	58	57	74	70	29	0.7439	4.43
Denmark	Developed	High Income	0.0649	0.0889	18	74	16	23	35	70	0.8875	2.58
Estonia	Developed	High Income	0.0450	0.0304	40	60	30	60	82	16	0.755	0.48
Finland	Developed	High Income	0.0866	0.028	33	63	26	59	38	57	0.8574	2.48
France	Developed	High Income	0.0494	0.0797	68	71	43	86	63	48	0.7966	26.91
Germany	Developed	High Income	0.0338	0.1049	35	67	66	65	83	40	0.7953	38.88
Hong Kong	Developing	High Income	0.0710	0.031	68	25	57	29	61	17	0.7834	2.53

Hungary	Developed	High Income	0.0378	0.0111	46	80	88	82	58	31	0.6414	3.95
India	Developing	Lower Middle Income	0.0160	0.0033	77	48	56	40	51	26	0.3115	265.71
Indonesia	Developing	Lower Middle Income	0.0220	0.0045	78	14	46	48	62	38	0.3745	63.56
Ireland	Developed	High Income	0.0532	0.0323	28	70	68	35	24	65	0.7744	1.34
Israel	Developing	High Income	0.0312	0.0008	13	54	47	81	38	#BOŞ!	0.6998	2.33
Italy	Developed	High Income	0.0417	0.0042	50	76	70	75	61	30	0.5926	24.2
Japan	Developed	High Income	0.0302	0.0074	54	46	95	92	88	42	0.8052	47.09
Latvia	Developed	High Income	0.0397	0.036	44	70	9	63	69	13	0.738	0.95
Lithuania	Developed	High Income	0.0422	0.0155	42	60	19	65	82	16	0.6922	1.3
Malaysia	Developing	Upper Middle Income	0.0420	0.0188	100	26	50	36	41	57	0.6319	6.41
Mexico	Developing	Upper Middle Income	0.0347	0.0153	81	30	69	82	24	97	0.5113	27.59
Netherlands	Developed	High Income	0.0864	0.0882	38	80	14	53	67	68	0.8583	7.23
Norway	Developed	High Income	0.0828	0.0285	31	69	8	50	35	55	0.8728	2.23
Philippines	Developing	Lower Middle Income	0.0283	0.0137	94	32	64	44	27	42	0.5327	20.2
Poland	Developed	High Income	0.0375	0.004	68	60	64	93	38	29	0.6129	13.71
Portugal	Developed	High Income	0.0458	0.0058	63	27	31	99	28	33	0.5969	3.69
Romania	Developed	Upper Middle Income	0.0336	0.0069	90	30	42	90	52	20	0.5257	7.1
Russia	In Transition	Upper Middle Income	0.0476	0.003	93	39	36	95	81	20	0.622	51.6
Serbia	In Transition	Upper Middle Income	0.0367	0.0174	86	25	43	92	52	28	0.5839	2.85
Singapore	Developing	High Income	0.0888	0.0529	74	20	48	8	72	46	0.765	1.24
Slovakia	Developed	High Income	0.0443	0.0103	100	52	100	51	77	28	0.7207	2.72
Slovenia	Developed	High Income	0.0433	0.0285	71	27	19	88	49	48	0.6697	0.72
South Africa	Developing	Upper Middle Income	0.0267	0.0023	49	65	63	49	#BOŞ!	#BOŞ!	0.4554	13.21
South Korea	Developing	High Income	0.0668	0.014	60	18	39	85	100	29	0.8626	20.23

Spain	Developed	High Income	0.0596	0.0652	57	51	42	86	48	44	0.732	16.9
Sweden	Developed	High Income	0.0882	0.0339	31	71	5	29	53	78	0.8914	4.59
Switzerland	Developed	High Income	0.0581	0.0354	34	68	70	58	74	66	0.8501	3.42
Thailand	Developing	Upper Middle Income	0.0261	0.009	64	20	34	64	32	45	0.3822	20.67
Turkey	Developing	Upper Middle Income	0.0513	0.0014	66	37	45	85	46	49	0.5797	17.49
United Kingdom	Developed	High Income	0.0816	0.1019	40	91	62	46	26	68	0.8923	26.76
United States	Developed	High Income	0.0989	0.0544	35	89	66	35	51	69	0.8078	125.44
Vietnam	Developing	Lower Middle Income	0.0234	0.0235	70	20	40	30	57	35	0.4845	18.57

APPENDIX D

MODEL 1 ANALYSIS AND RESULTS TABLES

Table D1. Coefficients Table of Linear Regression Analysis of Model 1, Including All Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.011	.020		.558	.581					
	pdi	-9.356E-5	.000	-.097	-.709	.484	-.466	-.128	-.052	.290	3.444
	idv	1.491E-5	.000	.016	.090	.929	.358	.016	.007	.172	5.814
	mas	.000	.000	-.112	-1.148	.260	-.170	-.205	-.085	.568	1.759
	uai	-6.967E-5	.000	-.077	-.716	.480	-.421	-.130	-.053	.466	2.144
	ltowvs	-2.541E-5	.000	-.025	-.213	.833	.031	-.039	-.016	.407	2.456
	ivr	.000	.000	.108	.831	.413	.373	.150	.061	.322	3.110
	GDP, per capita	-1.331E-7	.000	-.127	-.562	.578	.687	-.102	-.041	.107	9.325
	International Tourism, departures per capita	-3.107E-5	.001	-.003	-.026	.980	.246	-.005	-.002	.532	1.879
	Internet Penetration, % of population	-.008	.037	-.053	-.209	.836	.658	-.038	-.015	.085	11.776

	Passenger Cars, per 1,000 capita	-1.141E-5	.000	-.098	-.706	.486	.275	-.128	-.052	.281	3.553
	Number of Households, m	.000	.000	1.319	2.782	.009	.109	.453	.205	.024	41.406
	Tourism GDP, % of GDP	.010	.089	.010	.114	.910	-.231	.021	.008	.642	1.559
	Population, total, m	-7.920E-5	.000	-1.016	-2.085	.046	.014	-.356	-.154	.023	43.719
	Smartphone Penetration, % of population	.108	.033	.757	3.290	.003	.778	.515	.242	.103	9.746
	Tablet Penetration, % of population	.027	.039	.168	.689	.496	.766	.125	.051	.091	10.939

a. Dependent Variable: RideSharing

Table D2. Coefficients Table of Linear Regression Analysis of Model 1 Final Version, After VIF Elimination

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.021	.023		-.907	.371					
	pdi	-1.246E-5	.000	-.013	-.086	.932	-.466	-.015	-.008	.384	2.604
	idv	.000	.000	-.174	-1.031	.310	.358	-.174	-.095	.300	3.336
	mas	.000	.000	-.138	-1.345	.187	-.170	-.225	-.124	.813	1.230
	uai	.000	.000	-.148	-1.201	.238	-.421	-.202	-.111	.565	1.770
	ltowvs	-7.536E-5	.000	-.073	-.513	.611	.031	-.088	-.047	.424	2.360
	ivr	.000	.000	.139	.934	.357	.373	.158	.086	.386	2.592
	International Tourism, departures per capita	.001	.001	.103	.879	.386	.246	.149	.081	.625	1.599
	Internet Penetration, % of population	.121	.028	.838	4.338	.000	.658	.597	.401	.229	4.357
	Passenger Cars, per 1,000 capita	6.440E-6	.000	.055	.327	.745	.275	.056	.030	.300	3.335
	Number of Households, m	.000	.000	.486	3.985	.000	.109	.564	.369	.576	1.737
	Tourism GDP, % of GDP	.061	.106	.063	.574	.570	-.231	.098	.053	.719	1.390

a. Dependent Variable: RideSharing

Table D3. Model Summary of Model 1 Final Version

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.842[a]	.709	.615	.0133001	.709	7.529	11	34	.000	2.028

a. Predictors: (Constant), Tourism GDP, % of GDP, mas, ivr, International Tourism, departures per capita, Number of Households, m, Passenger Cars, per 1,000 capita, uai, ltowvs, pdi, idv, Internet Penetration, % of population

b. Dependent Variable: RideSharing

Table D4. ANOVA Analysis of Model 1 Final Version

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.015	11	.001	7.529	.000[b]
	Residual	.006	34	.000		
	Total	.021	45			

APPENDIX E

MODEL 2 ANALYSIS AND RESULTS TABLES

Table E1. Coefficients Table of Linear Regression Analysis of Model 2, Including All Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-4.383	4.321		-1.014	.319					
	pdi	-.014	.028	-.114	-.494	.625	-.435	-.090	-.061	.290	3.444
	idv	-.002	.036	-.020	-.067	.947	.456	-.012	-.008	.172	5.814
	mas	-.003	.020	-.026	-.158	.875	-.203	-.029	-.020	.568	1.759
	uai	-.010	.021	-.086	-.476	.638	-.330	-.087	-.059	.466	2.144
	ltowvs	.006	.026	.047	.240	.812	-.068	.044	.030	.407	2.456
	ivr	.005	.030	.037	.169	.867	.356	.031	.021	.322	3.110
	GDP, per capita	-5.745 E-5	.000	-.427	-1.127	.268	.508	-.202	-.140	.107	9.325
	International Tourism, departures per capita	-.168	.260	-.110	-.646	.523	.093	-.117	-.080	.532	1.879

Internet Penetration, % of population	10.740	7.863	.581	1.366	.182	.566	.242	.169	.085	11.776
Passenger Cars, per 1,000 capita	-.003	.003	-.191	-.820	.419	.275	-.148	-.102	.281	3.553
Number of Households, m	-.017	.031	-.437	-.548	.588	-.116	-.100	-.068	.024	41.406
Tourism GDP, % of GDP	14.473	19.219	.117	.753	.457	-.146	.136	.093	.642	1.559
Population, total, m	.004	.008	.449	.548	.587	-.162	.100	.068	.023	43.719
Smartphone Penetration, % of population	-3.795	7.101	-.207	-.534	.597	.506	-.097	-.066	.103	9.746
Tablet Penetration, % of population	16.895	8.314	.833	2.032	.051	.660	.348	.252	.091	10.939

a. Dependent Variable: HouseSharing

Table E2. Coefficients Table of Linear Regression Analysis of Model 2 Final Version, After VIF Elimination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-4.227	3.959		-1.068	.293					
	pdi	.011	.024	.089	.454	.652	-.435	.077	.056	.398	2.509
	idv	.029	.026	.244	1.145	.260	.456	.190	.142	.337	2.964
	mas	-.023	.017	-.183	-1.331	.192	-.203	-.219	-.165	.814	1.229
	uai	-.029	.017	-.250	-1.666	.105	-.330	-.271	-.207	.683	1.465
	ltowvs	.001	.025	.006	.032	.975	-.068	.005	.004	.424	2.360
	ivr	.012	.027	.091	.459	.649	.356	.077	.057	.391	2.558
	International Tourism, departures per capita	-.050	.234	-.033	-.214	.832	.093	-.036	-.027	.655	1.526
	Internet Penetration, % of population	8.954	4.478	.484	1.999	.053	.566	.320	.248	.262	3.815
	Number of Households, m	.003	.006	.068	.420	.677	-.116	.071	.052	.589	1.699
	Tourism GDP, % of GDP	21.980	18.154	.177	1.211	.234	-.146	.200	.150	.720	1.389

a. Dependent Variable: HouseSharing

Table E3. Model Summary of Model 2 Final Version

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.679[a]	.462	.308	2.28275%	.462	3.001	10	35	.008	1.866

a. Predictors: (Constant), Tourism GDP, % of GDP, mas, ivr, International Tourism, departures per capita, Number of Households, m, idv, uai, ltowvs, pdi, Internet Penetration, % of population

b. Dependent Variable: HouseSharing

Table E4. ANOVA Analysis of Model 2 Final Version

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	156.368	10	15.637	3.001	.008[b]
	Residual	182.383	35	5.211		
	Total	338.751	45			

a. Dependent Variable: HouseSharing

b. Predictors: (Constant), Tourism GDP, % of GDP, mas, ivr, International Tourism, departures per capita, Number of Households, m, idv, uai, ltowvs, pdi, Internet Penetration, % of population

Table E5. Coefficients Table of Linear Regression Analysis of Model 2 Stepwise Version

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-4.433	1.616		-2.743	.009					
	Internet Penetration, % of population	10.456	2.298	.566	4.549	.000	.566	.566	.566	1.000	1.000
2	(Constant)	-2.115	1.915		-1.104	.276					
	Internet Penetration, % of population	9.768	2.241	.528	4.359	.000	.566	.554	.523	.978	1.022
	uai	-.029	.014	-.252	-2.080	.043	-.330	-.302	-.249	.978	1.022

a. Dependent Variable: HouseSharing

Table E6. Excluded Variables of Model 2 Stepwise Version

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	pdi	-.125[b]	-.768	.447	-.116	.592	1.689	.592
	idv	.169[b]	1.067	.292	.161	.611	1.636	.611
	mas	-.136[b]	-1.088	.282	-.164	.985	1.015	.985
	uai	-.252[b]	-2.080	.043	-.302	.978	1.022	.978
	ltowvs	-.139[b]	-1.109	.273	-.167	.985	1.015	.985
	ivr	.173[b]	1.309	.197	.196	.868	1.153	.868
	International Tourism, departures per capita	-.056[b]	-.434	.666	-.066	.934	1.071	.934
	Number of Households, m	.137[b]	1.004	.321	.151	.835	1.198	.835
	Tourism GDP, % of GDP	.098[b]	.715	.479	.108	.838	1.193	.838
2	pdi	-.085[c]	-.535	.596	-.082	.582	1.717	.582
	idv	.165[c]	1.077	.288	.164	.611	1.636	.604
	mas	-.126[c]	-1.041	.304	-.159	.983	1.017	.965
	ltowvs	-.109[c]	-.890	.379	-.136	.970	1.031	.959
	ivr	.126[c]	.959	.343	.146	.835	1.198	.835
	International Tourism, departures per capita	-.114[c]	-.894	.376	-.137	.895	1.117	.895

Number of Households, m	.049[c]	.349	.729	.054	.738	1.356	.738
Tourism GDP, % of GDP	.153[c]	1.154	.255	.175	.810	1.235	.810

a. Dependent Variable: HouseSharing

b. Predictors in the Model: (Constant), Internet Penetration, % of population

c. Predictors in the Model: (Constant), Internet Penetration, % of population, uai

Table E7. Model Summary of Stepwise Version of Model 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.566[a]	.320	.304	2.28825%	.320	20.695	1	44	.000
2	.618[b]	.382	.353	2.20633%	.062	4.328	1	43	.043

a. Predictors: (Constant), Internet Penetration, % of population

b. Predictors: (Constant), Internet Penetration, % of population, uai

Table E8. ANOVA Analysis of Model 2 Stepwise Version

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	108.363	1	108.363	20.695	.000[b]
	Residual	230.389	44	5.236		
	Total	338.751	45			
2	Regression	129.433	2	64.716	13.295	.000[c]
	Residual	209.319	43	4.868		
	Total	338.751	45			

a. Dependent Variable: HouseSharing

b. Predictors: (Constant), Internet Penetration, % of population

c. Predictors: (Constant), Internet Penetration, % of population, uai

APPENDIX F

MODEL 3 ANALYSIS AND RESULTS TABLES

Table F1. Coefficients Table of Linear Regression Analysis of Model 3, Including All Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.150	.191		.785	.438					
	pdi	-.001	.001	-.147	-.604	.550	.212	-.110	-.079	.290	3.444
	idv	-.001	.002	-.208	-.657	.516	-.190	-.119	-.086	.172	5.814
	mas	.001	.001	.179	1.029	.312	.094	.185	.135	.568	1.759
	uai	.001	.001	.291	1.512	.141	.026	.266	.199	.466	2.144
	ltowvs	.001	.001	.110	.532	.599	.208	.097	.070	.407	2.456
	ivr	-.001	.001	-.121	-.524	.604	-.214	-.095	-.069	.322	3.110
	GDP, per capita	-2.969E-6	.000	-.528	-1.316	.198	-.155	-.234	-.173	.107	9.325
	International Tourism, departures per capita	-.009	.012	-.137	-.762	.452	-.060	-.138	-.100	.532	1.879
	Internet Penetration, % of population	-.424	.348	-.549	-1.219	.232	-.218	-.217	-.160	.085	11.776

Passenger Cars, per 1,000 capita	-3.875E-5	.000	-.062	-.251	.803	-.181	-.046	-.033	.281	3.553
Number of Households, m	.000	.001	-.232	-.275	.785	.514	-.050	-.036	.024	41.406
Tourism GDP, % of GDP	.142	.851	.027	.167	.869	.142	.030	.022	.642	1.559
Population, total, m	.000	.000	.713	.821	.418	.491	.148	.108	.023	43.719
Smartphone Penetration, % of population	.542	.314	.706	1.722	.095	-.033	.300	.226	.103	9.746
Tablet Penetration, % of population	.641	.368	.757	1.742	.092	-.042	.303	.229	.091	10.939

a. Dependent Variable: RideSharing2

Table F2. Coefficients Table of Linear Regression Analysis of Model 3 Final Version, After VIF Elimination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.092	.188		.488	.629					
	pdi	.000	.001	.088	.387	.701	.212	.066	.054	.384	2.604
	idv	-.001	.001	-.116	-.453	.653	-.190	-.077	-.064	.300	3.336
	mas	-5.254E-5	.001	-.010	-.065	.948	.094	-.011	-.009	.813	1.230
	uai	.001	.001	.115	.615	.542	.026	.105	.086	.565	1.770
	ltowvs	4.447E-5	.001	.008	.037	.971	.208	.006	.005	.424	2.360
	ivr	.000	.001	-.087	-.384	.703	-.214	-.066	-.054	.386	2.592
	International Tourism, departures per capita	.002	.011	.038	.213	.832	-.060	.037	.030	.625	1.599
	Internet Penetration, % of population	.133	.227	.172	.587	.561	-.218	.100	.082	.229	4.357
	Passenger Cars, per 1,000 capita	5.443E-5	.000	.087	.340	.736	-.181	.058	.048	.300	3.335
	Number of Households, m	.001	.000	.599	3.233	.003	.514	.485	.454	.576	1.737
	Tourism GDP, % of GDP	.498	.860	.096	.579	.567	.142	.099	.081	.719	1.390

a. Dependent Variable: RideSharing2

Table F3. Model Summary of Model 3 Final Version

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.573[a]	.329	.111	.1080818	.329	1.512	11	34	.173	1.777

a. Predictors: (Constant), Tourism GDP, % of GDP, mas, ivr, International Tourism, departures per capita, Number of Households, m, Passenger Cars, per 1,000 capita, uai, ltowvs, pdi, idv, Internet Penetration, % of population

b. Dependent Variable: RideShare/TotalMob

Table F4. ANOVA Analysis of Model 3 Final Version

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.194	11	.018	1.512	.173[b]
	Residual	.397	34	.012		
	Total	.591	45			

a. Dependent Variable: RideShare/TotalMob

b. Predictors: (Constant), Tourism GDP, % of GDP, mas, ivr, International Tourism, departures per capita, Number of Households, m, Passenger Cars, per 1,000 capita, uai, ltowvs, pdi, idv, Internet Penetration, % of population

APPENDIX G

MODEL 4 ANALYSIS AND RESULTS TABLES

Table G1. Coefficients Table of Linear Regression Analysis of Model 4, Including All Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.072	.194		-.373	.712					
	pdi	1.706E-5	.001	.004	.013	.989	-.072	.002	.002	.290	3.444
	idv	-.001	.002	-.134	-.367	.716	.073	-.067	-.056	.172	5.814
	mas	.000	.001	-.105	-.522	.605	-.210	-.095	-.079	.568	1.759
	uai	-.001	.001	-.145	-.653	.519	-.324	-.118	-.099	.466	2.144
	ltowvs	.000	.001	.076	.320	.751	-.069	.058	.048	.407	2.456
	ivr	.000	.001	.054	.200	.843	.149	.037	.030	.322	3.110
	GDP, per capita	-1.595E-6	.000	-.322	-.697	.491	.092	-.126	-.106	.107	9.325
	International Tourism, departures per capita	-.004	.012	-.070	-.338	.738	.024	-.062	-.051	.532	1.879
	Internet Penetration, % of population	.517	.353	.761	1.463	.154	.101	.258	.222	.085	11.776

Passenger Cars, per 1,000 capita	.000	.000	-.234	-.819	.419	-.135	-.148	-.124	.281	3.553
Number of Households, m	-.002	.001	-1.421	-1.457	.155	.106	-.257	-.221	.024	41.406
Tourism GDP, % of GDP	.984	.864	.216	1.139	.264	.079	.204	.173	.642	1.559
Population, total, m	.001	.000	1.592	1.589	.123	.131	.279	.241	.023	43.719
Smartphone Penetration, % of population	-.345	.319	-.512	-1.081	.288	.075	-.194	-.164	.103	9.746
Tablet Penetration, % of population	.487	.374	.653	1.304	.202	.207	.232	.198	.091	10.939

a. Dependent Variable: HouseSharing2

Table G2. Coefficients Table of Linear Regression Analysis of Model 3 Final Version, After VIF Elimination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.063	.177		.358	.722					
	pdi	.001	.001	.171	.719	.477	-.072	.121	.108	.398	2.509
	idv	.001	.001	.171	.659	.514	.073	.111	.099	.337	2.964
	mas	-.001	.001	-.251	-1.502	.142	-.210	-.246	-.226	.814	1.229
	uai	-.001	.001	-.317	-1.741	.091	-.324	-.282	-.262	.683	1.465
	ltowvs	.000	.001	.053	.228	.821	-.069	.039	.034	.424	2.360
	ivr	.001	.001	.101	.421	.677	.149	.071	.063	.391	2.558
	International Tourism, departures per capita	-.001	.010	-.010	-.056	.956	.024	-.009	-.008	.655	1.526
	Internet Penetration, % of population	.082	.200	.120	.409	.685	.101	.069	.061	.262	3.815
	Number of Households, m	.000	.000	.103	.526	.602	.106	.089	.079	.589	1.699
	Tourism GDP, % of GDP	1.046	.809	.229	1.292	.205	.079	.213	.194	.720	1.389

a. Dependent Variable: HouseSharing2

Table G3. Model Summary of Model 4 Final Version

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.455[a]	.207	-.019	.1017658	.207	.916	10	35	.530	2.216

a. Predictors: (Constant), Tourism GDP, % of GDP, mas, ivr, International Tourism, departures per capita, Number of Households, m, idv, uai, ltowvs, pdi, Internet Penetration, % of population

b. Dependent Variable: HouseSharing2

Table G4. ANOVA Analysis of Model 4 Final Version

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.095	10	.009	.916	.530[b]
	Residual	.362	35	.010		
	Total	.457	45			

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