THE DETERMINANTS OF VARIABLES FOR THE SUCCESS OF BUSINESS MODELS ORIENTED FOR SHARING: THE VIEW OF BRAZILIAN CONSUMERS

Bruno Roberto Santos  
Fuzzy Consultoria Ltda, Brazil  
E-mail: bruno.roberto.2019@gmail.com

Ana Beatriz de Mello Moraes  
IBMEC-RJ, Brazil  
E-mail: ana.moraes@ibmec.edu.br

Maria Augusta Soares Machado  
IBMEC-RJ, Brazil  
E-mail: fuzzy-consultoria@hotmail.com

Fabiana Madureira Nery  
Fuzzy Consultoria Ltda, Brazil  
E-mail: fuzzy-consultoria@hotmail.com

Submission: 6/22/2020  
Accept: 7/30/2020

ABSTRACT

The objective proposed by the present study is to identify the determining factors that make sharing-oriented business to succeed under the Brazilian consumers perspective. The findings bring useful information for companies who are interesting in starting up or to continuous in this type of business and help them to develop appropriated strategy taking advantage of the best opportunities in this new market scenario. The theoretical frame supported two analysis fronts: Factors that motivate consumers inside sharing economy and barriers that bring difficulty to the transactions. As motivational factors, ideological and financial questions were tested. As barriers were studied questions such as legal, technological, social and marketing. The study was supported by a quantitative research conducted in order to test hypothesis about consumer behavior in this kind of business. Around 140 people has answered the survey. The results allow inferring that collaborative consumption, is not a Brazilian behavior yet, but it is a trend and questions involving financial benefits are the ones which most influence the consumers.

Keywords: Sharing economy; collaborative consumption; business model innovation; strategy; consumer behavior
1. INTRODUCTION

This paper had the objective to understand what the determining variables for the success of the businesses are oriented to the sharing in the view of the Brazilian consumers.

The analyzes were divided into two fronts, the first are the factors that motivate consumers to participate in the business within the collaborative consumption and the second are the barriers that could harm this type of transaction.

The paper was limited to the consumers’ point of view, not addressing any other external aspect that may impact the companies in the industry. In addition, the main focus of the study is only to identify the influence factors, and no further action is recommended for companies.

The research was of a quantitative nature, based on the application of a questionnaire elaborated from the analysis of the theoretical reference. The profile of the respondents were varied in terms of gender, age group and salary range.

Real-time technologies are enabling a rapid shift from the hyper consumption model to an innovative system based on shared asset use. It is the wave of shared consumption Botsman and Rogers (2011), which is being termed sharing economy.

The size of the sharing economy is estimated at $26 billion. Some well-known examples are hosting services such as Airbnb, car and bicycle rentals such as RelayRides, as well as taxi services such as Uber and Lyft Malhotra and Van Alstyne (2014).

The mechanism of the shared economy comes from the moment in which mediators in the Internet meet the demand with the supply in real time and in global scale, Malhotra and Van Alstyne (2014). They are web platforms where people who have underutilized assets find other people who have an interest in renting them. Cosumano (2015), thus creating value for these assets Malhotra, and Van Alstyne (2014).

The concept of collaborative consumption can be applied to any type of product or service. It is possible, for example, to rent your bags while you are not traveling, after all most of the time they are stored in the closet unused. Another possibility is to rent your parking space from your building because you do not have a car.

But there are also negative aspects in this type of business. It is a poorly regulated market. It is extremely dependent on the trust and a reputation that is created by the users. If
any client makes any baseless or liar comment on a social network, who will intercede? Often the supplier will have to struggle to get their reputation back Malhotra, and Van Alstyne (2014).

The fact is that, since its rise in the last decade several business-oriented sharing has not sustained. What some experts say is that consumers are looking for three things: price, convenience and safety, and that any other motivational aspect, such as community sense or environmental appeal, is secondary. Moreover, in order to arouse the interest of investors, it is necessary to address a real problem, to have a business strategy and a spreadsheet that will clearly show the economic benefits of the business Marc (2014). That is, with no right stimulus for the consumer and a robust business model that convinces investors, there is a little chance that the business survive.

Airbnb is an example of success by having a clear value proposition in response to a identified need and having a well-structured business model very similar to the traditional, advantageous for all involved Marc (2014).

Neighborrow, SnapGoods and NeighborGoods are some cases of failure within the sharing economy. Their concept is very similar, exchange favors or belongings between neighbors. The idea seems at first brilliant. According to Adam Berk, founder of Neighborrow, everyone has thousands of items that collect dust in cabinets, and it would be great to increase their utility by sharing them with neighbors.

There are few studies in the area specifically exploring consumers' views on the subject. One of them was carried out by Hamari, Sjöklint and Ukkonen (2015), and it is a survey of users of a global collaborative consumer site with users from all over the world. The intention was precisely to test four hypotheses that motivate this type of consumption: sustainability, fun, reputation and economic benefits. The results of the survey, showed that, although consumers recognize the environmental issue, this is not reflected in the real motivation of consumption. Improving reputation was also not a decisive factor in behavior. On the other hand, the pleasure and fun, as well as financial gains, have been more impacting in the motivation of the consumers.

Given the expressiveness of the current market and the growth rate of the sharing economy, many studies have been carried out on the subject, but few with the consumer view, justifying the need for more research with this approach.

Studies generally analyze the phenomenon of sharing as a whole, mostly following a positive or negative line in relation to it. The idea of this paper is not to make the analysis about
the phenomenon but, in an exempt way, to raise the aspects favorable to the businesses oriented to the sharing in the Brazilian consumer's perspective.

2. METHODOLOGY

First, the analysis of the researched theoretical framework allowed the two main factors that motivate consumers to participate in the sharing economy to be raised. They are ideological and financial.

The analysis also allowed to identify the barriers that could hinder the participation of the consumer in this type of transaction. In this case the barriers are legal, technological, social and market.

The main actors in the shared economy are the government, through laws; companies, depending on their business models; and the changing consumer habits. They are the main tripod of the shared economy. The highlights of the object of analysis of this research are grouped into two main themes: barriers, which involve society, technology, the consumer market and laws; and the motivators, which can be financial and/or ideological. Knowing this, it was then possible to elaborate the research construct, as shown in the table 1 below:

Table 1: Construct for test of perception of Brazilians on sharing economics. Prepared by the author.

<table>
<thead>
<tr>
<th>Indicator Builder</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Assumptions</td>
<td>Construct for test of perception of Brazilians on sharing economics. Prepared by the author.</td>
</tr>
<tr>
<td>Motivators</td>
<td>Ideological and financial factors</td>
</tr>
<tr>
<td>Barriers</td>
<td>Legal, technological, social and marketing factors</td>
</tr>
</tbody>
</table>

Source: Authors, with survey data

The next step was to elaborate a questionnaire with 30 questions, whose suggested answers did not follow any specific rule. It was elaborated in order to capture the direction (favoring or disadvantage) in relation to what was proposed to measure and if there were differences of perception between gender, age and income.

Around 330 people were invited to participate in the survey through e-mails and social networks, and the return was approximately 41%; as not all people answered all the questions, the number of responses varied between 134 and 142.

The survey was compiled in the online tool called Survey Monkey.
The research was sampled Botelho and Almeida (2009); Fowler (2014), so that inferences could be made about the perception of Brazilians regarding the new business models that are emerging from the sharing economy. Using the twenty-seven questionnaire items, it was used Factorial Analysis. As Aranha and Zambaldi (2008), which used to measure the latent variables, as part of the steps for the construction and validation of scales one must have a solid theory of sustainability, in some situations, especially when the proposed scale does not have a firm theoretical foundation, the Factorial Analysis is an exploratory technique, in the sense that helps to understand how the items are associated with a construct.

With the factors formed by Factorial Analysis it was evaluated their reliabilities by means of Cronbach's Alpha. Later, in the case of accepted reliability, It was tried to examine how the factors are related using the Friedman Test, since, by definition, even when measured at a scalar level, the factors / constructs are natural ordinances as Siegel and Castelllan (2006). It was tested if there are differences between the estimated factors and gender, age and income, through Mann-Whitney and Kruskal-Wallis tests, because they are independent samples and the variables / factors are natural ordinations by definition.

3. RESULTS

Most of the interviewees are men (60%), are between 31 and 50 years old (79%) and have income above 10 minimum wages (63%).

Collaborative consumption is still not a habit among Brazilians, but most respondents believe that it is a trend that came to stay (65%) and those who already had exchange or rent experiences within the concept considered that they were positive.

What indicates not to be a habit, according to the research, is that 21% still does not have experiences in this type of transaction. In addition, most have some restrictions on buying used products (61%), do not usually trade products with whom they do not know (84%), generally would not rent or loan a good to an unknown person (62%), but the opposite would do, borrow or rent a good from a stranger (62%).

The initial factorial model was estimated by Maximum Likelihood, in spite of the possible lack of data normality, because the other most recommended option: Principal Components, due to convergence problems, did not present the rotational weight matrix. The model presented ten factors, however, the Q11 variable presented an MSA = 0.360, below the recommended 0.50. When you re-run the model, with the exclusion of item Q11, the item with
MSA <0.50 (Q15) was again found. In this way the final model was run without variables Q11 and Q15, with the following characteristics:

1) At that time, it was possible to adjust it by Principal Components, maximizing the explained variance. The same was estimated with standardized items and used criterion Oblique for rotation of the weight’s matrix, that is, factors are correlated as is most common in opinion questionnaires (Hair et al., 2009);

2) The model presented an adjustment within the limit of acceptable:

i) KMO = 0.655;

ii) Communities around 0.50; MSA's > 0.50; and

iii) Explained variance of 62%. These adjustments can be accepted as long as an exploratory study is considered (Hair et al., 2009);

The final model gave rise to nine factors that, at first, seem to make some sense from a theoretical point of view (Table 2).

<table>
<thead>
<tr>
<th>Factor / Items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Openness to collaborative consumption / Trust in people</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Environmental (Ideological)</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Price (Financial)</td>
</tr>
<tr>
<td>Factor 4</td>
<td>Legal and technological barriers</td>
</tr>
<tr>
<td>Factor 5</td>
<td>Novelty (Marketing)</td>
</tr>
<tr>
<td>Factor 6</td>
<td>Availability of information</td>
</tr>
<tr>
<td>Factor 7</td>
<td>Experience in collaborative consumption</td>
</tr>
<tr>
<td>Factor 8</td>
<td>Reputation (Social)</td>
</tr>
<tr>
<td>Factor 9</td>
<td>Emotional</td>
</tr>
</tbody>
</table>

Source: Authors, with survey data

The items that are part of each of the factors can be found in the standard matrix. The blank values indicate that the item did not load more than 0.40 in the factor: it is part of the factor those items that have more weight (higher coefficient) in the respective factor. Table 2 also summarized the items that are part of each of the factors.

The final factorial model gave rise to nine factors that were tested in the reliability question through the measurement of Cronbach's Alpha.
All factors presented a reliability inferior to the acceptable classification (Cronbach's alpha > 0.70), as suggested by Maroco & Garcia-Marques (2006) and only factors 1, 2 and 3 were higher than 0.60, a limit that we can consider if exploratory research. From these findings only factors 1, 2 and 3 were taken for subsequent analyzes (Table 3).

Table 3: Cronbach's Alpha Summary

<table>
<thead>
<tr>
<th>Factor / Items</th>
<th>Cronbach's Alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1 (Q3, Q4, Q5 e Q6)</td>
<td>0.647</td>
</tr>
<tr>
<td>Factor 2 (Q7, Q8 e Q9)</td>
<td>0.672</td>
</tr>
<tr>
<td>Factor 3 (Q18, Q19 e Q20)</td>
<td>0.611</td>
</tr>
<tr>
<td>Factor 4 (Q17 e Q26)</td>
<td>0.524</td>
</tr>
<tr>
<td>Factor 5 (Q21, Q22 e Q23)</td>
<td>0.545</td>
</tr>
<tr>
<td>Factor 6 (Q12, Q13 e Q14)</td>
<td>0.435</td>
</tr>
<tr>
<td>Factor 7 (Q1 e Q2)</td>
<td>0.477</td>
</tr>
<tr>
<td>Factor 8 (Q10 e Q16)</td>
<td>0.490</td>
</tr>
<tr>
<td>Factor 9 (Q24 e Q27)</td>
<td>0.340</td>
</tr>
</tbody>
</table>

Source: Authors, with survey data

Factor 1 = is related to trust in people for the exchange; Factor 2 = relates to environmental concerns in consumption; and Factor 3 = refers to the influence of price as the determinant of trade. Since there are only three factors, there are few possibilities for relations, but for all intents and purposes, in the lack of a theory that bases these relations, it was chosen to relate the three factors simultaneously by the Friedman Test.

The result of the test is presented in Figure 2 and rejects the null hypothesis (p-value = 0.736), that is, there is no relation between the three factors. The bar graph in these figures makes it very clear that the distribution of the scores of the three factors are very similar.

Figure 1: Friedman Test (F)
Source: Authors, with research data analyzed in SPSS
That is, the entire quantitative analysis of the data failed to prove any correlation between the factors (Motivational and Barriers) and the consumer influence of the shared economy.

In applying the Kruskal-Wallis test to evaluate the difference in perceptions between individuals, with more or less income and age, it did not find statistically significant differences as p-values (asymptotic sign) below 0.10. However, with respect to gender, it was found statistically significant differences, at a level of 10% of significance, between factors 1 and 2. According to the results presented in Figures 3 and 4, women give less importance to trust in people for exchange, that is, they are more open to collaborative consumption and have greater environmental concerns in consumption than men.

![Figure 2: Mann-Whitney Test (U) between factor 1 versus gender](source: Authors, with research data analyzed in SPSS)
Figure 3: Mann-Whitney Test (U) between factor 2 versus gender
Source: Authors, with research data analyzed in SPSS

Figure 4: Mann-Whitney Test (U) between factor 3 versus gender
Source: Authors, with research data analyzed in SPSS
4. CONCLUSION

It was proven that 76% of the respondents demonstrated to have environmental and social concerns in their day-to-day actions, such as selective collection at home, avoiding plastic bags and disposable cups, saving water, etc. But this is not reflected in their consumption decisions, as only 29% say they are researching whether a product consumed is from a manufacturer that has sustainable attitudes. In addition, 70% answered clearly that it is never or rarely that exchanging or renting a good is more environmentally and socially sustainable than buying it influences their consumption decision.

According to the survey, 80% of respondents believe that the value of the service / product is a key factor in their consumption decision within the concept of sharing, and 54% of respondents have a greater predisposition to participate in transactions within this concept when they are unable to buy the negotiated item in question. In addition, 69% agree that cheaper products are not worth the work of renting or entering the site to search or even have the logistics of return. 61% of the respondents reported having no restriction of using the services within the sharing economy, even though these businesses are new and little regulated.

More than 70% of respondents have been in favor of online transactions. More than 80% of people think that the fact that the application is user-friendly is even a motivator for using these types of services, and agrees that the applications already in the sharing economy today are easy to use.

For 75% of respondents it is essential to know information about the person with whom you are making a swap or rent transaction, and 96% of people want to know detailed information about the product. And more than 50% would never lease your asset to someone without many references. However, being the first to rent a good would not be an apparent deterrent, given that 48% of respondents would accept it.

In addition, more than 80% believe that the good reputation of the supplier is essential in their consumption decision and that most evaluations about a supplier must be positive in order to close a transaction.

Finally, more than 90% of the respondents believe that it is essential to have subsidies to analyze the conduct / reputation with whom they will make some exchange or rent of their property.
About 68% of respondents say they do not mind not having the latest version of any product, plus another 87% even agree to buy an older version of a product. And more than 90% say only carry out the exchange of your product when it is no longer in use.

More than 60% of respondents reported giving more value to the use experience than possession of the good.

Berk, owner of the startup Neighborrow, believes that the main problem with the idea is not trust, insurance, financial, interface or other human apathy, it's still the attempt to make the sharing economy work. (Kessler, 2015).

The research conducted by Hamari, Sjöklint and Ukkonen (2015), concluded that ideological questions do not necessarily translate into behavior. They proved for example that people recognized collaborative consumption as good for the environment but the real motivations that led to this type of consumption were actually economic benefits. More than an altruistic attitude of sharing there is still a search for gains for oneself.

Sastre (2012), is another author who points out that the way the collaborative economy is being treated often seems more like what is best for each other rather than a group. Nothing more than service business models focused on the intermediation of the sale of something (space, things used - commodities, new things, etc.) or temporary rent. Perhaps the idea of collaboration can be found in the system of collaborative lifestyles through concrete initiatives such as crowdfunding and coworking spaces. He further emphasizes that the term collaborative consumption becomes very comprehensive, thus needing to be renamed.

Through the research conducted here it was possible to infer that the collaborative consumption is not yet a habit for Brazilians, but it is already considered a trend. It is precisely the act of people practicing more and feeling comfortable within these new business models. There is still a certain attachment to one's own goods and an insecurity in the relations of exchange. The point raised by other authors cited in the above paragraphs, which is that people are more concerned with their own benefits than with group earnings, could also be observed in this research.

As critical success factors, the ideological factor was not relevant. The fact that it is an environmentally and socially sustainable business has not proved a motivator for the growth of this type of business from the point of view of the current consumer. However, as people are becoming more aware of the importance of the topic in their day to day life it may be that in
the future it is, in addition, research has shown that women are more sensitive to this subject than men.

Confidence in people and maintaining a good reputation, these were considered fundamental items in the collaborative economy. In addition, the research statistically proved that women give less importance than men to this question. It is therefore important that anyone who is participating in these transactions in any way can make comfortable, secure and well informed both the supply side and the demand side. Today there are several supply-side evaluation tools, but little on the demand side. It is possible to see for example if an apartment is well rated but there are not many tools to evaluate the reputation of a possible candidate to rent it.

The highest level of detail about the product / service was also important. The fact that it is a new and poorly regulated business model does not inhibit consumers.

Sastre's research (2012), emphasizes that this business model enables the democratization of access to luxury items provided by leasing companies for articles such as handbags, jewelry, properties and private clubs, jets and boats. These unique items become available to less exclusive people for at least a period of time. Therefore, we must be attentive to the value of the products / services. It may not be worth investing in a business of exchanging products with very low values. This research has shown that people are prone to price and tend to interact more in this type of transaction when the amounts involved are higher.

Finally, the research shows that people are giving more importance to having experiences of use to the detriment of the possession of the goods. Coupled with the fact that consumers are not too worried about always having the latest version of a product and do not bother buying / exchanging used things, the potential of business related to the sharing economy is reinforced.

In summary, entrepreneurs interested in entering the world of shared consumption should base their business strategies on the basis that the consumer:

1) Need to see financial advantage and convenience

2) It thinks the environmental issue (mainly women) is important but it is not yet a buying motivator

3) Need to feel safe (mainly men)

4) Want to use a simple tool
5) It is not inhibited because it is a poorly regulated environment

6) Values experience are more significant than ownership

REFERENCES


Crain, R. (2010). Collaborative consumption sounds great on paper, but watch out for your reputation and your privacy. *Advertising Age*. 81, 36, 28. ISSN: 00018899


