

Motivators for the use of vehicle sharing services on demand in Brazil

AREA: 1
TYPE: Application

51

AUTHOR

Fábio Luciano Violin

Unesp - São Paulo
State University, Brasil
fabio.violin@unesp.br

1. Corresponding author:
Unesp Câmpus de Rosana,
Avenida dos Barrageiros,
1881, Centro, Rosana - SP,
CEP: 19274-000, Brasil

Motivadores para el uso de servicios de compartir vehículos bajo demanda en Brasil
Motivadores para utilização de serviços de compartilhamento de veículos sob demanda no Brasil

The study focused on determining the motivators for the use of means of transport on demand in Brazil. The methodological procedures involved the Exploratory Factor Analysis to validate the variables and the Confirmatory Factor Analysis established the adjusted model and the dimensions in which these elements appeared in the users' perception. It can be observed that the motivators were relevant, however, only three variables of a utilitarian nature are strongly linked to the consumption process, indicating the cost, the moment of use and the technological facilitator as indicators of the use of this type of service in Brazil.

El estudio se centró en determinar los motivadores para el uso de medios de transporte bajo demanda en Brasil. Los procedimientos metodológicos involucraron el Análisis Factorial Exploratorio para validar las variables y el Análisis Factorial Confirmatorio estableció el modelo ajustado y las dimensiones en las que estos elementos aparecían en la percepción de los usuarios. Se puede observar que los motivadores fueron relevantes, sin embargo, solo tres variables de carácter utilitario están fuertemente ligadas al proceso de consumo, indicando el costo, el momento de uso y el facilitador tecnológico como indicadores del uso de este tipo de servicio en Brasil.

O estudo teve como objetivo determinar os motivadores para o uso de meios de transporte sob demanda no Brasil. Os procedimentos metodológicos envolveram a Análise Fatorial Exploratória para validação das variáveis e a Análise Fatorial Confirmatória estabeleceu o modelo ajustado e as dimensões em que esses elementos apareciam na percepção dos usuários. Pode-se observar que os motivadores foram relevantes, porém, apenas três variáveis de caráter utilitário estão fortemente vinculados ao processo de consumo, apontando o custo, o momento de utilização e o facilitador tecnológico como indicadores da utilização deste tipo de serviço em Brasil.

DOI
10.3232/GCG.2021.V15.N3.02

RECEIVED
16.01.2021

ACCEPTED
11.02.2021

1. Introduction

As a result of technological advances, structures and operations have suffered disruptions in several markets, fostering the formation of new markets, bringing offerors closer to demanders, changing the logic of the operation of entire sectors, and allowing the acceleration of innovations in the context of the sharing economy, which presents itself as a global phenomenon with rapid growth potential (Lutz & Newlands, 2018; Sigala, 2018).

The sharing economy represents a comprehensive term and has been used to represent a myriad of organizational models, transforming markets and urban landscapes, in which goods and services, skills, and spaces have been shared, exchanged, rented, or leased (Curtis & Mont, 2020).

The sharing economy emerges as a result of the technological change founded, particularly by the refinement of e-commerce, popularization of the internet, and mobile technologies supported by the growing concern with the environment and the promotion of new forms of commerce (Frenken & Schor, 2017), allowing the expansion of social value in many countries, in addition to changing the supply system (Zhu & Liu, 2020), including displacement on demand.

Unlike previous times when private vehicles were for personal use only, their use is now extended beyond the individual purposes being shared, which in essence defines the nature of vehicular sharing (Filippas *et al.*, 2020).

The research on the motivators for using the means of travel on demand presents a relevant contribution to the field of studies when discussing the conditioning factors of consumer decision-making, especially considering national studies (Santos *et al.*, 2019) and international (Lutz & Newlands, 2018; Yuana *et al.*, 2019) that analyze partial aspects of the consumption relationship, with research focused on the social aspect (Räisänen *et al.*, 2020), environmental (Zhu & Liu, 2020), technological (Oksana *et al.*, 2020) and/or economic (Mont *et al.*, 2020) of the offer.

The results pointed to the existence of social and economic motivators influenced by technology, indicating the utilitarian character as opposed to the hedonistic aspect of consumption, highlighting the cost as an element of the first magnitude, in addition to the technological facilitator and the final objectives intended beyond the displacement.

2. Theoretical Framework

There is no widely accepted understanding regarding the meaning of what will be a Sharing Economy (Gurau & Ranchhod, 2020). Ertz & Leblanc-Proulx (2018) question the use of the expressions collaborative economy and shared economy, indicating the predilection of literature for the second term, but several other constructions such as consumption-based on access, gig

KEYWORDS

Consumer
Behavior; Sharing
Economy;
Technology.

PALABRAS CLAVE

Comportamiento
del consumidor;
Economía
compartida;
Tecnología.

PALAVRAS-CHAVE

Comportamento
do consumidor;
Economia do
Compartilhamento;
Tecnologia.

JEL CODES:

D16; L91; Q55; R41

economy, economy on demand (service), crowd-based capitalism, are associated with the word that has become a kind of umbrella by encompassing a wide variety of behaviors and business models (Frenken & Schor, 2017; Curtis & Lehner, 2019) related to obtaining, granting and sharing access to goods and services among strangers (Hawlitscher *et al.*, 2018).

Still, according to Ertz & Leblanc-Proulx, 2018 the word shared economy is not presented as appropriate, as it has its nature confused concerning what it really represents, but the fact is that the term is structured as a multifaceted concept moving from the perception of social improvement and sustainability to the idea of a platform that produces even economic benefits, differing from traditional electronic commerce in that offers via a person-to-person platform are generally managed by private companies (Dann *et al.*, 2020).

Filippas *et al.*, 2020 indicate that the economic logic underlying person-to-person rental focuses on the use of less than 100% of the goods/service by the owner, generating excess capacity that is now rented by people who want the benefit and not possession.

Generate actions such as the possibility - via platform - to access data between the parties, monitor the path taken (Liu *et al.*, 2018), among other facilitators that do not exist in traditional offers, coupled with the reduction of transaction costs and the subsequent proliferation of markets person-to-person rental is supported by its e-commerce predecessors, the expansion of the internet and the proliferation of smartphones (Filippas *et al.*, 2020).

The use of on-demand travel applications can be understood as one in which there is a sharing of access to goods or services person-to-person (Akhmedova *et al.*, 2020), based on a third-party platform (Benjaafar & Hu, 2020) and it acts in situations where institutions and people with idle resources transfer the benefits of the good negotiated at a reduced cost (Frenken & Schor, 2017) through platforms for payment, thus increasing its utilization rate and not generating the user's possession (Zhu & Liu, 2020).

The sharing economy allows the use of expensive physical assets without the need for purchase. (Räisänen *et al.*, 2020), being able to reduce environmental impacts through reuse, with more affordable offers (Sharma *et al.*, 2020), being able to mitigate informational asymmetries through the availability of content and offers in digital media, generating more sustainable business models when compared to traditional offers (Ertz & Leblanc-Proulx, 2018; Dann *et al.*, 2020).

World consumption has increased, generating impacts on the use of resources, raising the need for more sustainable solutions for people and businesses, and the sharing economy can help promote such sustainability (Räisänen *et al.*, 2020), allowing platforms can mediate idle products/services offering the benefits of use without the need for definitive purchase, upon payment by the user of a certain amount, thereby improving their usage rates (Benjaafar & Hu, 2020; Zhu & Liu, 2020).

Certain aspects favor sharing, particularly its potential to reduce environmental impacts by reducing the underutilization of goods/services, increasing cohesion when connecting people through digital technology, stimulating entrepreneurship, and the ability to mitigate realities such as economic recession, austerity governmental, growing disparities between social classes and problems caused by hyper consumption through actions aimed at sustainability (WEF, 2017; Mont *et al.*, 2020).

However, the number of criticisms of the model has grown based on studies that indicate the existence of little evidence regarding the benefit of sustainability, which is also perceived as a threat to employment,

public security, privacy, and health, in addition to problems related to labor rights and environmental burden (SOU, 2017; Mont *et al.*, 2020).

Unlike previous times when private vehicles were for personal use only, their use for sharing purposes is currently observed (Filippas *et al.*, 2020), in Brazil, the volume of travel applications on-demand has increased considerably, ranging from traditional Uber and 99 Taxis, even offers for niches such as Eu Vô (elderly); Lady Driver (women); Carupa (small cities); Jaubra (periphery) among other (Microsoft Store, 2021).

From the users' point of view, their motivations for use can orbit around economic and social elements, specifically focused on cost, the convenience of use, availability, sustainability, social interaction, and support (Ozanne & Ozanne, 2020), at the same time that they can perceive risks related to privacy and security (Lee *et al.*, 2018) in addition to elements such as effort, lack of confidence, unwanted social interaction and performance, physical, privacy and process risks are some of the main barriers to engaging in the economy sharing (Lang *et al.*, 2020).

Considering the spheres of analysis in this study, the importance of emphasizing the social, environmental, economic, and technological aspects of the offer is indicated. In this sense, aspects such as trust, socialization, concern for others and their surroundings, sense of belonging (Zhang *et al.*, 2018) are pointed out as questions related to displacement from access platforms under demand.

Climate crises, economic uncertainties, weakened social connections, virtualization of relationships, urban and regulatory impacts, as well as issues associated with the dynamics of safety and labor benefits, among others, have been measured in a wide range of studies (Ertz & Leblanc-Proulx, 2018; Akhmedova *et al.*, 2020; Mont, *et al.*, 2020; Räisänen *et al.*, 2020), and in this sense, this study sought to assess one of the prisms of this relationship, specifically, the set of indicative variables of the motivators for the use of on-demand travel modes in Brazil, considering their implications in developing markets (Santos *et al.*, 2019; Yuana *et al.*, 2019).

3. Methodological Procedures

To compose the sample, the concepts of the sampling grid were used (clear identification of the population of interest and exclusion of foreign elements) (McBratney *et al.*, 1981), when approaching individuals with indicative posture of service use (cell phone in hands , stopped at selected boarding points with insistent observation of the cars that approached the site, in addition to those that disembarked at the collection sites).

Systematic sampling was used (obtaining the largest possible volume of sample subjects, with the possibility of harmonic participation) (Nezer *et al.*, 2016), determining that for every two shipments / landings, the third subject would be approached.

In addition to conglomerate sampling (determining the main places of incidence of supply) (Zhang *et al.* 2018) mapped in the following locations: São Paulo (SP), Presidente Prudente (SP), Campo Grande (MS), Dourados (MS), Curitiba (PR) and Maringá (PR), used for the application of pre-tests.

Based on on-site observation and indigenous indications, the locations with the highest incidence of the service were determined specifically: airports and bus stations, events, shopping centers, universities, public markets and hotels. The pre-test included a questionnaire supported by a table of dimensions:

Table 1 - Factors and authors associated with use drivers

AUTHORS	FACTOR
<i>Filippas, & Zeckhauser, 2020;</i> <i>Benjaafar & Hu 2020.</i>	ECONOMIC Reduced tariff value; productivity and efficiency, financial savings.
<i>Liu et al., 2018; Zhu & Liu 2020.</i>	TECHNOLOGICAL Digital and interpersonal reliability; access to electronic device and connection means.
<i>Ertz & Leblanc-Proulx, 2018; Santos et al., 2019.</i>	ENVIRONMENTAL Lower air pollution and carbon emission reduction, less environmental degradation and fuel consumption.
<i>Räisänen et al.; 2020; Zhu & Liu 2020; Curtis & Mont, 2020.</i>	SOCIAL Social trust; generation of social relationships, perception of sharing, desire to share.

Source: authors cited in the body of the table

The Likert scale with five points was used, where 1 meant "irrelevant" and 5 "indispensable".

The pre-test was applied, between December 2018 and January 2019, for one hour at each identified incidence point for validation of the research instrument, for up to twelve hours in each previously named municipality, generating two hundred and forty-six valid samples. Two points emerged considering the set of actions and procedures.

The first is that in the same period three users embarked in the capitals against one in the smaller cities, which led to the selection of 150 for capitals and 50 for cities with more than 100 thousand inhabitants.

The second point indicates the absence of adherence between the variables resulting from international studies and the need to model the research instrument and apply a second pre-test in the same locations between the end of January and the end of February 2019, from following set of previously identified motivators:

Table 2 - Dimension and motivators

<i>Dimension</i>	<i>Motivators</i>
<i>Cost</i>	Reduced Fee; Elimination of expenses.
<i>Technological Convenience</i>	Technological Availability; Data security.
<i>Convenience of Use</i>	Schedule Convenience; Travel Safety; Boarding convenience.
<i>Use Experience</i>	Socialization; Expectation of Use; Absence of requirements
<i>Environmental Benefits</i>	Vehicle Reduction; Pollutants reduction
<i>Social Benefits</i>	Valuing the Professional; Income generation

Source: author

The data survey took place between May 2019 and January 2020, obtaining 2150 valid questionnaires - from people over 18 who had already used the service more than five times - in nine Brazilian states (Belo Horizonte, Campo Grande, Curitiba, Florianópolis, Manaus, Natal, Rio de Janeiro, Salvador, São Paulo) besides the Federal District and in fourteen cities with more than 100 thousand inhabitants (Balneário Camboriú (SC), Bauru (SP), Campinas (SP), Campo Largo (PR), Cascavel (PR), Dourados (MS), Feira de Santana (BA), Foz do Iguaçu (PR), Maringá (PR), Mossoró (RN), Niterói (RJ), Presidente Prudente (SP), São José (SC) and Uberlândia (MG)).

The IBM SPSS Statistics software generated the reliability indicators through the Cronbach's alpha coefficient and the KMO test, which are presented below:

Table 3 - Level of internal consistency

<i>Reliability statistics</i>	
Alfa de Cronbach based on standardized items	N items
,858	16

Source: research data (2020)

This value indicates a high level of internal consistency of the variables (Landis; Koch, 1977) . Sequentially, the following elements are presented:

Table 4 - KMO and Bartlett test

<i>Kaiser-Meyer-Olkin measure of sampling adequacy.</i>		,904
<i>Bartlett's test of sphericity</i>	Approximate chi-square.	18338,691
	df	91
	Sig.	,000

Source: research data (2020)

Both the Kaiser-Meyer-Olkin measure above 0.80 and the Bartlett test for sphericity have adequate significance (Hair et al. 1987), both tables indicate consistency, reliability and consistency of the analyzed motivators.

The data analysis relied on the use of the IBM SPSS Statistic software to apply the Exploratory Factor Analysis added by the Confirmatory Factor Analysis, in order to unveil the usage drivers and their classification.

4. Data Analysis and Discussion

To determine the set of drivers for the use of travel modes and their dimensions, the general average of representativeness of each item is initially presented, plus the sum of categories 4 and 5 of the Likert scale and their modal allocation:

Table 5 – Frequency of use and degree of importance

Variables	Average (Likert)		Average % ** (A)	Mode (M)
	General * (G)	Standard error		
<i>Technological Availability</i>	4,58	0,018	88,91%	5
<i>Reduced Fee</i>	4,48	0,017	91,57%	5
<i>Expected Benefits</i>	4,47	0,017	86,86%	5
<i>Convenience of schedule</i>	3,92	0,016	75,52%	4
<i>Data security</i>	3,83	0,016	69,66%	4
<i>Boarding convenience</i>	3,65	0,02	66,78%	4
<i>Travel safety</i>	2,98	0,016	21,30%	3
<i>Elimination of expenses</i>	2,73	0,016	10,23%	3
<i>Absence of requirements</i>	2,26	0,018	1,30%	2
<i>Individual income generation</i>	1,93	0,02	1,22%	2
<i>Socialization</i>	1,71	0,012	1,11%	2
<i>Pollutant Reduction</i>	1,47	0,013	1,05%	1
<i>Valuing the professional</i>	1,61	0,012	0,79%	1
<i>Reduction of vehicles in circulation</i>	1,47	0,012	0,76%	1

* Overall average of indications within the Likert scale

** Sum of categories 4 (very important) and 5 (essential) the Likert scale

Source: Author

Standard deviation, variation, and asymmetric proportionality present levels considered adequate and, therefore, reliable and consistent, allowing the sequence of contextualization.

The table indicates high preferential values for the Technological Availability variables (G: 4.58 / A: 88.91% / M: 5); Reduced Fee (G: 4.48 / A: 91.57% / M: 5) and Expected Benefits (G: 4.47 / A: 86.86%

/ M: 5) in a second tier of preference appear at Convenience of time (G: 3.92 / A: 75.52% / M: 4); Data Security (G: 3.83 / A: 69.66% / M: 4) and Shipment Convenience (G: 3.65 / A: 66.78% / M: 4). The other elements, despite appearing on the list of motivators for use, have less significant indicators, such as the variable Safety of displacement, which has indicators G: 2.98 / A: 21.30% / M: 3, and occupies the seventh ranking in the user's preference ranking. Such numbers are substantially lower compared to predecessor variables.

Through the Exploratory Factor Analysis, it is possible to confirm the set of proposed variables and their level of explanation in relation to the factors, which they are allocated to:

Table 6 – Total Variation Explained

Component	Initial eigenvalues			Extraction sums of squared loads			Rotating sums of squared loads
	Total	% variation	% cumulative	Total	% variation	% cumulative	Total
1	5,182	37,013	37,013	5,182	37,013	37,013	4,947
2	2,512	17,945	54,958	2,512	17,945	54,958	2,604
3	1,384	9,889	64,847	1,384	9,889	64,847	2,032
4	1,105	7,893	72,74	1,105	7,893	72,74	1,472
5	0,756	5,4	78,14				
6	0,662	4,727	82,867				
7	0,582	4,159	87,025				
8	0,454	3,245	90,27				
9	0,416	2,974	93,244				
10	0,296	2,114	95,358				
11	0,207	1,482	96,84				
12	0,184	1,316	98,156				
13	0,163	1,164	99,32				
14	0,095	0,68	100				

Extraction method: analysis of the main component.

Source: Author

It is observed that the "Extraction sums of squared loads" and the "Rotating sums of squared loads" present adequate indices. The data indicate that four sets of factors are capable of explaining 72.74% of the motivators for using the travel modes and the next table shows the distribution of variables within each of the factors:

Table 7 – Communalities, component matrix and factor allocation

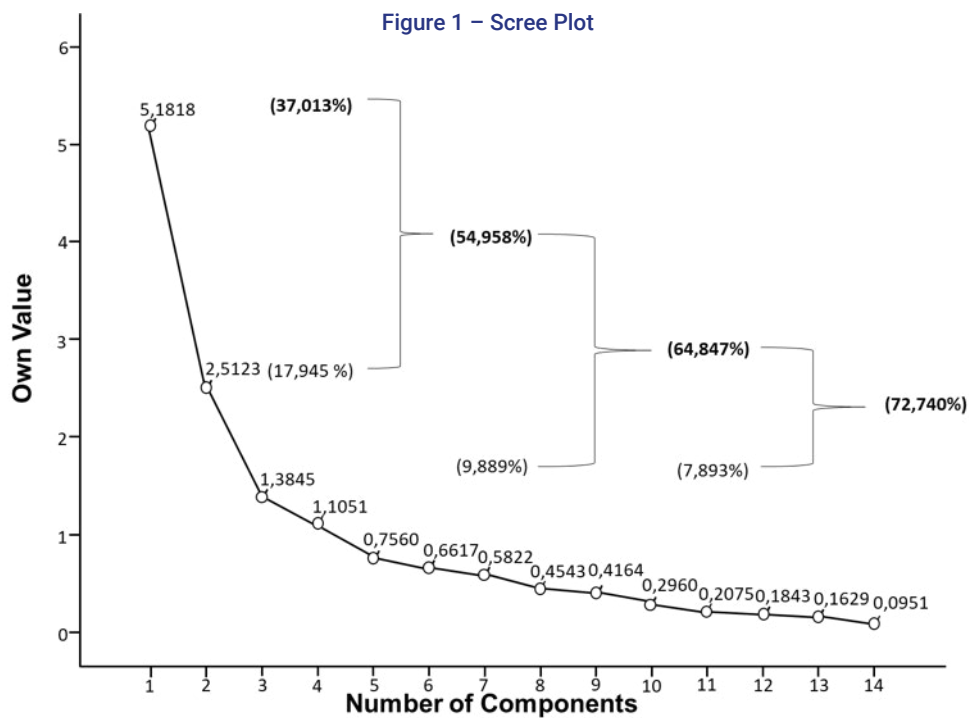
Indicators	Reduced Fee	Technological availability	Expected benefits	Time convenience	Data security	Convenience of boarding / unboarding	Travel safety	Elimination of expenses	Absence of requirements	Individual income generation	Socialization	Pollutant reduction	Valuing the professional	Reduction of circulating vehicles
Communes	0,823	0,794	0,758	0,602	0,669	0,738	0,685	0,635	0,618	0,632	0,555	0,725	0,623	0,608
Component matrix ^a	0,886	0,864	0,853	0,749	0,754	0,841	0,665	0,592	0,585	0,684	0,672	0,851	0,551	0,568
Factor ^b	1	1	1	2	2	2	3	3	3	3	4	4	4	4

^a Rotation method: Oblimn with Kaiser normalization.

^b Indicates the range of the component that the motivator is inserted, complemented by the scree plot.

Source: Author

All values expressed in the commonality field < .500 indicating the adequacy of the variables, as well as in the factors field, the explanatory order of the factors can be observed, and before inferences it is necessary to present the scree plot indicating the distributive structure:



Source: Author

The data from the two previous tables and the figure presented here indicate the Reduced Fare, Technological Availability and the Expectation of Benefits represents 37.013% of the equation that indicates the reasons for using the means of travel on demand, added to this set the Boarding Convenience. and Time and Data Security, the index rises to 54, 958% in a model explained by 72.74% by the Exploratory Factor Analysis.

Sequentially, the Confirmatory Factor Analysis was performed, with the first model involving the 14 variables previously measured, subsequently the data were rotated from the elimination of less robust variables, as can be seen:

Table 8 – Distinctive indicators between models

Models	Absolute Adjustment Measures		Incremental Adjustment Measures			Parsimony-Adjusted Measures			
	Chi-square	RMSEA	CFI	TLI	NFI	PRATIO	PCFI	PNFI	AIC
Model 1	0,000	0,188	0,694	0,608	0,692	0,780	0,540	0,542	5541,561
Modified Model	0,0068	,0059	0,917	0,936	0,922	0,888	0,794	0,774	2312,562

Source: Author

Model 1 presents indicators (RMSEA: 0.188 / CFI: 0.694 / TLI: 0.608 / NFI: 0.692 / PRATIO: 0.780 / PCFI: 0.540 / PNFI: 0.542) which leads to the need to refute the model.

In turn, the modified model showed a likelihood Fee expressed by the chi-square <0.05 indicating adequacy. The RMSEA generated an index > 0.050, being considered adequate. In turn, CFI, TLI, and NFI <0.90, indicate structural adequacy parsimony adjustment measures, expressed by PRATIO, PCFI, and PNFI in the modified model, presented indices considered adequate.

From the AIC it is inferred that the difference between the model initially proposed (5541,561) and the adjusted model (2312,562) indicates that the latter responds to the appropriate set of motivators for use. Attention is drawn to the next table:

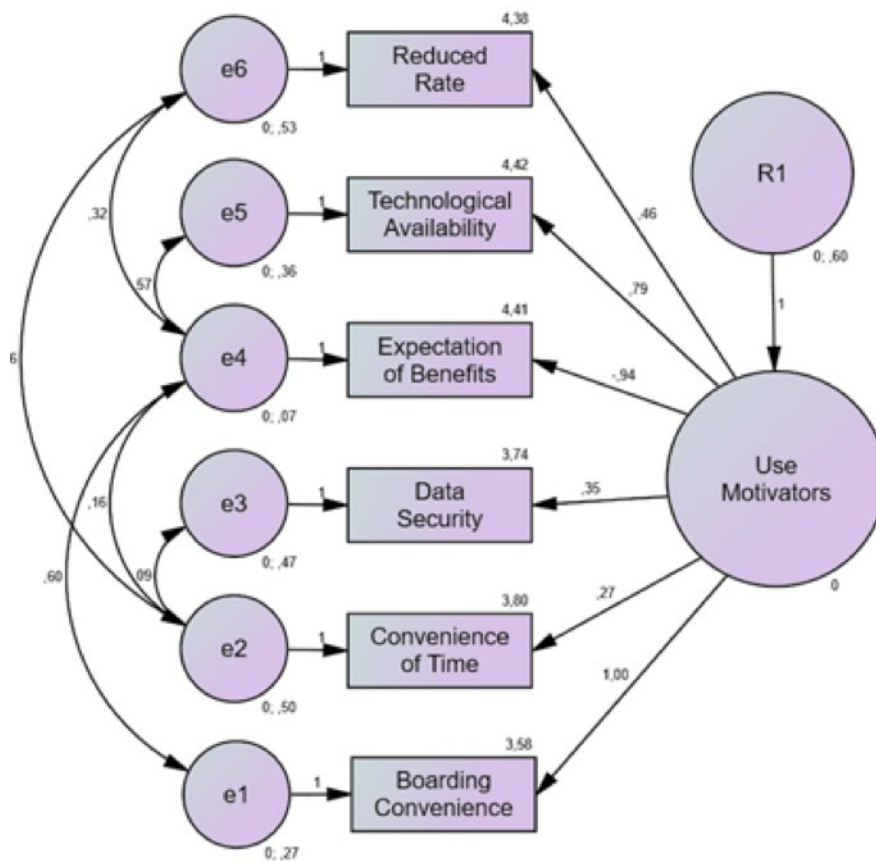
Table 9 – Confirmatory Factor Analysis - indicators

Variables	Regression Weights				Variances				Intercepts				Standardized Regression Weights	Squared Multiple
	Estimate	S.E.	C.R.	P	Estimate	S.E.	C.R.	P	Estimate	S.E.	C.R.	P		
<i>Reduced Fee</i>	1,000				,556	,032	17,174	***	3,585	,020	178,560	***	0,801	,207
<i>Technological Availability</i>	,321	,025	12,933	***	,310	,023	13,481	***	3,801	,016	239,069	***	,325	,526
<i>Expectation of Benefits</i>	,368	,025	14,684	***	,486	,015	31,637	***	3,738	,016	234,551	***	,372	,010
<i>Boarding Convenience</i>	,106	,026	4,170	***	,470	,015	31,213	***	4,414	,017	264,000	***	,102	,138
<i>Convenience of Time</i>	,832	,036	22,963	***	,594	,018	32,679	***	4,420	,018	239,480	***	,726	,106
<i>Data Security</i>	,494	,028	17,635	***	,347	,018	19,100	***	4,378	,017	251,015	***	,455	,642

*** p < 0,001
Source: Author

The *p* values expressed in the "Regression Weights" "Variances" and "Intercepts" fields demonstrate the adequacy of the proposed model (< 0,001), as well as the data presented in the "Standardized Regression Weights" and "Squared Multiple" fields, in addition to the elements that indicate the absence of multicollinearity point to the inference of the consistency of the adjusted model. The figure shows the set of relationships established by the modified model:

Figure 2 – Model modified by Confirmatory Factor Analysis



Source: Author

The data indicate that the set of correlations between the variables with the Standardized RMR measured at 0.074, and signaled consistency indicated by Regression Weights, Variances and Intercepts in acceptable standards support the proposed model and the set of elements presented give consistency subsequent inferences.

The variables Reduced Fee, Technological Availability and Expectation of Benefits are among the central elements of the decision to use modals on demand and indicate a utilitarian meaning linked to cost, convenience of use and desired end, respectively, partially aligned with the studies of Akhmedova *et al.*, 2020; Gurau & Ranchhod 2020; Lang *et al.*, (2020).

The variables Boarding Convenience and Time in addition to Data Security emerge from the offer from the platforms indicating a consistent departure from the traditional way of offering this type of service, studies such as those by Liu *et al.*, 2018; Santos *et al.*, 2019; Ozanne & Ozanne, 2020 discuss the importance and influence of technology and its impacts on consumers.

The other motivators - of a social and environmental nature - despite being considered in the consumption decision-making process, their impact is reduced. The Brazilian case disagrees at least partially with studies that point out such dimensions as relevant (Ertz *et al.*, 2018; Curtis & Mont, 2019. Räisänen *et al.*, 2020).

The model generated indicates that the Reduced Fee (economic), Expectation of Benefits (socioeconomic) considering that the act of moving is less relevant than the performance of such action and, the Technological Availability; Convenience of boarding and time in addition to data security are technological variables that appear as a phenomenon resulting from the nature of the offer via platform and in line with studies such as those by Lee *et al.*, 2018; Yuana *et al.*, 2019; Zhu & Liu, 2020.

Through the Exploratory Factor Analysis, it was indicated the existence of up to fourteen motivators for use involving the social, environmental, economic dimensions and with an indication of the technological element underlying the whole process, however the Confirmatory Factor Analysis indicated that only six variables of this set are robustly linked to the consumer decision-making process.

5. Conclusions

The Brazilian case indicated that the social and environmental dimensions had not been robustly linked to the decision-making process for use, with the exception of "Expectation of Benefits", whose nature is socioeconomic.

It is inferred that in the Brazilian case the utilitarian sense prevailed over the hedonist and that cost, personal benefits and the technological apparatus are vital in the process of use by Brazilians, a result corroborated by a wide range of national and international studies.

Among the most relevant variables, the "Technological Availability" (permissive element of the offer), the "Expectation of Benefits" (generating personal experience) and the "Reduced Fee" stand out as major denominators of the use process which can act isolated or collaboratively with the users' perception of adequacy center, indicating the moment of use and technological facilitators supported by the reduced value and sense of security as structuring the consumption decision.

The other motivators, appear as assistants in the decision-making process, and even all dimensions presenting variables, do not necessarily mean that they are representative, indicating that the staggering is, therefore, a fact, and that, like national and international studies on the theme, the adherence related to the reduced cost and personal benefits with the displacement supported by the technological element is measurable.

The study brings advances to the field of knowledge regarding the theme in Brazil considering its scope of research, representative sample and results indicating the nature, order and degree of importance of the elements that are part of the consumer decision-making process.

The study brings advances to the field of knowledge regarding the theme in Brazil considering its scope of research, representative sample and results indicating the nature, order and degree of importance of the elements that are part of the consumer decision-making process, and although not presenting novelty in world terms, represents an advance in the understanding of how such elements are presented in developing countries, as is the case of Brazil.

The need to expand the study involving vehicle drivers and their perceptions regarding the balance between supply and demand, as well as the real impacts on the cities in which the activity is offered is indicated, especially considering that in Brazil, inland cities have received services on demand similar to those presented here, however, with other formatting.

References

- Akhmedova, A., Mas-Machuca, M., & Marimon, F. (2020). "Value co-creation in the sharing economy: The role of quality of service provided by peer". *Journal of Cleaner Production*, Vol. 266. doi:10.1016/j.jclepro.2020.121736
- Benjaafar, S., Hu, M. (2020). "Operations management in the age of the sharing economy: what is old and what is new?" *Manufacturing & Service Operations Management*. Vol. 22, Num. 1, pp.93-101. <https://doi.org/10.1287/msom.2019.0803>
- Curtis, S.K., Lehner, M. (2019). "Defining the sharing economy for sustainability". *Sustainability*, Vol. 11, Num. 3, 567. <https://doi.org/10.3390/su11030567>.
- Curtis, S.K., Mont, O. (2020). "Sharing economy business models for sustainability". *Journal of Cleaner Production*. Vol. 266, 121519. <https://doi.org/10.1016/j.jclepro.2020.121519>
- Dann, D., Hawlitschek, F., Peukert, C.; Martin, & Weinhardt, C. (2020): "Blockchain and Trust in the Platform Economy: The Case of Peer-to-Peer Sharing." in *WI 2020 Proceedings*. https://doi.org/10.30844/wi_2020_n2-dann
- Ertz, M., & Leblanc-Proulx, S. (2018). "Sustainability in the collaborative economy: A bibliometric analysis reveals emerging interest". *Journal of Cleaner Production*, Vol. 196, pp. 1073–1085. doi:10.1016/j.jclepro.2018.06.095
- Filippas, A., Horton, J.J., Zeckhauser, R.J. (2020). "Owning, using, and renting: some simple economics of the sharing economy". *Management Science*, Vol. 66, Num. 9 <https://doi.org/10.1287/mnsc.2019.3396>.
- Frenken, K., & Schor, J. (2017). "Putting the sharing economy into perspective". *Environmental Innovation and Societal Transitions*, Vol. 23, pp. 3–10. doi:10.1016/j.eist.2017.01.003
- Gurau, C., Ranchhod, A. (2020). "The sharing economy as a complex dynamic system: exploring coexisting constituencies, interests and practices". *Journal of Cleaner Production*, Vol. 245, 118799. <https://doi.org/10.1016/j.jclepro.2019.118799>
- Hair, J.F.; Anderson, R.E.; & Tatham R.L. (1987). "Multivariate data analysis". New York: Macmillan.
- Hawlitschek, F., Notheisen, B., Teubner, T. (2018). "The limits of trust-free systems: A literature review on blockchain technology and trust in the sharing economy". *Electronic Commerce Research and Applications*, Vol. 29, pp. 50–63.
- Lang, B., Botha, E., Robertson, J., Kemper, J. A., Dolan, R., & Kietzmann, J. (2020). "How to grow the sharing economy? Create Prosumers!". *Australasian Marketing Journal* doi:10.1016/j.ausmj.2020.06.012
- Lee, Z.W., Chan, T.K., Balaji, M.S., Chong, A.Y.-L. (2018). "Why people participate in the sharing economy: an empirical investigation of Uber". *Internet Research*. Vol. 28, Num. 3, pp. 829–850

Liu, M., Brynjolfsson, E., & Dowlatabadi, J. (2018). "Do Digital Platforms Reduce Moral Hazard? The Case of Uber and Taxis". *SSRN Electronic Journal* doi:10.2139/ssrn.3239763

Lutz, C.; Newlands, G. (2018). "Consumer segmentation within the sharing economy: the case of Airbnb". *Journal of Business Research*, [s. l], Vol. 88, n. C, pp. 187–196.

McBratney, A. B.; Webster, R.; & Burgess, T. M. (1981). "The design of optimal sampling schemes for local estimation and mapping of regionalized variables—I". *Computers & Geosciences*, Vol. 7, Num. 4, pp. 331–334.

Microsoft Store. (2021). *Sharing Economy*. Recovered on February 8, 2021 from <https://www.microsoft.com/pt-br/search?q=>.

Mont, O; Palgan, Y.V; Bradley, K. & Zvolkska, L. (2020). "A decade of the sharing economy: Concepts, users, business and governance perspectives" *Journal of Cleaner Production*, Vol. 269.

Nezer, O., Bar-David, S., Gueta, T.; & Carmel, Y. (2016). "High-resolution species-distribution model based on systematic sampling and indirect observations". *Biodiversity and Conservation*, Vol. 26, Num. 2, pp. 421–437.

Ozanne, L., Ozanne, J.L. (2020). "The power of sharing to support consumers through liminality". *Australasian Marketing Journal*, Vol. 28, Num. 3.

Räisänen, J., Ojala, A., & Tuovinen, T. (2020). "Building Trust in the Sharing Economy: Current Approaches and Future Considerations". *Journal of Cleaner Production*, 123724. doi:10.1016/j.jclepro.2020.123724

Santos, A. S., Nascimento, J. C. H. B., Rabelo Neto, A., & Barbosa, F. L. S. (2019). "Determinantes da adesão aos serviços de mobilidade compartilhada: uma investigação empírica no contexto brasileiro". *Revista Brasileira de Gestão Urbana*, Vol. 11, e20190033. <https://doi.org/10.1590/2175-3369.011.e20190033>

Sharma, P., Leung, T.Y., Kingshott, R.P., Davcik, N.S., & Cardinali, S. (2020). "Managing uncertainty during a global pandemic: an international business perspective". *Journal of Business Research*. Vol. 116, pp.188–192.

Sigala, M. (2018). "Market formation in the sharing economy: findings and implications from the sub-economies of Airbnb". In: Barile, S.; Pellicano, M.; Polese, F. (eds.) *Social Dynamics in a Systems Perspective*. [S.l], Springer. Chapter 9, pp. 159–174.

SOU (2017). *Delningsekonomi - På Användarnas Villkor "Sharing Economy e on the Terms of the Users"*. SOU (Swedish Governmental Enquiry). Stockholm, Elanders.

WEF (2017). "Collaboration in cities: from sharing to 'sharing economy". *World Economic Forum*.

Yuana, S. L., Sengers, F., Boon, W., & Raven, R. (2019). "Framing the sharing economy: A media analysis of ridesharing platforms in Indonesia and the Philippines". *Journal of Cleaner Production*, Vol. 212, pp.1154–1165. doi:10.1016/j.jclepro.2018.12.073.

Zhang, L., Yan, Q., Zhang, L. (2018). "A computational framework for understanding antecedents of guests' perceived trust towards hosts on Airbnb". *Decision Support Systems*, Vol. 115, pp.105–116. <https://doi.org/10.1016/j.dss.2018.10.002>.

Zhu, X., & Liu, K. (2020). "A systematic review and future directions of the sharing economy: business models, operational insights and environment-based utilities". *Journal of Cleaner Production*, 125209. doi:10.1016/j.jclepro.2020.125209.