UNIVERSITÉ PARIS DAUPHINE MASTER BUSINESS TRANSFORMATION



Relevant factors to take in consideration when applying a collaborative consumption
practice in Peru

Giovanna Villavicencio Rodriguez

Tutor: Anouck Adrot

Paris, August 2019

Index

Chart List	iv
Image List	v
Executive Summary	1
Introduction	2
CHAPTER 1: Literature Review	3
1.1 The sharing economy	3
1.1.1 Characteristics of the sharing economy	4
1.2 The collaborative consumption	5
1.2.1 Characteristics of the collaborative consumption	6
1.3 The business of collaborative consumption	8
1.3.1 Automotive	8
1.3.2 Hospitality	10
1.4 Factors associated to the collaborative consumption	10
1.4.1 Political	11
1.4.2 Economical	12
1.4.3 Social	13
1.4.4 Technological	14
1.4.5 Summary of the factors and variables	16
1.5 Complexity in collaborative consumption practices	
1.6 Developing Countries	
1.6.1 Key benefits of the collaborative consumption practices	20
1.6.2 Barriers in developing countries	20
1.7 General information about Peru	22
1.7.1 Peruvian Background	22
1.7.2 Peruvian Population	22
1.7.3 Characteristics of the population	
1.7.4 Usage of internet compared with other countries	
CHAPTER 2: Methodology	27
2.1 Importance of the investigation	27
2.2 Methodology of the study	27
2.3 Objectives of the study	28

2.4 Hypothesis approach	29
2.4 Size of the sample	30
2.5 Data analysis method	33
2.6 Delimitations	36
CHAPTER 3: Results of the investigation	37
3.1 Profile of the respondents	37
3.2 Cronbach's alpha	42
3.3 Correlation coefficient	47
3.4 Linear Regression	49
3.5 Economical Factor	51
3.6 Technological Factor	56
CHAPTER 4: Conclusions and recommendations	60
4.1 Conclusions	60
4.2 Recommendations	62
References	64
Appendix	72
Appendix A: Survey requirements	72

Chart List

Chart 01: Factors and Variables	16
Chart 02: Peruvian Population	22
Chart 03: Population by age segment - Lima Metropolitana 2017	31
Chart 04: Population by age segment and socioeconomic level - Lima Metropolitana 2017	31
Chart 05: Interpretation of the reliability coefficient	34
Chart 06: Strength and direction of the correlation Coefficient	35
Chart 07: Economic Factor	43
Chart 08: Reliability statistics – Economic Factor	43
Chart 09: Social Factor	44
Chart 10: Reliability statistics – Social Factor	44
Chart 11: Technological Factor	45
Chart 12: Reliability statistics - Technological Factor	45
Chart 13: Political Factor	46
Chart 14: Reliability statistics - Political Factor	46
Chart 15: Reliability statistics – Usage Factor	47
Chart 16: Reliability statistics	47
Chart 17: Correlation Coefficient	48
Chart 18: Model coefficient test	50
Chart 19: Economic Factor	52
Chart 20: Technological Factor	56

Image List

Image N° 01: Collaborative consumption and sharing economy	05
Image N°02: Percentage of adults who own a smartphone	15
Image N°03: Presence of sharing economy companies by region	19
Image N°04: Sharing economy companies by country in the developing world	20
Image N°05: Generational characteristics. Obtained from Ipsos Perú (IPSOS, 2018)	23
Image N°06: Internet users and GDP per capita	24
Image N°07: Internet users (% population 6 years old and over)	25
Image N°08: Ways of access to the internet	25
Image N° 09: Percentage of people that bought products and services using internet	26
Image N°10: Conceptual model of the hypothesis	30
Image N°11: Target market estimation for sample size	32
Image N°12: Percentage of participation according to age range	38
Image N°13: Age distribution	38
Image N°14: Collaborative consumption platforms' usage	39
Image N°15: Last time of use of any collaborative consumption platform	40
Image N°16: Opinions about collaborative consumption platforms	41
Image N°17: Reasons why people don't consider reputations systems enough to co	onsider
collaborative consumption platforms safe	41
Image N°18: Thoughts about the increase of value of their belongings thanks to collab	orative
consumption practices	52
Image N°19: Thoughts about the creation of collaborative consumption practices	53
Image N° 20: Intention of participants to act as suppliers	53
Image N°21: Thoughts of participants about earning money through apps	54

Image N°22: Thoughts of participants about economic situation of the country and their	online
consumption level	55
Image N°23: Thoughts of participants about the relation of collaborative consumption pra	actices
and the growth of the country	55
Image N°24: Smartphone owners	57
Image N°25: Are reputation systems considered safe?	58
Image N°26: Payment preferences	60

Executive Summary

The following investigation was made as a dissertation for the Business Transformation Master of Université Paris-Dauphine. The main objective of this study will be to determine the political, economic, social and technological factors that might contribute to a successful application of a collaborative consumption practice in Lima, Peru.

In the first chapter we present the literature review made about the collaborative consumption and its characteristics. Here, we mention our position towards the different definitions of the practice and we present the sectors where the collaborative consumption practices have grown.

In the second chapter we present the research design proposed for the study. In this chapter we identify the principal and secondary objectives, hypothesis, size of samples, data analysis methods and delimitations of the study are established.

In the third chapter we present the results of the investigation. In this chapter we develop all the analysis made for the statistical part of the study. Also, we present the most relevant information obtained from the surveys made.

Finally, in the fourth chapter we present the conclusions and recommendations based on the results of the study performed.

Introduction

Over the past ten years, companies and countries have been facing a phenomenon known as the "sharing economy" (Belk, 2013). This term represents the new way of trade that appeared since the internet started to gain more importance in the daily life of the consumers. In the sharing economy, people share their belongings for a determined amount of money through digital platforms. This form of trade also applies to start-ups and traditional businesses who face a new opportunity to re-think their value creation and optimize their resources (Muñoz and Cohen, 2018). Even though there is no clear agreement on which is the definition that describes the sharing economy in the best way, there are many studies that stablish what can be considered as sharing economy and what cannot.

The principal organizations of the shared economy were developed mainly in United States and Europe, and had as their main goal the use of technology to simplify complex transactions (Chase, 2016). Talking about sharing economy practices in developed countries is easy since there are plenty of examples about companies created to share, but how does it work in a developing country?

The main objective of this investigation will be to determine the political, economic, social and technological factors that might contribute to a successful application of a collaborative consumption practice in Lima, Peru. In order to do it, we will analyze how these factors permitted the rise of the sharing economy in developed countries and we will narrow them to the Peruvian context. First, the study will rely in the literature review to establish the different factors and then, after reviewing if they are applicable to the Peruvian reality, we will be using an exploratory research to test them. By doing this we will know what are the factors that might facilitate the application of this type of practice in Peru.

CHAPTER 1: Literature Review

1.1 The sharing economy

There are many definitions regarding the concept of sharing economy, even though it can be interpreted in different ways, most of the definitions agree on something: it is a short-term access to a product or a service facilitated through digital platforms. This concept appeared after the financial crisis of 2008¹, when people lost their houses, cars and other investments. In other words, after the crisis consumers couldn't afford any additional ownership of assets that required constant maintenance since they became more price sensitive (Görög, 2018), which is why they started to share their own belongings in order to get the products or services they needed paying a low price for the access or transfer of goods and services.

The concept of sharing has been among us since the development of the human society, nevertheless, the "sharing economy" in terms of collaborative consumption is a term born thanks to the increasing use of internet and digital platforms (Belk, 2013). The term gained recognition in 2010 after Rachel Botsman and Roo Rogers used it in their book "What's mine is yours: the rise of collaborative consumption" (Botsman and Rogers, 2010), after that, in 2015 the term was included in the Oxford Dictionaries with the definition of:

"An economic system in which assets or services are shared between private individuals, either free or for a fee, typically by means of the Internet" (Oxford Dictionary, 2015)

Although the sharing economy term is used indifferently as a synonymous of many other terms such as collaborative economy, on-demand economy, gig economy, freelance economy, peer economy, access economy, crowd economy, collaborative consumption, among others (Rinne, 2017), there's a slight difference between all those terms. Before explaining the

¹ The financial crisis began in the mortgage market in the United States and exploded worldwide when the Lehman Brothers, one of the world's biggest financial institutions, went bankrupt in October 2008.

difference between those terms and the sharing economy, we should take into consideration one common definition among them. All those terms suggest that all the active parts in the economy should encourage themselves to create a more sustainable society by exploiting the current market information. Indeed, by encouraging a more sustainable cooperation between companies and consumers, we could decrease the economic impact that implies buying more assets instead of sharing them (Barbu, 2018).

1.1.1 Characteristics of the sharing economy

As seen before, the sharing economy might have many different synonymous but the term most utilized when talking about sharing economy is the collaborative consumption (Görög, 2018). In this part of the chapter we will identify the differences between both terms in order to understand better the scope of the sharing economy.

The sharing economy and the collaborative consumption share the same principle: consumers and companies share assets. Among those two terms, the action to share can be based on access or transfer of ownership and with the pass of the time it will reinvent the behavior of traditional markets where the consumer won't rent, exchange and swap their belongings as they used to. In fact, they will create new economies and incomes by renting, exchanging and swapping assets that they are not using anymore (Botsman, 2013).

Now the question is, is there a difference between the sharing economy and the collaborative consumption? According to Görög (2018), the main difference between the collaborative consumption and the sharing economy is that the first one focuses on the importance of financial compensation while the sharing economy includes all those exchanges where people re-use underutilized assets for free, just as an exchange without any financial compensation. In the sharing economy getting a financial retribution is not the main concern, but when we talk about collaborative consumption we can include examples such as Airbnb,

Uber, Taskrabbit among others. Image N° 01 shows how the sharing economy concept is one part of the collaborative consumption concept, for this reason, in this study we will be considering the term "collaborative consumption" as the complete concept where we can include all the different examples mentioned before.



Image N° 01: Collaborative consumption and sharing economy (Görög, 2018)

After defining what sharing economy really means, on the next part we will define the meaning of the collaborative consumption in order to better understand how it works and how it (as a complete definition) can be applied to the Peruvian context.

1.2 The collaborative consumption

The collaborative consumption is defined as an environment where the act of buying and distributing goods and services is made by stablishing a fee or another type of compensation. It has become a large-scale phenomenon that is involving all kind of users and has evolve the way companies work to make them more cost-effective (Petrini, Freitas and Silveira, 2017).

The collaborative consumption has three main actors: (a) the digital platform provider, (b) the person who provides the service, and (c) the customer (Benoit, Baker, Bolton, Gruberd, and Kandampully 2017). For instance, Uber is a well-known platform that connects people who want an inexpensive and safe taxi service with people that has a car and want to earn some money during their free times. The platform created by Uber coordinates the use of the underutilized assets of some people (uber drivers) and contacts the customer with the driver in

exchange of a small fee. Another example of a collaborative consumption company is the well-known platform called Airbnb. This platform allows regular people to connect with potential clients that are looking for a cheap place to stay. Whether they look for an un-expensive room or a place where they can learn more about the culture of the country or city they are in, Airbnb allows them to find the perfect place with a great location in exchange of a small fee.

As we can see, collaborative consumption practices are more than just sharing assets, this type of practice always include a fee in their services and they have a strong dependency with the peer's interactions (Guyader, 2018). Also, the success of this type of practices rely on the platform's internal performance that will guide the user when asking for a service though the platform.

1.2.1 Characteristics of the collaborative consumption

The collaborative consumption is characterized for having four key drivers: the importance of community, the rise of social and real-time technologies networks, the importance of the environment and the financial crisis (Botsman, 2010). Each of those drivers have allowed the rise of this type of practices in developed countries, and they might be the key to understand if they can be successfully applied in Peru.

The first driver is that there is a renewed belief about the importance of community. Nowadays, the world is moving from a passive consumer to a highly creative collaborator that will use technology to let companies know what are their needs and what changes need to be done in current services (Botsman, 2010).

The second driver is that the social networks and real-time technologies are now part of our life and they are changing the way we behave. Traditional markets, such as farms in developed countries, are also changing their behaviors by utilizing technology to make their day-to-day work more profitable. As an example, in the website https://www.kuhleasing.ch/

you can lease a cow for a season, in exchange, you will get an special price for the cheeses the farm produces with the milk of the cow you leased. According to the owner of the farm, all of their 150 cows are leased worldwide and now they don't worry about producing big amounts of cheese without knowing to whom there were going to sell it (Matzler, Veider & Kathan, 2014). This driver can be applied to the Peruvian reality due to the fact that the main economic sectors, such as fishing and agriculture, are specialized in extraction (El Comercio, 2019).

The third driver that characterizes the collaborative consumption are the current worries about the environment. In most of the developed countries, conservation of the environment is starting to be a priority (Haynie, 2017). Not only consumers are willing to make a change, companies are also trying to generate less impact in the environment by changing the way they use to make their businesses. For example, the outdoor clothing and gear brand Patagonia started a partnership with eBay in order to lower the environmental strains of consumption (Matzler et al, 2014). The partnership allowed customers to buy and sell their used Patagonia clothes through a specialized website where people could re-sell their previous clothes or buy used ones. By doing this, the company increased the number of Patagonia clothes in circulation and they also decrease the environmental impact of producing a big amount of clothes. This driver can also be applied in the Peruvian context, for instance, companies such as ayu.pe (connect people that want to do volunteering with organizations that need help), Car cool (carpooling app), Conectagro (connects agricultural sellers with potential buyers), Deenty.com (detects hours where dentists don't have patients and allows to get the appointment with a cheaper price), Helpers (connects maintenance workers with people that want their services), between others, are already applying the collaborative consumption concept and they have been accepted successfully in the Peruvian market (Innovate Peru, 2016).

The last driver is the one mentioned at the beginning, the financial crisis of 2008 affected the consumer's savings and it changed the way they saw their belongings. Even though

the financial crisis affected the entire world, the consequences were less relevant in Latin American countries (Alarco, 2010).

As shown before, the collaborative consumption is a consequence of different changes that consumers had to face with the pass of the years. Nevertheless, companies have found a way to adapt their strategies to build new approaches to the consumer, and the Peruvian consumer is already internalizing this without knowing it is a collaborative consumption practice.

1.3 The business of collaborative consumption

Collaborative consumption practices can be categorized in four sectors: (a) automotive, (b) retail and consumer goods, (c) hospitality, and (d) entertainment (PricewaterhouseCoopers LLP, 2015). In order to focus the investigation to the Peruvian context, we will concentrate only in the development of this practices in the industries of automotive and hospitality. The reason behind this is because the European Commission in their last Eurobarometer, concluded that these two categories were the most representative in Europe (European Commission, 2018).

1.3.1 Automotive

The automotive share industry is referred to the sharing of cars, bicycles and scooters though digital platforms. According to PricewaterhouseCoopers LLP (2015), this category is the preferred by consumers and they would like this type of services to succeed.

Car-share and ride hailing services

The emergence of car-sharing has changed the transportation landscape, either because now people share their rides or because these platforms are providing a short-term access to cars (Martin, Shaheen & Lidicker, 2010). The main advantage of the car-sharing industry is that it is reducing the number or cars on the streets, having as a result the reduction of traffic congestions, gas emissions and car ownership in 50% (Shaheen, Mallery, Kingsley, 2012).

"Zazcar" was the first car-share platform based in Brasil and it has revolutionized the way people are mobilized. With this app, customers can rent cars for hours instead of calling a taxi and paying twice the price (Be Brasil, 2017). The other scheme is the ride hailing services, these services known as Uber, Cabify, Easytaxi, etc. have allowed cost-effective rides and they have changed the way individual move (Deloitte, 2017).

Bicycle and Scooter share

When talking about the bicycle and scooter share sector, we referred to the bikes and scooters available to the general public for a rental fee charged by a platform. The advantage of this is that is it not only improves health but also saves money. Also, it is known that it improves the quality of the city life by reducing the ecological impact of cars (Hsua, Liou, Lo & Wang, 2018).

An example of a bike sharing company is Vélib, a French company considered as the largest bike share outside of China (Ecowatch, 2015). On the other hand, when talking about Scooters a well-known example in Europe is Lime. Recently this collaborative consumption practice has been introduced to Peru under the name Grin. The project is still in pilot mode which is why it is only working on 1 district (San Isidro). Even though it was introduced recently (March 2019), the rate of acceptance is showing how Peruvians are willing to adequate

their lifestyles to the use of this type of transport (Andina, 2019). Also, in July of 2019 the district of Miraflores introduced "CityBike Lima", which is the first service of public bicycles under the scheme of the collaborative consumption practice (Goga, 2019).

1.3.2 Hospitality

The industry of hospitality changed since the creation of platforms such as Airbnb and Home away. Nowadays, you can rent a room in an occupied house or rent a complete apartment for days. According to Euromonitor, the most important target for this type of companies are Millennials, but it depends on the platform. Indeed, Airbnb average age of users is 35 and for Home Away is 45+ (Euromonitor, 2016). For instance, Airbnb operates since 2008 and even though it was created in California-FL, now a days it is present in more than 190 countries around the world (Solomon, 2016). It's presence in developing countries such as Africa and India show how this type of business model can be applied in most parts of the world. Today, Airbnb strategy is being re-defined by implementing a hotel-like brand called Niido. Indeed, today there are only two Niido buildings located in Nashville-TN and Orlando- FL, and their goal is to have 14 properties by 2020 (Boston Hospitality Review, 2018).

1.4 Factors associated to the collaborative consumption

In order to stablish the factors to take into consideration for the present investigation, we will take the PEST factors and analyze how they can be molded to the Peruvian reality. Indeed, in this part we will explain how these factors works in an international point of view and after, in the exploratory research, we will analyze how these factors are seen from a Peruvian point of view.

1.4.1 Political

In many developed countries collaborative consumption practices have faced the creation of different laws that allow or deny their operations in certain parts of the world, or even in a same country. For instance, in Germany there are different laws through the country that affects the collaborative practices. In Hamburg, a city in the north of Germany, their local government specified that there is no requirement for local hosts to rent their rooms, on the other hand, Berlin's government has banned this activity (Zon, 2015). Now a days, governments are understanding better what's behind collaborative consumption practices and they are introducing more flexible regulations. For example, London's and Amsterdam's government have agreed that Airbnb will be the one in charge of regulating their operations in those countries, by restricting the number of days per year that a unit can be rented (Woolf, 2016).

The political environment in Peru is still not well defined. For instance, the Peruvian government created the law N° 170-2018-MINCETUR for this type of practices the past 10 of May 2018. When the law was published it had as a goal to regulate all the sharing practices in Peru (Ministerio de Comercio Exterior y Turismo, 2018). After 2 months, the new norm was abolished and until March 2019, this sector has not been regulated (El Comercio, 2018)

Now that we have a general idea of how the political factors are seen from a macro level, the next step is to understand how it can be analyzed from a micro level. In order to do that, we will be analyzing the point of view of the customers by applying a survey. With this survey we will be analyzing if people trust in their government's decisions and if they believe there's a need to regulate this sector. As mentioned before, in Peru the regulation for these types of practices it's still under analysis by the government, but it doesn't mean that the potential customers won't have a different point of view when analyzing the different positions the government could take in this matter.

1.4.2 Economical

For this study, we will consider as the economic factors all those that affects the cost of the transactions made in a collaborative consumption environment. We will be considering an approach of 3 types: (a) the consequences of the collaborative consumption models, (b) the situation of the market forces and (c) the economic situation of the country.

After analyzing the different characteristics of the collaborative consumption practices, we can agree that the main consequence is that it increases the value of an under-utilized asset by allowing someone else to re-use it or by optimizing the use of it by creating services for others (Muñoz and Cohen, 2018). By doing this the collaborative consumption is generating value where it wasn't before. For instance, rideIT is a ride matching platform created in India to overcome the increasing cost of gasoline and traffic jams. This app was targeted only for working people and it was born because the public transport in India was too crowded. The platform connects car-owners with working people that want to get a quiet ride to their works, and it has improved the way people go to their work (Jacob, 2015). Since its creation in 2013 it has won several social awards due to its usefulness (Das, 2016).

Another important factor to consider are the market forces of supply and demand. Collaborative consumption platforms not only require clients, but also individuals who are willing to offer their services or products through the platform. Not having consumers on the demand side can have as a result a lack of providers in the supply side, and this might lead to the failure of the platform (Chasin et al, 2018). Also, another variable to take into consideration when analyzing the market forces are the transactions costs. The cost of the transaction for the provider should be less than the cost of the operation per se, if it is not like that, the offer won't exist and there will be no market (Golpe, 2019).

The third economical aspect to have in consideration is the economic situation of the country where the platform is going to operate. As mentioned before, most of the collaborative consumption practices surged after the financial crisis of 2008, because people wanted to keep living as they used to but there weren't able to do it due to the crisis (Bocker & Meelen, 2017). For instance, the platform "Rent the Runway" was created in United States for all those people that wanted to change their clothes without investing too much. Indeed, in this platform people can rent for a period of time clothes by paying a monthly subscription. Although the financial crisis had implications worldwide, Peru's economy was considered as one of the fastest-growing countries in Latin America until 2013. The financial crisis affected the Peruvian's economy after 2013 due to the decrease of the international commodity prices, nevertheless, the impact wasn't strong as in other countries (The World Bank, 2018).

1.4.3 Social

There are many innovative platforms that are growing worldwide successfully. For instance, Airbnb is present in more than 191 countries around the world and the explanation behind its success is because they managed to think global, act local (Solomon, 2016). Before entering a new country, platforms owners have to understand the culture of the country towards the acceptance of new business models, their insights about the new ways to generate income by using platforms and if they are ready to share their assets with others.

Culture is a set of shared behaviors that might be influenced by religion and that are learned by living in community (Zimmermann, 2017). National culture around the world vary significative, which is why companies have to understand it before entering to a new country. In order to understand how culture affects the companies, we should understand the insights of the potential customers towards the acceptance of new business models. For instance, back in 2004 this type of practices were unthinkable but now they are accepted as a way to find a place

to stay or a taxi (Ranchorda, 2014). Also, the acceptance of the collaborative consumption practices as a new way to generate income (Ranchorda, 2014) is also an important variable to analyze.

Nowadays lifestyles have changed, and there are many remarkable differences between men and women when it comes about the use of collaborative platforms. For instance, 54% of men use this platform in the transport sector, compared to the use by women that is 47%. On the other hand, if we see the accommodation sector this numbers change. Woman are the one with the highest rate of use with a 60% while men only use them 53% of the time. The location of where you live is also a variable when using this type of platforms. People living in large towns are most likely to use these practices than the ones living in rural areas. Also, 62% of self-employees and employees tend to use collaborative platforms, and they are more likely to use these practices in the hospitality sector (European Commission, 2018). As we can see, lifestyles can vary among genders which is why in this study we will determine what is the degree of acceptance of shared assets in the Peruvian context.

1.4.4 Technological

Nowadays we are living in the fourth industrial revolution, which means that technology is going to change the way we live, work and relate with other people (Schwab, 2016). In order to analyze the technological impact in the collaborative consumption practices, we will separate the analysis in two: (a) the mobile connectivity and (b) the security of the transactions from a Peruvian perspective.

The mobile connectivity is directly attributed to the smartphone ownership. Even though it seems like almost everybody has a phone, people living in developed countries have a higher rate of mobile ownership. According to Taylor and Silver (2019) from the Pew Research Center, there's a media of 76% people in developed countries that owns a

smartphone. On the other hand, the media in developing countries is just of 45%. Whether we are referring about developed or developing countries, usually young people is more likely to be digitally connected. As we can see in the image N°02 below, people between 18-34 years are the ones with a higher level of smartphone ownership, for this reason we will target them when analyzing this factor in the Peruvian context.

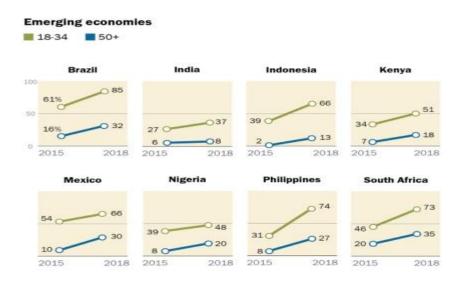


Image $N^{\circ}02$: Percentage of adults who own a smartphone (Taylor & Silver, 2019)

The second factor to consider is the security of the consumer when using this type of platforms. According to Smith (2017), 64% of people in United States have at least one account involving sensitive data such as bank or health information, 41% have experienced fraudulent charges on their credit cards and 31% have received a notification saying that their personal information had been compromised. As we can see, there's an important issue with the security in technology. For this reason, in our exploratory research we will consider this factor as crucial in order to understand deeper what do Peruvians think about this.

1.4.5 Summary of the factors and variables

In order to have a more specific definition of the factors and its variables, chart $N^{\circ}01$ will summarize them. These variables will be the ones taken into consideration when developing the survey.

Chart 01

Factors and Variables

Factor	Factor	Variable
Political P1 Trust of people in their government		Trust of people in their government
Fontical	P2	Need of regulations
	E 1	Collaborative consumption practices increases the value of an under-utilized
Essesia		assets by allowing someone else to re-use it
Economic	E2	Situation of the market forces of demand and supply
E3		Economic situation of the country
	S1 Acceptance of new business models	
Social	S2	Acceptance of the collaborative consumption practices as a new way to
		generate income
	S3	Acceptance of shared assets
Taskuslasiaal	T1	Mobile connectivity
Technological Security of transactions		Security of transactions

1.5 Complexity in collaborative consumption practices

The rapid acceptance of the consumer when we talk about collaborative consumption practices such as Uber and Airbnb, has led traditional companies to face a new market threat. Companies that want to be competitive are now required to be flexible, innovators and have a digital platform in order to give their consumers an adequate value proposition (Barbu, C., Bratu, R. & Sirbu, E, 2018).

Although collaborative consumption companies have an "low-cost" access to their consumers (they don't invest in architecture, employee's, etc.), Chasin, Von Hoffen, Hoffmeister and Becker (2018) have identified 7 reasons why collaborative consumption companies might fail in their attempt to be competitive.

The first reason that might lead to failure is because there is a lack of platform providers. Companies with specific market targets might fail in the task of attracting suppliers. For instance, the sharehood.org, was and platform created in Australia that tried to connect people that wanted to share their laundries, bicycles, sewing machines, etc., with people in their local area. Even though it was a great idea for the funder, Michael Green, now a days the platform doesn't work since there weren't enough providers willing to share subscribed (Belk, 2013).

The second reason described by the authors is the insufficient analysis of the market. Sometimes ideas might look good on paper, but before investing, idea owners should analyze the market to check the project viability. Also, new startups should analyze if the market they want to enter have bigger companies that work on the same. The main idea behind analyzing the market and the possible competitors is because big companies have the resources to change their business model in order to kill the competition (Owyang, 2015). If this happens, small startups won't be able to compete and they will fail in the attempt.

The third reason of failure is because of trust issues. According to Bostman (2012), one of the critical ingredients of collaborative consumption is trust and efficiency. Virtual trust will transform the way we relate with others, and it will also change the way we see digital companies.

The fourth reason of failure are the hidden resources requirements. According to Chasin, Von Hoffen, Hoffmeister and Becker (2018), they believe that companies think that the operation in a digital platform is easy and that it doesn't require much resources. For instance, Kitchit, a platform where you could hire a personal chef to cook premium meals at your house, had to close after 5 years of operations due to financial problems. According to the co-founders, Ian Ferguson and Brendan Marshall, they raised \$8.1 million but after 5 years

they couldn't afford to keep on going with the business since it required more financing than expected (Tuder, 2016).

The fifth reason that might lead collaborative consumption companies to failure are the technical challenges of a collaborative platform. Systems that fails are the ones that are created without considering scalabity. For instance, companies that create their platforms believing that they will get maximum 1000 members (as the case of neighborhoods platforms) and then they get 1 001 members, the company will have problems with their platform since they weren't ready to attend more people.

The sixth and seventh problems collaborative consumption companies have to face are the unclear legal environment and the acquisitions. Since this type of companies usually create their own markets, they constantly face the risk of new laws and they are usually the target of big companies that want to buy them just to make them disappear or to acquire they customer database.

In conclusion, working on a collaborative consumption environment is not an easy task.

There are many considerations to take into account before entering to this type of market. All the reasons for failure mentioned before can be applied to the Peruvian market. For this reason, later we will study the Peruvian culture, its characteristics and their usage of internet.

1.6 Developing Countries

Before analyzing the Peruvian culture and its implications towards collaborative consumption practices, we need to define what is a developing country. According to Hoskisson, Eden, Lau and Wright (2000), developing countries are characterized for being economies of *rapid-growth* and *low-income*. In fact, these countries have a big potential for growth but they also have a big potential of facing political, social and monetary risks (Business Dictionary, 2019). Moreover, Maria Merricks (2010) also propose as a characteristic of a

developing country a shorter life expectancy and an average age of 10 years below in comparison with a develop country citizen. Even though developing countries can be risky markets due to their characteristics, their attractiveness for sharing economy companies is due to the increasing need of customers to find cheaper providers for their daily activities (Hira, 2017).

As we can see in Image N°03, sharing economy companies have a strong presence in Latin America. Nevertheless, the presence is mainly in Brazil due to the fact that their government strongly promote courses such as programing.

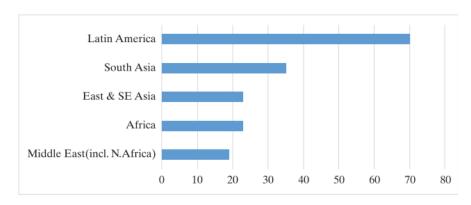


Image N°03: Presence of sharing economy companies by region (Hira, 2017)

Image N°04 shows a better panoramic of the sharing economy presence in Peru. As we can see, Peru might not have much presence of many sharing economy platforms but it still has an average presence of platforms.

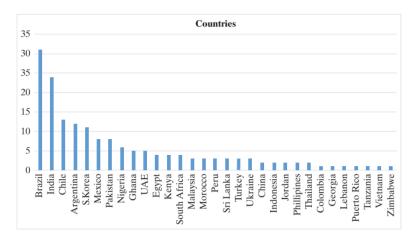


Image $N^{\circ}04$: Sharing economy companies by country in the developing world (Hira, 2017)

1.6.1 Key benefits of the collaborative consumption practices

Enablers of development

Collaborative consumptions practices can generate new jobs and formalize existing services. For instance, until 2016 in India the automotive platforms have created 30,000 jobs (Yaraghi & Ravi, 2017). Also, it is improving daily activities in the agricultural field by sharing their equipment between farms. An example of this is "Hellotractor", a platform created in Africa that connects tractors owners to small farmers. By using the app farmers can rent the tractors to improve their efficiency (Hellotractor, 2019).

Enablers of entrepreneurship

Collaborative consumption practices are generating new opportunities for people without previous work experience by building their reputation based in their skills and network connections (Dillahunt & Malone, 2015). These practices have socio-economic benefits that can contribute to decrease poverty by generating more work. For instance, "Good Meal Hunting" is a platform in Philippines that connects regular home cookers with people that don't want to cook but they want home meals. The platform owners are the ones that handle all the logistical and technical aspects of running a food business, while the home cookers only focus on cooking and selling their dishes (Good Meal Hunting, 2019).

1.6.2 Barriers in developing countries

In this part we will analyze three main barriers when implementing a collaborative practice in developing countries: (a) lack of trust, (b) technology and (c) electronic payment systems.

Lack of trust

As mentioned before, the lack of trust is one of the main barriers why a collaborative platform would fail in a developed country, and this is also a barrier in a developing country. This type of platforms requires people to trust in them because they collect and store personal data to improve the quality of the service (Van Welsum, 2016). According to the world values survey, 60% of people in developed countries such as Norway, Finland and Sweden believe that people can be trust, on contrast, only 10% of people in Colombia, Ecuador and Peru believe that they can trust in others (Ortiz-Ospina & Roser, 2016). As we notice, the lack of trust when applying this type of practice in Peru might be one of the main barriers.

Technology

Most of the collaborative consumption businesses have as their central enabler the internet and the smartphone application. Not having both can be a significant barrier and in developing countries the smartphone ownership is low. Even though 80% of people in emerging economies own a phone, only 47% of them said that they have a smartphone (Pew Research Center, 2019). Based on this information we can conclude that collaborative practices need to provide platforms that can work by voice (call) or text (messages) in order to be attractive to this type of countries.

Electronic payment systems

The electronic online payment is the principal way companies in collaborative practices charge for their services. The main reason behind this is because they need to ensure their services will be paid. Companies such as Uber have already interiorized this, which is why they accept in developing countries cash payments after using the app to get the service (Uber, 2018).

1.7 General information about Peru

1.7.1 Peruvian Background

Peru is the third largest country in South America and one of the 20 largest countries in the world (the country's surface area is bigger than the surface of Spain and France together) (Promperu, 2019).

Peru is located in the western part of South America, next to Ecuador, Colombia, Bolivia, Chile and Brazil and it is divided into 25 departments.

Peru has 3 main regions. The first one is the Jungle, with 59% of the territory, where 12% of the country's population is concentrated. The second one is the highlands, with 30% of the territory and 36% of the population. The third and last territory is the Coast, even though is only has 11% of the territory, it concentrates 53% of the population.

The official language in Peru is Spanish, but there are also 47 native languages spoken in the country, being the main ones Quechua and Aymara.

1.7.2 Peruvian Population

According to the last census made by INEI (2018), the Peruvian population in 2017 ascends to 31.2 million. As we can see on the Chart N°02 below, the Peruvian population has grown from 2007 (the previous census) to 2017 in 7%.

Chart 02

Peruvian Population

Año	Total
1940	7,023,111
1961	10,420,357
1972	14,121,564

1981	17,762,231
1993	22,639,443
2007	28,220,764
2017	31,237,385

Note. Recovered from the data base of INEI

1.7.3 Characteristics of the population

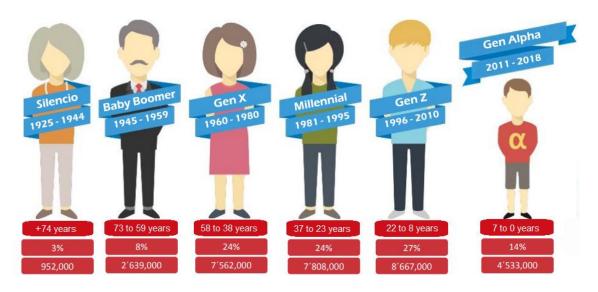


Image N°05: Generational characteristics. Obtained from Ipsos Perú (IPSOS, 2018)

As we can see in the Image N°05, 48% of the population have between 23 and 58 years old, which means that the Peruvian population is a really young population.

Another important fact to consider about the Peruvian population is that, even though it is a really young one, they are not used to interact or buy products by using all the different platforms that exists today. According to IPSOS PERU (2018), from 2012 to 2017 the online shoppers have increased from 4% to 10%. Although the rate of online shoppers is not significant, people considered as Millennials and Generation X (48% of the population) are connected to the internet during the week 85% of their time.

1.7.4 Usage of internet compared with other countries

To understand better the position of the Peruvians on behalf of the use of internet, it is important to analyze what is the country position towards the other South American countries regarding the use of internet. As we can see in Image N°06, even though Peru has a bigger GDP per capita than countries such as Ecuador and Paraguay, the percentage of population that access the internet is lower.

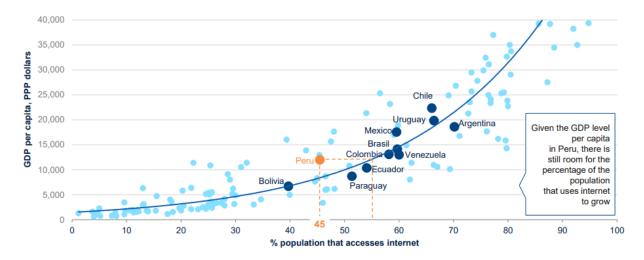


Image $N^{\circ}06$: Internet users and GDP per capita (BBVA Research, 2017)

Although Peru is a big country, the population with the most internet usage concentrates in Lima, the capital. As we can see in Image N°07, according to BBVA Research (2017), 63% of the population in Lima uses the internet, the question now is, how do they connect to the internet?

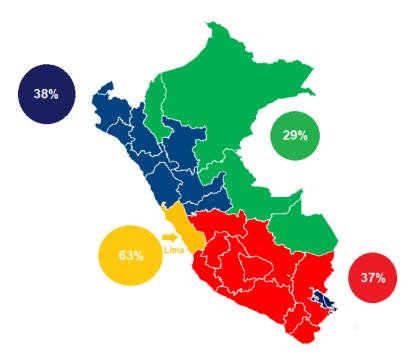


Image N°07: Internet users (% population 6 years old and over) *Note*. Obtained from BBVA Research (2017)

According to the BBVA Research (2017), most of the usage of internet is done through the cellphone, and in second place from a PC in their homes.

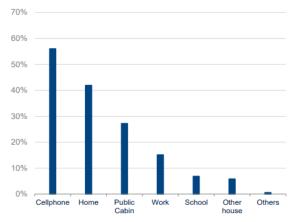


Image N°08: Ways of access to the internet *Note*. Obtained from BBVA Research (2017)

Now we know that Peruvians mainly use their phones to get to the internet, but do they buy things through this channel? As we can see in Image $N^{\circ}09$, until 2016 only 8% of the 63% of internet users mentioned before said they buy things using internet.

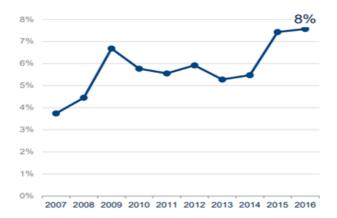


Image N° 09: Percentage of people that bought products and services using internet Note. Obtained from BBVA Research (2017)

After analyzing the Peruvian context, we can conclude that it is a country that it is still developing their usage in internet. Moreover, we can notice a willingness to adapt to the new internet wave since their internet usage and shopping online has increased. In the next chapter we will present the methodology we will be using to analyze the factors stablished in this chapter.

CHAPTER 2: Methodology

2.1 Importance of the investigation

Nowadays we are living in a world where the amount of people using internet has grown significantly, so much that now there are cases of internet addiction where countries, such as South Korea, had to create nationwide policies to stop this problem (Rosenthal, Cha & Clark, 2018). This is something that years ago nobody wouldn't have thought that would happen. The important of this study falls in the fact that nowadays people have a different point of view towards the use of the internet and the applications to buy, rent or sell their things. Even though in Peru there isn't yet a high penetration of the internet usage and smartphone's owners (Pew Research Center, 2019), predictions shown before demonstrate that this percentage is increasingly growing, which is why it is important to analyze and understand the political, economic, social and technological point of view of the potential users to better understand if Peru's population will follow up the steps of the developed countries.

2.2 Methodology of the study

As seen in the previous chapter, even though there is a presence of collaborative consumption practices in Peru, there isn't yet much information or studies about these practices and the customers insights in the country. For this reason, in order to gain familiarity and learn more about the insights of the Peruvian consumers towards this topic we will be using an exploratory research approach (Kothari, 2004).

The exploratory research is characterized by being flexible and without any structure. It is used mainly to isolate the variables and find key relationships between them. Also, the sample used in this type of research is small (Malhotra, 2008).

Since this study have as an objective to determine the political, economic, social and technological factors that might contribute to a successful application of a sharing economy platform in Peru, our target will be characterized by the following specifications:

- ✓ Between 25 and 55 years old (Millennials and Generation X)
- ✓ A/B/C Socioeconomic level
- ✓ Have a smartphone with mobile internet
- ✓ Reside in Peru

Our approach to the target will be through digital surveys created by using Google forms. The survey (Appendix A) will include fixed alternative questions and Likert scales, and will take the respondents 3 minutes. After collecting the quantity of surveys required, the answers will be tabulated though Microsoft Excel and the data will be analyzed in the IBM SPSS Statistics 24 program.

2.3 Objectives of the study

The objectives of the study are the following:

General Objective

Determine the political, economic, social and technological factors that might contribute to a successful application of a collaborative consumption practice in Lima, Perú, 2019.

Specific Objectives

- Investigate if the economic factor influences the intention of use of the collaborative platforms, 2019.
- Investigate if the social factor influences the intention of use of the collaborative platforms, 2019.

- Investigate if the technological factor influences the intention of use of the collaborative platforms, 2019.
- Investigate if the political factor influences the intention of use of the collaborative platforms, 2019.

2.4 Hypothesis approach

The hypothesis taken into consideration to develop the statistical analysis are the following:

Primary Hypothesis

There are factors that have a significant impact with the use of collaborative consumption platforms in Lima, 2019.

Secondary Hypothesis

- H_1 The economic factor influences in a direct and positive way the intention of use of the collaborative consumption platforms.
- H_2 The social factor influences in a direct and positive way the intention of use of the collaborative consumption platforms.
- H_3 . The technological factor influences in a direct and positive way the intention of use of the collaborative consumption platforms.
- H_4 . The political factor influences in a direct and positive way the intention of use of the collaborative consumption platforms.

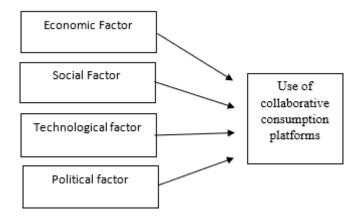


Image N°10: Conceptual model of the hypothesis

2.4 Size of the sample

For this study we will be using a non-probabilistic sampling technique. The reason behind this is because this type of technique is based in the personal judgment of the investigator and it is often used when there's a limited budget and time (Daniel, 2012).

In order to estimate the amount of surveys required for the study, we will be taking in consideration the population of the capital of Peru, Lima. According to the CPI (2017), the population in the capital is of 10,209,300 and they are the ones with the most internet usage in the country (BBVA Research, 2017). We will narrow down our target by taking into consideration the different age segments in Lima, taking into consideration that we want to study the Millennials and Generation X insights. Indeed, we will be considering the Millennials and Generation X which are known for being connected to the internet 85% of their time (IPSOS, 2018). This two generational groups represent approximately 43.8% (Chart N°03) of the total population in the capital, which means that our target market at this point will be 4,471,674. Also, we will take into consideration the different socioeconomic segments as detailed in chart N°04, from where we are estimating that our final target market is of 3,142,100, as presented in Image N°11.

Chart 03

Population by age segment - Lima Metropolitana 2017

9.30%
10.80%
8.20%
13.00%
24.50%
19.30%
14.90%

Note. Adapted from CPI (2017)

Chart 04

Population by age segment and socioeconomic level - Lima Metropolitana 2017

socioeconomic	from 0 to	from 6 to	from 13 to	from 18 to	from 25 to	from 40 to	from 56
level	5 years	12 years	17 years	24 years	39 years	55 years	and more
A/B	183,800	249,100	193,600	297,700	606,800	597,200	570,500
C	352,500	455,100	355,800	552,800	1,061,200	876,900	680,400
D	287,000	294,600	221,000	370,600	645,800	400,500	210,700
E	131,200	107,700	68,000	105,500	178,500	92,000	62,800

Note. Adapted from CPI (2017)

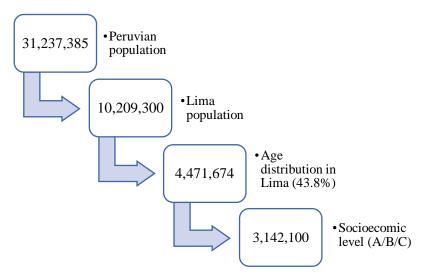


Image N°11: Target market estimation for sample size

In order to estimate the appropriate sample size for the surveys, we will be using the following formula to estimate the proportion of the population adequate for the study (Ponce & Pasco, 2018):

$$n = \frac{N \times Z^2 \times p \times q}{E^2 \times (N-1) + Z^2 \times p \times q}$$

N = number of cases

Z = confidence level

p = Probability of success

q = probability of failure

E = desired level of precision (error)

The sample was developed considering a number of cases of 3,142,100 and with a confidence level "Z" of 95%. The confidence level was established in 95% mainly because this confidence interval meets the parameters of the observed population (Minitab, 2019). The probabilities of success "p" and failure "q" were defined with 0.5, because by doing this we

are generating a greater amplitude in the construction of the intervals, expanding the number of surveys to be carried out and making the results more reliable (Universitat de Valencia, n.d). Moreover, the percentage of error "E" for the sample was defined with 5%. After replacing all the variables with the numbers given, we obtained a result of 385 surveys required.

2.5 Data analysis method

The survey was divided in 5 parts: (a) Profile, (b) Economic factor, (c) Technologic factor, (d) Social Factor and (e) Political factor. All the information obtained in part (a), will be presented in charts and graphics that will help us see much clearer the distribution of the respondents about its gender, age and position in respect with the use of this type of platforms. Moreover, the information in part (b), (c), (d) and (e) will be analyzed under the scheme of the Cronbach's alpha to test the level of confidence of the information obtained, and the lineal regression in order to analyze the relationship between the factors. Our intention behind this type of analysis is to better understand which one(s) of the factors are the most relevant for the Peruvian consumer.

Even though we started with only 4 constructs (a, b, c, d), after the literature review and creation of the survey we realized that there's not much information about the use of this type of practices in Peru. In other words, there's not yet a study that gives specific information about how many times these type of platforms are used and if there's still people that doesn't use it. For this reason, we will be adding to our constructs a fifth variable called "use". This information will be obtained from part (a) Profile of our surveys and will consist in two direct questions asking about this matter. It's important to emphasize that this need appeared during the creation of the survey which is why it is not mentioned before during the literature review nor included as a factor associated to the collaborative consumption (Chapter I). Indeed, this

factor will be considered as the dependable variable of the analysis, having as independent variables: economic, social, technological and political.

In order to analyze the level of confidence of the information obtained in the surveys, we will be using Cronbach's alpha to analyze the internal consistency between the different variables (UC REGENS, 2019). We will be comparing the values obtained for each factor (economic, social, technological and political) and will categorize them as detailed in chart N°05. The interpretation of this coefficient will let us know which one of the four factors are the more relevant to the study.

Chart 05

Interpretation of the reliability coefficient

Values		Interpretation	
	0.81 - 1.00	Very High	
	0.61 - 0.80	High	
	0.41 - 0.60	Moderate	
	0.21 - 0.40	Low	
	0.01 - 0.20	Very low	
•			

Note: Adapted from Ruiz (2013)

On the other hand, in order to establish a relation between the four factors we will be using the coefficient of correlation and the linear regression theory. By doing this we will be able to conclude if the factors are enough to predict the insights of the population towards the collaborative consumption practices.

The Correlation coefficient will help us measuring the statistical relationship between the variables, while giving information about the magnitude of the association (Massachusetts Institute of Technology, n.d). the correlation of the variables will be categorized according to the data in Chart N°06.

Chart 06

Strength and direction of the correlation Coefficient

Convolation Coefficient	Strength of the correlation	Direction of the correlation
Correlation Coefficient	coefficient	Coefficient
1.00	Perfect positive correlation	
0.5 < r < 1.00	Strong positive correlation	Positive correlation
0.5	Moderate positive correlation	Positive correlation
0 < r < 0.5	Weak positive correlation	
0	No correlation	
-0.5 > r < 0	Weak negative correlation	
-0.5	Moderate negative correlation	Na satissa Completion
-1.00 < r < -0.5	Strong negative correlation	Negative Correlation
-1.00	Perfect negative correlation	

Note. Adapted from Estadística aplicada a los negocios y la economía (Lind, Marchal & Wathen, 2015)

Furthermore, regressions are used to estimate relationships and there are two types: (a) simple linear regression and (b) the multiple linear regression. The first type is responsible for explaining the dependent variable Y from a single variable X (Y= β 0 + β 1x). On the other hand, the multiple linear regression explains the dependent variable Y when comparing it with a set of independent variables X1... Xp (Y= β 1x1 + β 2x2 + · · · + β pxp) (Massachusetts Institute of Technology, n.d). For this study we will be using the multiple linear regression since we have 4 independents variables. Also, we will be presenting the following coefficients that are generated with the linear regression model:

Level of significance: Traditionally represented with the Greek letter alpha (α), the level of significance is known as the representation of the level of risk established for the

analysis and it helps to measure the probability of rejecting the null hypothesis when it is true and, in this way, accept the alternative hypothesis established by the researchers. To evaluate the hypotheses established for this study, the level of significance is defined as recommended by some authors with 0.05 (Lind, Marchal & Wathen ,2015).

Regression coefficient β: This coefficient defines how much will the dependent variable Y change when the dependable variable X changes in one unit (Sharma, 2014).

We took in consideration only these two results of the linear regression due to the fact that our main purpose with the statistical part of this study is to understand the relation of the variables. Since it is just an exploratory research, this study won't propose a final statistical model. Indeed, we will be using the statistical information in order to focus our efforts to the variables that are the most relevant for the collaborative consumption practices.

2.6 Delimitations

It is important to emphasize that the results of the study are based in the perception of people towards this topic and the different variables stablished previously. Also, due to the fact that there is a delimitation of budget and time, the collection of the data will be made through a virtual survey, which will be sent to all the potential respondents through e-mail and social networks.

The motivation behind the conduction of the survey is to understand the point of view of the potential customers towards this new type of practice in Peru. Therefore, by achieving all the necessary surveys we will be able to understand their insights about this topic. The virtual survey will be held through Google Forms in order to get the data anonymously. The information obtained will be confidential and will only be used for academic purposes. The survey will be conducted between the months of May and July of the year 2019 and the results will be specified in the next chapter.

CHAPTER 3: Results of the investigation

In this chapter we will be presenting the analysis of the data obtained from the 385 surveys made. First, we show the results of the profile of the respondents and then the analysis of the Cronbach's Alpha where the reliability of the survey applied in our model was measured. Finally, we proceeded to perform a linear regression analysis of the hypotheses to better understand the degree of relationship between our factors and if they are relevant to take into consideration when talking about collaborative consumption in Lima.

3.1 Profile of the respondents

The first part of the survey was made with the intention of knowing the gender and age range of the people surveyed. As mentioned before, with this study we want to better understand which of the four factors (economic, social, technological and political) should be taken into consideration when applying a collaborative consumption practice in Peru, and for this we will be taking as our target the millennials and generation X population (23 to 55 years old). The reason of this segmentation is due to the fact that this two generations represent nearly 48% of the population and they are the ones with the highest rate of internet usage (BBVA Research, 2017).

The survey was divided in five parts: (a) Profile, (b) economic, (c) social, (d) technological and (e) Political. The first part, the profile section, had eight questions from which the first four were filter questions and the last four were in-depth questions with the intention to get to know better the use of this type of platforms by the people surveyed.

The first question was about the gender. According to the surveys, 53% of the respondents were men and the other 46% were women. We also had 1% of people who

preferred to mark the "other" section, giving us a total of 100% of surveys made. Image $N^{\circ}12$ shows the graphic representation of this information.

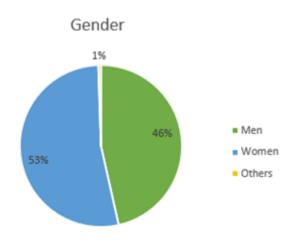


Image $N^{\circ}12$: Percentage of participation according to age range

As we can see, there is an equal distribution of the genders, which means that the information obtained in the surveys wont' be biased by any gender.

Another important information obtained from the survey is that 98 percent of the respondents were between 25 and 39 years old, and only 2 percent were between 40 and 55 years old.

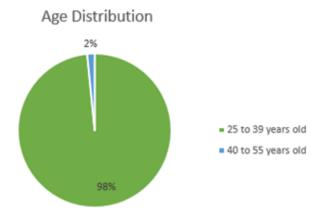


Image N°13: Age distribution

In addition to the introductory part of the survey and filter questions, we added two questions that seemed to be important to ask: (a) how many times have they used any collaborative consumption platforms and (b) when was the last time they recall to have used any of this type of platforms.

The first question about the usage showed that 72% of our sample use the collaborative consumption platforms on their daily life, while the other 28% use them occasionally (Image N°14). None of the participants marked the options "just once" or "never".

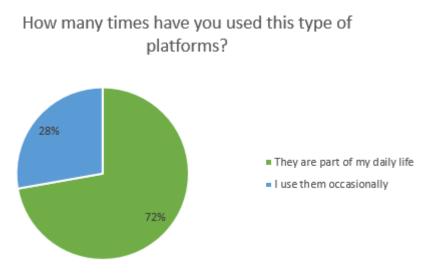
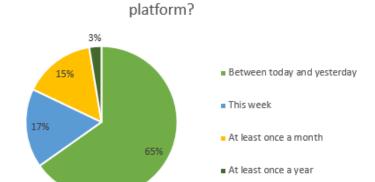


Image N°14: Collaborative consumption platforms' usage

In addition to this, the second question about the usage showed that 65% of the people surveyed used this type of platforms between today and yesterday (Image N°15), and 17% of them indicated that they used a platform of this kind during the last 7 days.



When was the last time you used this type of

Image N°15: Last time of use of any collaborative consumption platform

As we can see, there's a strong usage of this type of platforms between the people surveyed. Indeed, according to the responses to question N°16 where we asked if they would like to have more options of this type of platforms, 87% of the respondents answered in a positive way.

The last two questions from the profile section were about the people's opinion about the collaborative consumption platforms. Indeed, most of the responses obtained indicated that people like this type of platforms because it allows them to save time and money (48%) and because they had more options when they were looking for a service of product (38%). Moreover, 12% of the participants indicated that they like it because it included other people's opinions that made their decision easier to take. Image N°16 shows all the responses obtained from this question. As we can see, most of the people surveyed had a positive opinion about the collaborative consumption practices in Peru.

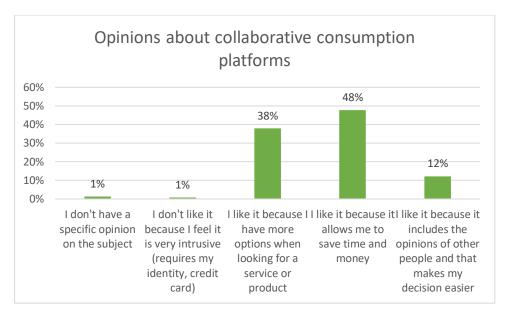


Image N°16: Opinions about collaborative consumption platforms

Even though people's opinion towards collaborative consumption practices are positive, they don't believe their reputation system is 100% safe. Indeed, according to the surveys made, 84% of the people rather have other options to validate the seller, apart from the reviews specified in the platforms. As shown in Image N°17, 13% of the participants indicated that they don't trust in online references, thus, they don't trust in the reputation systems which is a main feature of the collaborative consumption practices.

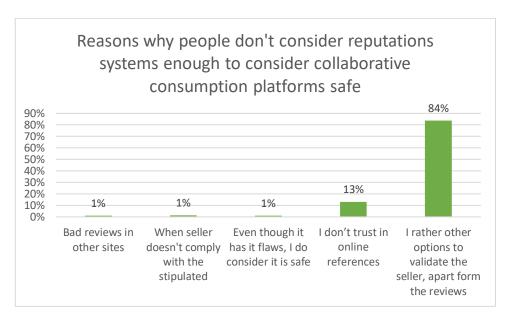


Image N°17: Reasons why people don't consider reputations systems enough to consider collaborative consumption platforms safe

In conclusion, this part of the survey showed us that even though people rather having other ways to validate the seller than just having reviews of other users, there's a positive response towards these type of practices in Peru. This means that now we have to fully understand what are the factors that have more importance when applying a collaborative consumption practice in Peru.

3.2 Cronbach's alpha

Cronbach's Alpha is a coefficient that helps us determine the reliability of each of the variables established as a complete statistical model, and its value can oscillate between 0 and 1. According to Ruiz (2013), the interpretation for the reliability coefficient is (a) Very High for values from 0.81 to 1.00, (b) High for values from 0.61 to 0.80, (c) Moderated for values from 0.41 to 0.60, (d) low for values from 0.21 to 0.40 and (e) Very low for values from 0.01 to 0.20.

The survey performed consisted in 27 questions, from which 6 were filter questions. For this reason, the Cronbach's Alpha will be performed to the 21 remaining questions which are grouped in 4 constructs (economic, social, technological, political). Also, we will be considering the information of use as the dependent variable. In order to analyze the reliability of the information obtained in the survey, we analyzed two Cronbach's Alpha values: (a) Individual value of each construct, (b) Total value of all the constructs together. We start the analysis of our information by using this type of analysis because it is important to find out if the information obtained with the surveys for each variable is trustworthy.

For the individual values we will be analyzing the four constructs: (a) economic, (b) social, (c) technological and (d) political.

The Economic variable is the first construct of the model presented in this research. Chart N° 07 shows the seven questions corresponding to this variable and each reliability value obtained for each one of the items.

Chart 07

Economic Factor

Factor	Ítem	Questions	Cronbach's Alpha
Economic	E1	Have you ever offered your services/assets though this kind of platform	0.757
Economic	E2	Do you know someone that has offered their services/assets though this kind of platform	0.798
Economic	E3	I believe that platforms such as Airbnb and Uber can increase the value of my house and car	0.662
Economic	E4	I like the idea of earning money by renting/lending things I don't use through an app	0.662
Economic	E5	I believe that life is much easier with the creation of platforms such as Airbnb and Uber	0.656
Economic	E6	I believe that this type of platforms supports the growth of the country because it is a new way of income	0.652
Economic	E7	The economic situation of my country is one of the reasons why I have increased my online consumption level	0.686

Note: Adapted from the analysis in SPPS

Comparing results of Chart N°07 with the interpretation of the reliability coefficient according to Ruiz (2013), we can conclude that all items in the economic construct have a high reliability (their Cronbach's values are higher than 0.61). Indeed, the item with the highest value is E2 with 0.798 which means that this item is the one with the highest reliability. Also, the Cronbach's Alpha of all the items as a total is 0.734 which means that the construct is highly acceptable.

Chart 08

Reliability statistics – Economic Factor

Cronbach's Alpha	N° of elements	
0.734	7	

Note: Adapted from SPSS

The social variable is the second construct of our model, and it consisted in 5 questions. Chart N°09 shows all the questions made and the Cronbach's Alpha values obtained by using IBM SPSS Statistics 24 program.

Chart 09

Social Factor

Factor	Ítem	Questions	Cronbach's Alpha
Social	S 1	I would you like to have more options of platforms that encourage the idea of sharing assets/services	0.748
Social	S2	I believe technology is allowing people to generate more income since everybody has access to it	0.758
Social	S3	I believe that the old ways to generate income where less complicated than now	0.716
Social	S4	I don't care to have the latest trends, as long as it is useful for me	0.729
Social	S5	I take into consideration other people's recommendations when purchasing products/services	0.727

Note: Adapted from the analysis in SPSS

As shown in Chart $N^{\circ}09$, and after comparing the results with the interpretation of the reliability coefficient according to Ruiz (2013), we can conclude that all the items of this construct are highly reliable for the analysis made. Also, the reliability statistic for the construct as a total is 0.778 which means that it is highly acceptable to be part of the model.

Chart 10
Reliability statistics – Social Factor
Cronbach's Alpha N° of elements

0.778 5

Note: Adapted from SPSS

The third construct of this research is the technological variable. Chart N° 11 shows the four questions of this variable and each reliability value obtained after analyzing the items in IBM SPSS Statistics 24 program.

Chart 11

Technological Factor

Factor	Ítem	Questions	Cronbach's Alpha
Technological	T1	Do you own a smartphone and have regular connection of internet on it?	0.725
Technological	T2	If I had to buy a good on internet from an unknown user, I would consider an online reputation system safe	0.676
Technological	T3	Payment preferences	0.411
Technological	T4	Reasons to choose the type of payment	0.413

Note: Adapted from the analysis in SPSS

For this construct we have obtained for T1 and T2 a value of 0.725 and 0.676, respectively, which means that these items are highly reliable. On the other hand, the items T3 and T4 had as a result 0.411 and 0.413, respectively. According to Ruiz (2013), the level of reliability of these values is moderate. Even though we have high and moderate reliability values, the total reliability statistic for this construct is of 0.678. This means that as a total, the construct is highly reliable (Chart 12).

Chart 12

Reliability statistics - Technological Factor

Cronbach's Alpha N° of elements

0.678 4

Note: Adapted from SPSS

The fourth construct of this model is the political factor. Chart N° 13 shows the three questions of this variable and each reliability value obtained after analyzing them.

Chart 13

Political Factor

Factor	Ítem	Questions	Cronbach's Alpha
Political	P1	I feel safe to make an Internet transaction in Lima due to the trust in my authorities and laws	0.540
Political	P2	I think that the same rules that exist in other countries should be applied in Peru	0.636
Political	Р3	I believe that the government should regulate the services of Uber, Airbnb and Grin in a specific way without considering what is done in other countries	0.493

Note: Adapted from the analysis in SPSS

For this construct we have obtained for P1 a value of 0.540, for P2 a value of 0.636 and for P3 a value of 0.493. According to the literature, these values correspond to a reliability of high, moderate and moderate, respectively. Furthermore, their total reliability, as shown in Chart N°14, is 0.652 which indicates that according to Ruiz (2013) the reliability of this construct is high.

Chart 14

Reliability statistics - Political Factor

Cronbach's Alpha N° of elements

0.652 3

Note: Adapted from SPSS

The last construct, defined during the data analysis method, is usage. As mentioned before, we considered this additional construct as part of the study due to its importance to the study and also because it is the dependable variable for this model. Chart N°15 indicates the reliability statistic for this construct, which has a value of 0.749. According to our literature, this value is considered to have a high acceptance, thus, this construct is acceptable for our model.

Chart 15

Reliability statistics -	- Usage Factor
Cronbach's Alpha	N° of elements

Cronbach's Alpha	N° of elements
0.749	2

Note: Adapted from SPSS

The total Cronbach's Alpha value for the 21 questions and 4 constructs was 0.781, which indicates that the level of reliability of the model is also high.

Chart 16

Reliability statistics - Total

Cronbach's Alpha	N° of elements
0.781	21

Note: Adapted from SPSS

In conclusion, all research constructs have a high reliability. For this reason, we will continue with the analysis of the constructs with the correlation and linear regression of the variables.

3.3 Correlation coefficient

The analysis of the correlation coefficient will help us to better understand the strength of the relationship between the variables established for this study. According to the literature explained in chapter II, the correlation values can vary from a perfect negative correlation (-1.00) to a perfect positive correlation (1.00), being the interpretation of the coefficient as: (a) 1.00 for a perfect positive correlation, (b) Between 0.5 < r < 1.00 for a strong positive correlation, (c) 0.5 for a moderate positive correlation, (d) Between 0 < r < 0.5 for a weak positive correlation, (e) 0 for no correlation, (f) between -0.5 > r < 0 for a weak negative correlation, (g) -0.5 for a Moderate negative correlation, (h) between -1.00 < r < -0.5 for a

Strong negative correlation, (i) -1. 00 for a Perfect negative correlation (Lind, Marchal & Wathen ,2015).

Chart N°17 includes all the correlation coefficients for the constructs of the study. Nevertheless, we will be only interpreting the correlation coefficient of the independent variables (Economic, Social, Technological and Political) against the dependent variable (usage).

Chart 17

Correlation Coefficient

	Use	Economic	Social	Technological	Political
Usage	1.000	0.227	0.092	0.190	0.090
Economic	0.227	1.000	- 0.037	0.295	- 0.046
Social	0.092	- 0.037	1.000	0.191	0.865
Technological	0.190	0.295	0.191	1.000	0.136
Political	0.090	- 0.046	0.865	0.136	1.000

Note. Adapted from SPSS

The correlation coefficient between the variables "Economic" and "Usage" is 0.227, this indicates that there is a weak positive correlation.

The correlation coefficient between the variables "Social" and "Usage" is 0.092, this indicates that there is a weak positive correlation.

The correlation coefficient between the variables "Technological" and "Usage" is 0.190, this indicates that there is a weak positive correlation.

The correlation coefficient between the variables "Political" and "Usage" is 0.090, this indicates that there is a weak positive correlation.

Taking all the correlation coefficients into consideration, we can conclude that they all have a weak positive correlation regarding to the dependent variable "usage". On other words, the weak positive correlation between the independent variables and the dependent variable indicates that even though they decrease or increase together, the relationship between them is not strong (Minitab, 2019). Also, it is important to notice that the correlation between the variables does not imply causation (Calkins, 2005).

3.4 Linear Regression

Now that we know that the variables have a weak positive correlation, we are going to measure the relationship between the constructs in order to validate the hypotheses established in chapter II. For this, we will be applying the linear regression theory to estimate the relationship of the dependent and independent constructs towards the following hypothesis: (a) H_1 The economic factor influences in a direct and positive way the intention of use of the collaborative consumption platforms, (b) H_2 The social factor influences in a direct and positive way the intention of use of the collaborative consumption platforms, (c) H_3 The technological factor influences in a direct and positive way the intention of use of the collaborative consumption platforms, (d) H_4 The political factor influences in a direct and positive way the intention of use of the collaborative consumption platforms.

The results of the linear regression are shown in chart N° 18.

Chart 18

Model coefficient test

Model		ndardized ïcients	Standardized Coefficients		
	В	Standard Error	Beta	t	Sig.
Economic	0.250	0.067	0.195	3.762	0.000
Social	0.022	0.111	0.020	0.197	0.844
Technologic	0.130	0.058	0.120	2.261	0.024
Politic	0.053	0.079	0.066	0.667	0.505

Note. Adapted from SPSS

We will be testing our hypothesis by analyzing the level of significance of each variable. Chart N° 18 shows all the significance level of each variable and is specified as "sig". As mentioned in the methodology part, the level of significance will let us know if the hypothesis is accepted or rejected. Indeed, in order to be accepted it has to be <0.05 (Lind, Marchal & Wathen ,2015).

The results obtained for each hypothesis are presented below:

- (a) H_1 The economic factor influences in a direct and positive way the intention of use of the collaborative consumption platforms. This factor has a significance level of 0.000 which means that the hypothesis null is rejected and therefore the hypothesis H_1 is accepted.
- (b) H_2 The social factor influences in a direct and positive way the intention of use of the collaborative consumption platforms. This factor has a significance level of 0.844 which means that the hypothesis null is accepted and therefore the hypothesis H_1 is rejected. Therefore, the social factor doesn't influence in a direct and positive way the intention of use of the collaborative platforms

- (c) H_3 The technological factor influences in a direct and positive way the intention of use of the collaborative consumption platforms. For this factor we have a significance level of 0.024, therefore, the null hypothesis is rejected and the hypothesis H_3 is accepted.
- (d) H_4 The political factor influences in a direct and positive way the intention of use of the collaborative consumption platforms. The last factor has a significance level of 0.505, therefore, the hypothesis null is accepted and the hypothesis alternative H_4 is rejected. This means that the political factor doesn't influences in a direct and positive way the intention of use of the collaborative consumption practices.

After doing this analysis, we can conclude that the Economic and Technological factors are the ones that have more relevance for the collaborative consumption practices.

From this chart we can also analyze beta coefficients of the model. This coefficient defines how much will the dependent variable Y change when the dependable variable X changes in one unit (Sharma, 2014). The Economic and Technological variables are the most representative with a beta coefficient of 0.195 and 0.120, respectively. This means that for each increase of 1 unit of the economic and technological variables, the use will increase in 0.195 and 0.120 points, respectively.

Now that we know that the Economic and Technological variables are the most relevant variables for the Peruvian consumer, on the next part we will be presenting the additional information obtained from the surveys.

3.5 Economical Factor

As indicated in the literature review, each of the factors had different variables that were used as a guideline for the survey. For instance, each question in the survey (Appendix A) had a specific topic according to the type of information we were trying to obtain. Chart N° 19 presents a summary of the variables for the economic factor.

Chart 19

Economic Factor

Factor	Factor	Variable
	E 1	Collaborative consumption practices increases the value of an under- utilized assets by allowing someone else to re-use it
Economic	E2	Situation of the market forces of demand and supply
	E3	Economic situation of the country

E1: Collaborative consumption practices increases the value of an under-utilized assets by allowing someone else to re-use it

In order to obtain information for this variable we created a Likert scale where we asked the participants to rate the statement "I believe that platforms such as Airbnb and Uber can increase the value of my house and car". We used as an example Airbnb and Uber due to the fact that nowadays this companies are the most representatives' ones for this type of practices. As shown in Image N°18, 91.7% of the participants agreed that life is much easier with the creation of this type of platforms.

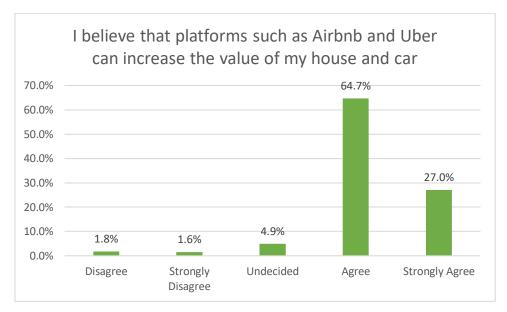


Image N°18: Thoughts about the increase of value of their belongings thanks to collaborative consumption practices

E2: Situation of the market forces of demand and supply

For this variable we asked the participants two types of questions in order to better understand if they like and use this type of platforms (demand) and if they will be willing to provide services or products through these platforms (supply). The information obtained was the following:

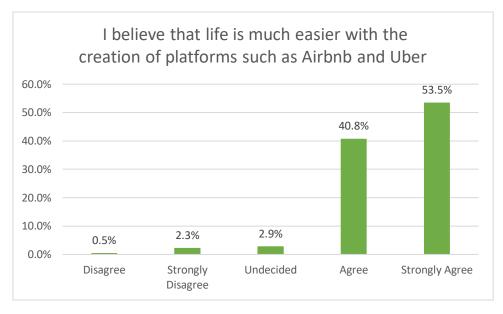


Image $N^{\circ}19$: Thoughts about the creation of collaborative consumption practices

As shown in Image N°19, 94.3% of people believe that life is much easier with the creation of collaborative consumption practices, also, Image N°20 shows the intention of participants to act as suppliers for collaborative consumption practices. Even though 61.3% of participants indicated that they haven't offered any services through these platforms, 33.8% of them indicated that they will be willing to do it.

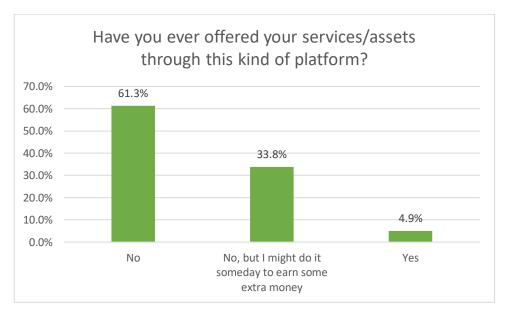


Image N° 20: Intention of participants to act as suppliers

Also, Image N°21 shows that 93% of the participants agreed with the statement "I like the idea of earning money by renting/lending things I don't use through an app". As we can see, according to our survey, people feel comfortable enough to accept the collaborative consumption practices and most of them will be willing to offer their services/products through these types of apps.

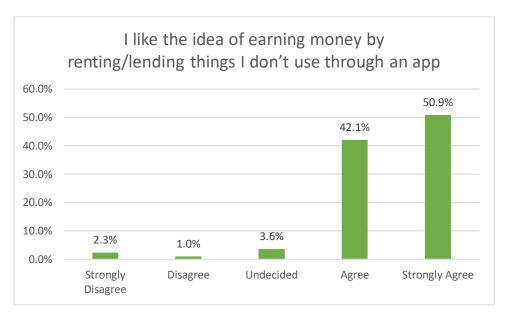


Image N°21: Thoughts of participants about earning money through apps

E3: Economic situation of the country

83% of the participants agreed on the fact that the economic situation of Peru is one of the reasons why they have increased their online consumption level. Indeed, this information is coherent with the economic situation of the country which, according to INEI, it has grown in a positive way compared with the last few years (Garcia, 2019)

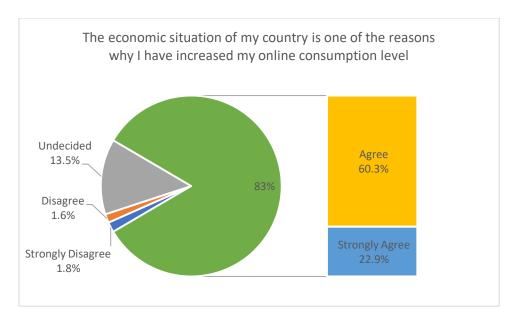


Image N°22: Thoughts of participants about economic situation of the country and their online consumption level

Also, 87% of the participants agreed with the statement that indicated that this type of platforms is supporting the growth of the country due to the fact that it is a new way of income.

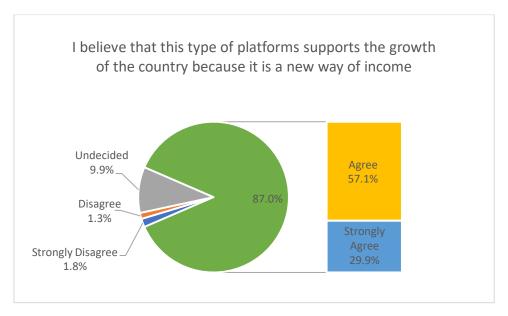


Image N°23: Thoughts of participants about the relation of collaborative consumption practices and the growth of the country

In conclusion, we can notice that there's a strong acceptance of the collaborative consumption practices between people of the sample taken. Indeed, the participants believe that this type of practices are making their daily life easier and they could possibly offer their products or services through this type of apps in the future. Also, this part of the study shows us that people believe that there's a positive relation between the economic position of the country and the introduction of this type of practices in the market. In other words, the economic factor shows us that there's an acceptance of the collaborative consumption mainly because its consequences are positive for the society.

3.6 Technological Factor

The second most relevant variable of our model is the technological factor. In this part we will present the most relevant information obtained from the survey made. Chart $N^{\circ}20$ shows the variables taken into consideration when analyzing the technological factor.

Chart 20
Technological Factor

Factor	Factor	Variable			
Tashnalagiaal T1		Mobile connectivity			
Technological	T2	Security of transactions			

T1: Mobile Connectivity

97% of the people that took the survey indicated that they have a smartphone with a regular connection of internet on it, and 3% indicated that they don't have one. As we can see, the penetration of the smartphones is really high and most of the people have one. This information is important due to the fact that most of the usage of internet is through the phones (BBVA Research,2017) and collaborative consumption platforms are developed mainly for digital users. Image N°24 shows a graphical representation of the information obtained.

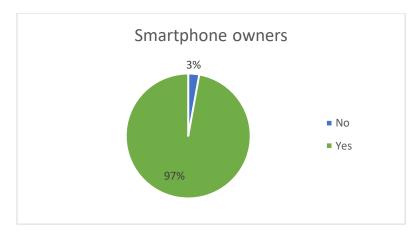


Image N°24: Smartphone owners

T2: Security of transactions

For this study, the security of transactions was measured by the degree of acceptance of online reputation systems and also the use of the different payment options available. For example, we asked about the reputation systems and what were their thoughts about taking in consideration this system when buying a product or paying for a service from an unknown seller. Also, we asked about their payment preferences because this information will let us understand more in depth the insights of the participant towards the different types of payment available. For instance, if the participant believes that the reputation systems and digital transactions are insecure, we will have responses that include payments against the product instead of payments through Web Platforms.

Our results showed that 94% of the participants believed that the reputation systems are safe. Nevertheless, in the profile part we showed that 84% of them preferred to have other options when validating the seller. Image N°25 shows distribution of thoughts about the reputation systems.

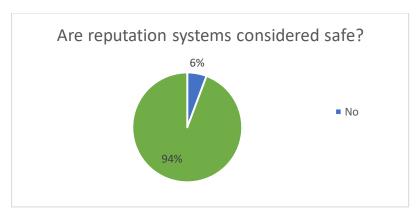


Image N°25: Are reputation systems considered safe?

Another important information obtained from the surveys are the payment preferences. We gave them 5 options between: (a) Web Platforms, (b) Online bank transfers, (c) Presential bank transfers, (d) 50% bank transfers, 50% against product and (e) Cash against product. The information obtained is represented in Image N° 26. As we can see, 79% of the participants prefer to make their online payment by using the web platforms of Visa, Master Card or PayPal, 13% of them preferred to do a bank transfer to the seller, 6% preferred to pay when receiving the product and 2% preferred to do the payment when receiving the product.

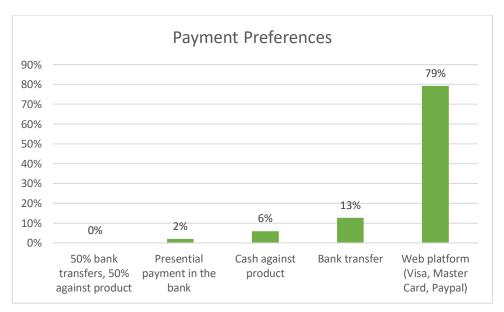


Image N°26: Payment preferences

The information obtained from our survey lets us conclude that our target market uses collaborative consumption platforms and they believe their reputation systems are safe. Nevertheless, they rather confirming the information with other ways than just accepting what the reputation systems of the site indicates. Also, in most cases they preferred to use the web platforms for payments online than doing bank transfers.

CHAPTER 4: Conclusions and recommendations

4.1 Conclusions

The main objective of this investigation was to determine the political, economic, social and technological factors that might contribute to a successful application of a collaborative consumption platform in Lima, Peru. Before presenting the main conclusions of this study, it's important to emphasize the difference stablished between the terms "sharing economy" and "collaborative consumption". Actually, at the beginning of the report we agreed with the definition where the sharing economy was considered as one part of the concept of collaborative consumption. For instance, if the sharing economy is an apple, the collaborative consumption is the apple's tree. For this reason, in this report we used the term collaborative consumption when referring about platforms dedicated to the automotive and hospitality sectors. Even though the collaborative consumption practices can be categorized in four sectors, these two categories were the most representatives in Europe so we took them as a reference for the literature review and comparison with the Peruvian reality. Also, these two sectors generate a financial retribution which is one of the main characteristics of a collaborative consumption practice.

For Peru, the year 2019 has been a breakpoint towards the acceptance of collaborative consumption practices in the capital. Indeed, during the development of the year practices such as "shared scooters" like Grin and "shared bicycles" like CityBike Lima, started to appear in the streets of Lima in a progressive way. The results of the acceptance and good use of this new practices will be probably obtained during the next year, but as far as the year goes, it seems like people are accepting this new concept of shared vehicles. One relevant information obtained from the study was that 72% of the participants use the collaborative consumption platforms on their daily life and 65% of them indicated that the last time they used one of these

platforms was between today and yesterday. This information is important because the literature showed that in 2017 only 8% of the internet users indicated that they buy products and services through the internet. As we can see, this part of the study shows that the opinions respecting this type of practices have changed and people are increasingly accepting the collaborative consumption practices. As a matter of fact, this information shows that Peru is turning into an attractive market for collaborative consumption companies.

Our statistical analysis concluded that all of the four variables had a high reliability as a model, nevertheless, when analyzing the hypothesis against the significance level of the linear regression it revealed that only the economic and technological variables influenced in a direct and positive way the intention of use of the collaborative consumption platforms in Lima, Peru. Because of this, we decided to analyze more in depth the information obtained of these two factors.

The information obtained about the economic factor lets us conclude that people believe these types of practices can increase the value of their properties and that it also has positive consequences for the society. Indeed, although most of the participants indicated that they had never offered their services through this type of platforms, 33% of them indicated they will be willing to do it. This information has a direct relation with the fact that the Peruvian population is increasingly accepting this type of practices, and as a consequence at some point the offer of products and services through a virtual based platform will be as normal as it is in developed countries.

On the other hand, the results of the technological factor showed us that even though most of the people believed that the reputation systems of the platforms were safe, they preferred having other options to validate the seller before making the purchase or closing any deals through these platforms. Also, most of the people indicated they preferred to use the web

platforms to make the payments instead of paying against the product or doing bank transfers, which was a very common method of payment in Peru. In fact, when Uber entered to the capital, they had to implement cash payments on their platform in order to make it more adequate to the Peruvian reality.

Taking everything in consideration, we can conclude that there's a strong acceptance of the collaborative consumption practices between people of the sample taken. Indeed, collaborative consumption companies willing to enter to the market should take into consideration mainly the economic and technological variables mentioned in this study. There's a clear attractiveness towards the collaborative consumption practices and it's the moment to take advantage of it since people believe that these types of practices are making their daily life easier and they could possibly offer their products or services through this type of apps in the future.

4.2 Recommendations

Even though this study concluded that the economic and technological factors are the most important for the Peruvian consumer, we strongly recommend to perform a deeper analysis to the social and political variables. Also, in addition to this study we recommend to perform a qualitative investigation in order to gather people's opinions on the topic and understand better the insights of the population and their reactions towards each of the variables stablished in this study.

During the study we made a correlation analysis which indicated that the strength of the relationship between the variables had a positive correlation. Is important to emphasize that only a properly controlled experiment could guarantee if the relationship between the variables

is casual or not. Indeed, this study only presented the fact that it has a positive correlation but if it is needed to establish a causal relationship, we recommend to conduct other types of studies in order to expand the scope of this information.

Although the study presented a positive acceptation towards the payments through web-based platforms, we strongly recommend to take into consideration that the Peruvian consumer is in a phase where the collaborative consumption practices are a new approach. As mentioned in the study, collaborative consumption practices that are regular in developed countries such as bike sharing, house sharing, between others, are currently being implemented in Peru in a pilot phase were we still don't know the final results of the implementation. Because of this, we strongly recommend to always consider all the possibilities of payments when entering to the county with the intention to attract as much clients as it's possible, because, although the study showed that people are open to the new collaborative consumption practices, they still don't totally trust the reputation systems which is the main feature of this type of practices.

Finally, as an additional recommendation we propose to expand the scope of this study in order to include other departments of Peru. For instance, according to INEI (2017), which is the National Institute of statistics and informatic, the second largest department in Peru in terms of population is Piura. A similar study to this one could be made with Piura's population in order to have a larger view of the current situation of people's insights respecting the collaborative consumption practices. This is mentioned because some platforms of this type, such as Glovo, are already starting to enter to this market due to its attractiveness to increment their short-term operations (Inga, 2019)

References

- Andina. (2019). "Scooters" eléctricos ya pueden alquilarse en Lima. 16 March 2019, from Andina website: https://andina.pe/agencia/noticia-scooters-electricos-ya-pueden-alquilarse-lima-744505.aspx
- Alarco, G. (2010). Crisis financiera internacional y patrón de crecimiento de una economía mediana y dependiente: el caso del Perú. Corvengencia: Revista de Ciencias Sociales, 54, 135-159. 6 March 2019, from EbscoHost Data base.
- BBVA Research. (2017). *Peru: Advances in digitalization*. 6 February 2019, de BBVA Research Website: https://www.bbvaresearch.com/wp-content/uploads/2018/01/Peru_Advances-in-digitisation_nov-17I_ING.pdf
- Barbu, C. B. (2018). *Business Models of the Sharing Economy*. Review of International Comparative Management, 1-14.
- Barbu, C., Bratu, R. & Sirbu, E. (May 2018). *Business Models of the Sharing Economy. Review of International Comparative Management*, 19 (2), 14. 26 January 2019, From Ebscohost Data base.
- Be Brasil. (2017). From ride-sharing to car-sharing, Brazilians are opening their doors. 15 March 2019, from Be Brasil website: http://www.bebrasil.com.br/en/news/from-ride-sharing-to-car-sharing-brazilians-are-opening-their-doors
- Belk, R. (2013). You are what you can access: Sharing and collaborative consumption online. Journal of Business Research, 1, 6. 28 January 2019, Obtained from ScienceDirect Data Base.
- Benoit, S., Baker, T., Bolton, R., Gruberd, T., Kandampully, J. (2017). A triadic framework for collaborative consumption (CC): Motives, activities and resources & capabilities of actors. Journal of Business Research, 79, 219-217. 05 February 2019, From Science Direct Data Base.
- Bocker, L., Meelen, T. (2017). *Environmental Innovation and Societal Transitions*. Science Direct, V. 23, 28-39. 10 March 2019, De Science Direct Data base.
- Boston Hospitality Review. (2018). *Airbnb and the Hotel Industry: The Past, Present, and Future of Sales, Marketing, Branding, and Revenue Management.* 16 March 2019, from Boston Hospitality Review website: http://www.bu.edu/bhr/2018/10/31/airbnb-and-the-hotel-industry-the-past-present-and-future-of-sales-marketing-branding-and-revenue-management/

- Botsman, R. (2010). *The case for collaborative consumption*. 25 January 2019, de TEDxSydney Sitio web: https://www.ted.com/talks/rachel_botsman_the_case_for_collaborative_consumption?lan guage=es#t-523557
- Botsman, R. (2012). *The economy of the new economy is trust*. 01 February 2019, from TEDx Website:

 https://www.ted.com/talks/rachel_botsman_the_currency_of_the_new_economy_is_trust #t-24765
- Botsman, R. (2013). *The sharing economy lacks a sharing definition*. Obtained from Fast Company: https://www.fastcompany.com/3022028/the-sharing-economy-lacks-a-shared-definition.
- Botsman, R. and Rogers, R. (2010). *What's mine is yours: the rise of collaborative consumption.*United States of America: Harper Collins Publishers.
- Business Dictionary. (2019). *Emerging Economies*. 25 February 2019, from WebFinance Inc website: http://www.businessdictionary.com/definition/emerging-economies.html
- Calkins, K. (2005). Correlation Coefficients. 07 July 2019, Retrieved from Andrews University: https://www.andrews.edu/~calkins/math/edrm611/edrm05.htm
- Chase, R. (2016). *The beginning of the sharing economy*. 1 March 2019, from CNBC website: https://www.cnbc.com/video/2016/04/05/the-beginning-of-the-sharing-economy-.html
- Chasin, F., Von Hoffen, M., Hoffmeister, B. & Becker, J. (2018). *Reasons for Failures of Sharing Economy Businesses*. MIS Quarterly Executive, 17:3, 16. 25 January 2019, De Ebscohost Data Base.
- CPI. (2017). Market Report. 1 July 2019, from CPI website: http://cpi.pe/images/upload/paginaweb/archivo/26/mr_poblacion_peru_2017.pdf
- Daniel, J. (2012). *Choosing between nonprobability sampling and probability sampling*. In Sampling Essentials (p.69). United States of America: SAGE Publications Inc.
- Das, P. (2016). *RideIT: Making Journey to work better*. 6 March 2019, from Start-Up Hyderabad website: http://startuphyderabad.com/rideit-making-journey-work-better/
- Deloitte. (2017). Car Sharing in Europe: Business models, National variations and upcoming disruptions. 15 March 2019, from Monitor Deloitte website: https://www2.deloitte.com/content/dam/Deloitte/de/Documents/consumer-industrial-products/CIP-Automotive-Car-Sharing-in-Europe.pdf

- Dillahunt, T. & Malone, A. (2015). *The Promise of the Sharing Economy among Disadvantaged Communities*. 15 March 2019, from ACM Human Factors website: http://socialinnovations.us/assets/papers/pn0389-dillahuntv2.pdf
- Ecowatch. (2015). 8 of the World's Best Bike Sharing Programs. 15 March 2019, from Eco Watch website: https://www.ecowatch.com/8-of-the-worlds-best-bike-sharing-programs-1882105476.html
- European Commission. (2018). The use of the collaborative economy. 15 March 2019, de European Commission Sitio web: http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/inst ruments/flash/surveyky/2184
- European Commission. (2018). *The use of the collaborative economy*. 16 March 2019, from European Commission website: http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/inst ruments/flash/surveyky/2184
- Euromonitor. (2016). *Travel: The Sharing Economy in Lodging*. Euromonitor International, 16 March 2019, from Euromonitor International Database.
- El Comercio. (2019). Economía peruana: ¿Cuáles fueron los sectores que más crecieron en el 2018?. 6 March 2019, from Diario El Comercio website: https://elcomercio.pe/economia/peru/inei-sectores-economia-peruana-pbi-mineria-pesca-crecieron-2018-noticia-608100
- El Comercio. (2018). *Mincetur daría marcha atrás en norma para las Apps de hospedaje*. 15 March 2019, from Diario El Comercio website https://elcomercio.pe/economia/negocios/mincetur-da-marcha-norma-traba-apps-hospedaje-noticia-535512
- García, J. (2019). Comportamiento de la Economía Peruana en el Primer Trimestre de 2019. Informe Técnico: Producto Bruto Interno Trimestral, 56 pp. 1 August, Retrieved From: https://www.inei.gob.pe/media/MenuRecursivo/boletines/pbi_trimestral_mayo2019.pdf
- Goga, Arturo. (2019). *Se inaugura CityBike Lima, servicio de Bicis Públicas en Miraflores* (*VIDEO*). 20 July 2019, retrieved from Diario Gestión website: https://gestion.pe/blog/arturogoga/2019/07/se-inaugura-citybike-lima-servicio-de-bicis-publicas-en-miraflores-y-san-isidro-video.html/
- Golpe, A. (2019). *La Gerencia Estratégica de Costos (G.E.C.) y los Costos de Transacción*. 11 March 2019, Retrieved from Intercostos website: http://intercostos.org/documentos/congreso-08/237.pdf

- Görög, G. (2018). *The Definitions of Sharing Economy: A Systematic Literature Review*. Management, 2, 1-16. 20 January 2019, Obtained from EbscoHost Data Base.
- Good Meal Hunting. (2019). *Good Meal Hunting: about us.* 15 March 2019, from Good Meal Hunting website: https://www.goodmealhunting.com/about-us
- Guyader, H. (2018) *No one rides for free! Three styles of collaborative consumption,* Journal of Services Marketing, Vol. 32. Issue: 6, pp.692-714, https://doi.org/10.1108/JSM-11-2016-0402
- Haynie, D. (2017). Countries That Care the Most About the Environment. 3 March 2019, from U.S. News website: https://www.usnews.com/news/best-countries/articles/2017-04-21/countries-that-care-the-most-about-the-environment
- Hellotractor. (2019). *Hellotractor: Connecting you to your tractor and your tractor to the world.*15 March 2019, from Hellotractor website: https://www.hellotractor.com/about-us/
- Hsua, C., Liou, J., Lo, H., Wang, Y. (2018). *Using a hybrid method for evaluating and improving the service quality of public bike-sharing systems*. Journal of cleaner production, 202, 1131-1144. 15 March 2019, from ScienceDirect Data base.
- Hira, A. (2017). *Profile of the Sharing Economy in the Developing World: Examples of Companies Trying to Change the World.* Journal of Developing Societies, Vol 33(2), 244–271. 26 February 2019, Retrieved from PlumbX Metrics.
- Hoskisson, R., Eden, L., Lau, C. & Wright, M. (2000). Abstract. Strategy in Emerging Economies (249-267). Academy of management Journal.
- INEI (2018). *Perú: crecimiento y distribución de la población*, 2017. Obtained from https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1530/libr o.pdf
- Inga, C. (2019). *Glovo ingresará a Piura esta semana*. 20 August, retrieved from Diario El Comercio website: https://elcomercio.pe/economia/dia-1/glovo-ingresara-piura-semana-noticia-609645
- Innovate Perú. (2016). *Start Up Perú: conozca los proyectos de la cuarta generación*. 06 March 2919, from Ministerio de la Producción website: https://innovateperu.gob.pe/noticias/noticias/item/1153-start-up-peru-conozca-los-proyectos-de-la-cuarta-generacion
- IPSOS. (2018). *El Peruano de Hoy: Tendencias y oportunidades 2018*. IPSOS PERU, 1, 1-15. 1 February 2019.

- Jacob, R. (2015). *Interview with RideIT, a Ride-matching service out of India*. 6 March 2019, from Thisweekin. Asia website: https://www.youtube.com/watch?v=oURmPeknDKQ
- Jackson, S. (2010). Statistics: Plain and simple. Jacksonville, United States: Cencage Learning.
- Kothari, C. (2004). *Research Methodology: An introduction*. In Research Methodology: Methods and Techniques (p.2). New Age International.
- Massachusetts Institute of Technology. (n.d). Linear Regression. 1 July 2019, from MIT website: http://www.mit.edu/~6.s085/notes/lecture3.pdf
- Malhotra, N. (2008). *Muestreo: diseño y procedimientos*. In Investigación de Mercados. Mexico: Pearson Education Inc.
- Martin, E., Shaheen, S. & Lidicker, J. (2010). *Impact of Carsharing on Household Vehicle Holdings*. 150-158, 15 March 2019, from University of California website: Impact of Carsharing on Household Vehicle Holdings
- Matzler, K., Veider, V. & Kathan, W. (2014). *Adapting to the sharing economy*. 25 January 2019, from MITSloan Management Review website: https://sloanreview.mit.edu/article/adapting-to-the-sharing-economy/
- Merricks, M. (2010). WHAT MAKES AN EMERGING MARKET? Investment Week, 55. Retrieved from https://search-proquest-com.ezproxybib.pucp.edu.pe/docview/763000924?accountid=28391
- Minitab (2019). ¿Qué es un nivel de confianza? Retrieved from: https://support.minitab.com/es-mx/minitab/18/help-and-how-to/statistics/basic-statistics/supporting-topics/basics/what-is-a-confidence-level/
- Minitab (2019). Interpret the key results for Correlation. 07 July 2019, Retrieved from: https://support.minitab.com/en-us/minitab-express/1/help-and-how-to/modeling-statistics/regression/how-to/correlation/interpret-the-results/
- Ministerio de Comercio Exterior y Turismo. (2018). Disponen la prepublicación del proyecto de Reglamento de Establecimientos de Hospedaje en el Portal Institucional del Ministerio. 15 March 2019, from Diario El Peruano website: https://busquedas.elperuano.pe/download/url/disponen-la-prepublicacion-del-proyecto-de-reglamento-de-est-resolucion-ministerial-n-170-2018-mincetur-1647912-1

- Muñoz, P. & Cohen, B. (2018). A Compass for Navigating Sharing Economy Business Models. California Management Review, Vol. 61(1), 114–147. 25 February 2019, From Ebscohost Data base.
- Lind, D., Marchal, W., Wathen, S. (2015). Estadística aplicada a los negocios y la economía, México: McGraw Hill.
- Ruiz, C. (2013). Instrumentos y Técnicas de Investigación Educativa. Houston, Texas.
- Ortiz-Ospina, E & Roser, M. (2016). Trust. 16 March 2019, de Our World in Data Sitio web: https://ourworldindata.org/trust
- Owyang, J. (2015). Large Companies Ramp Up Adoption in the Collaborative Economy. 6 February 2019, de Jeremiah Owyang Blog Website: http://www.webstrategist.com/blog/2015/07/20/large-companies-ramp-up-adoption-in-the-collaborative-economy/
- Oxford Dictionary. (2015). Oxford Dictionaries Word of the Year 2015: the shortlist. Obtained from Oxford Dictionary: https://blog.oxforddictionaries.com/2015/11/16/word-of-the-year-2015-shortlist/
- Pew Research Center. (2019). Digital connectivity growing rapidly in emerging economies. 16 March 2019, de Pew Research Center website: http://www.pewglobal.org/2014/02/13/emerging-nations-embrace-internet-mobile-technology/
- Petrini, M., Freitas, C. S. de., & Silveira, L. M. da S. (2017). *A Proposal for a Typology of Sharing Economy*. Revista de Administração Mackenzie, 18(5), 39-62. Doi 10.1590/167869712017/administracao.v18n5p39-62
- Ponce, M. & Pasco, M. (2018). Guía de investigación en Gestión. Perú: Pontificia Universidad Católica del Perú.
- PricewaterhouseCoopers LLP. (2015). *The Sharing Economy. Consumer Intelligence* Series, 1-30.
- Promperu. (2019). *About Peru: Peruvian Culture*. 8 February 2019, de Ministerio de Comercio Exterior y Turismo Website: https://www.peru.travel/about-peru/peruvian-identity/culture.aspx
- Ranchorda, S. (2014). *Does Sharing Mean Caring? Regulating Innovation in the Sharing Economy*. Minnesota Journal of Law, Science & Technology, Vol.16(1), pp.413-475. 3 April 2019, from HeinOnline Law Journal Library Database.

- Rinne, A. (2017). *What exactly is the sharing economy?* Obtained from World Economic Forum: https://www.weforum.org/agenda/2017/12/when-is-sharing-not-really-sharing/
- Rosenthal, S. R., Cha, Y., & Clark, M. A. (2018). *The Internet Addiction Test in a Young Adult U.S. Population*. Cyberpsychology, Behavior, and Social Networking, 21(10), 661–666.doi:10.1089/cyber.2018.0143
- Sharma, J. (2014). Business Statistics: Problems and Solutions. India: Vikas Publishing House PVT LTD.
- Schillo, S. & Robinson, R. (2017). *Inclusive Innovation in Developed Countries: The Who, What, Why, and How.* Technology Innovation Management Review, V. 7, 34-46. 7 March 2019, De EsbcoHost data base.
- Schwab, K. (2016). *The Fourth Industrial Revolution: what it means, how to respond*. 10 March 2019, from World Economic Forum website: https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/
- Shaheen, S., Mallery, M. & Kingsley. K. (2012). *Personal vehicle sharing services in North America*. 15 March 2019, retrieved from Science Direct: doi:10.1016/j.rtbm.2012.04.005
- Solomon, B. (2016). *How Airbnb Expanded To 190 Countries By Thinking 'Glocal'*. 11 March 2019, from Forbes website: https://www.forbes.com/sites/briansolomon/2016/05/03/how-airbnb-expanded-to-190-countries-by-thinking-glocal/#370f29597e91
- Smith, A. (2017). *Americans' experiences with data security*. 10 March 2019, from Pew Research Center website: http://www.pewinternet.org/2017/01/26/1-americans-experiences-with-data-security/
- Tuder, S. (2016). *Private Chef Supplier Kitchit Has Closed*, As Predicted. 5 February 2019, de Eater San Francisco Sitio web: https://sf.eater.com/2016/4/28/11533054/kitchit-closed
- Taylor, K & Silver, L. (2019). Smartphone Ownership Is Growing Rapidly Around the World, but Not Always Equally. 11 March 2019, from Pew Research Center website: http://www.pewglobal.org/2019/02/05/smartphone-ownership-is-growing-rapidly-around-the-world-but-not-always-equally/
- The World Bank. (2018). *The World Bank in Peru*. 11 March 2019, from The World Bank website: https://www.worldbank.org/en/country/peru/overview
- The World Bank. (2019). *World Bank Country and Lending Groups*. 1 March 2019, from The World Bank website: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519

- Uber. (2018). *Conoce más información sobre el pago en efectivo en Uber*. 16 March 2019, from Uber website: https://www.uber.com/es-MX/blog/uber-pago-en-efectivo-mexico/
- UC REGENS. (2019). What does Cronbach's Alpha mean? | SPSS FAQ. 1 July 2019, from UCLA: Institute for digital research education website: https://stats.idre.ucla.edu/spss/faq/what-does-cronbachs-alpha-mean/
- Universitat de Valencia. (n.d). Utilización de los diversos valores de P, para intervalos de proporciones. 1 July 2019, from Universitat de Valencia website: https://www.uv.es/ceaces/tex1t/5%20interval/pq05.htm
- Yaraghi, N & Ravi, S. (2017). The Current and Future State of the Sharing Economy. 15 March 2019, from Brookings India website: https://www.brookings.edu/wp-content/uploads/2016/12/sharingeconomy_032017final.pdf
- Van Welsum, D. (2016). Sharing is caring? Not quite. Some observations about 'the sharing economy'. 16 March 2019, de World Bank Sitio web: http://pubdocs.worldbank.org/en/308161452529903561/WDR16-BP-Sharing-is-caring-DWELSUMl.pdf
- Webster, T. (2015). Managerial Economics: Tools for analyzing business strategy. London: Lexington books.
- Woolf, N. (2016). Airbnb regulation deal with London and Amsterdam marks dramatic policy shift. 16 March 2019, from The Guardian website: https://www.theguardian.com/technology/2016/dec/03/airbnb-regulation-london-amsterdam-housing
- Zimmermann, K. (2017). What is culture / Definition of culture. 11 March 2019, from Live Science website: https://www.livescience.com/21478-what-is-culture-definition-of-culture.html
- Zon, N. (2015). *The Sharing Economy and why it matters for policy makers*. 15 March 2019, from Public Sector Digest website: https://mowatcentre.ca/wp-content/uploads/publications/PublicSectorDigest_TheSharingEconomyandWhyitMattersforPolic yMakers.pdf

Appendix

Appendix A: Survey requirements

- Between 25 and 55 years old (Millennials and Generation X)
- A/B/C Socioeconomic level
- Have a smartphone with mobile internet
- Reside in Peru

Factor	Factor	Variable					
Political	P1	Trust of people in their government					
Tontical	P2	Need of regulations					
	E 1	Collaborative consumption practices increases the value of an under-utilized					
E		assets by allowing someone else to re-use it					
Economic	E2	ituation of the market forces of demand and supply					
	E3	Economic situation of the country					
	Acceptance of new business models						
Social	S2	Acceptance of the collaborative consumption practices as a new way to					
Social		generate income					
	S3	Acceptance of shared assets					
Technological	T1	Mobile connectivity					
Technological	T2	Security of transactions					

- ✓ All the factors that appear red in the survey won't be visible.
- ✓ Survey was made in Spanish
- ✓ Survey takes less than 3 minutes

Introduction:

This form was created with the purpose of knowing the perspectives of Peruvian consumers regarding the Collaborative consumption model. Some examples of platforms that work under this model are Airbnb (accommodation), Uber (transport) and Grin (electric scooter).

Your answers will be anonymous and confidential.

Thank you for your participation!

I. Profile

- 1. Please indicate your gender
 - a) Male
 - b) Female
 - c) Other
- **2.** How old are you?
 - a) Less than 25 years old
 - b) Between 25-39 years old
 - c) Between 40-55 years old
 - d) More than 55 years old

3.		There do you reside?
		Peru
	b)	Other (please specify)
4.		ave you ever used a platform to get any product/service from someone else by sing an app? (Ex. Uber, Airbnb)
	a)	Yes
	b)	No
	c)	No, but it would like to do it
5.		ow many times have you used a platform to get any product/service from someone se by using an app?
	a)	They are part of my daily life
	b)	I use them occasionally
	c)	Just once
	d)	Never
6.	W	Then was the last time you used this type of platform?
	a)	Between today and yesterday
		This week
		At least once this month
		At least once this year
		Never
7.	W	That is the statement that best suits your opinion regarding these types of applications?
	a)	I like it because it allows me to save time and money
		I like it because I have more options when looking for a service or product
	c)	I like it because it includes the opinions of other people and that makes my decision easier
	d)	I don't like it because I feel it is very intrusive (requires my identity, credit card)
	e)	I don't have a specific opinion on the subject
8.	Is	there any reason why you wouldn't consider this type of platforms safe?
	a)	I don't trust in online references
	b)	I rather other options to validate the seller
	c)	Other:
,	E	conomical Factor

II.

- **9.** Have you ever offered your services/assets though this kind of platform? (E2)
 - a) Yes
 - b) No
 - c) No, but I might do it someday to earn some extra money

- **10.** Do you know someone that has offered their services/assets though this kind of platform? **(E2)**
 - a) Yes
 - b) No

Please rate the following statements

	Strongly	Disagree	Undecided	Agree	Strongly
	Disagree				Agree
11. I believe that platforms					
such as Airbnb and Uber can					
increase the value of my house					
and car (E1)					
12 . I like the idea of earning					
money by renting/lending					
things I don't use through an					
app (E2)					
13. I believe that life is much					
easier with the creation of					
platforms such as Airbnb and					
Uber (E2)					
14. I believe that this type of					
platforms supports the growth					
of the country because it is a					
new way of income (E3)					
15. The economic situation of					
my country is one of the					
reasons why I have increased					
my online consumption level					
(E3)					

III. Social Factor

Please rate the following statements

	Strongly	Disagree	Undecided	Agree	Strongly
	Disagree				Agree
16. I would you like to have					
more options of platforms that					
encourage the idea of sharing					
assets/services (S1)					
17. I believe technology is					
allowing people to generate					
more income since everybody					
has access to it (S2)					
18. I believe that the old ways					
to generate income where less					
complicated than now (S2)					

19. I don't care to have the latest trends, as long as it is useful for me (S3)			
20. I take into consideration other people's recommendations when purchasing products/services (S3)			

IV. Technological Factor

21. Do you own a smartphone and have regular connection of internet on it? (Post-pago)

(T1)

- a) Yes
- b) No
- **22.** If you had to buy a good on internet from an unknown user, would an online reputation system be considered safe? (T2)
 - a) Yes
 - b) No
- 23. Please mark the option of payment of your preference: (T2)
 - a) Web platform (Visa, Mastercard or PayPal)
 - b) Online bank transfers
 - c) Presential bank transfers
 - d) 50% bank transfer, 50% against product
 - e) Cash against product
- **24.** Did any of these reasons made you pick the type of payment before? You can select more than one (T2)
 - a) I use the web payment platforms whenever they are available
 - b) I have not had the opportunity to use a web payment platform
 - c) I do not wish or have had the need to use payment platforms
 - d) I find it difficult to use a web payment platform
 - e) Internet payments seems unsafe

V. Political

Please rate the following statements

	Strongly	Disagree	Undecided	Agree	Strongly
	Disagree				Agree
25. I feel safe to make an Internet					
transaction in Lima due to the					
trust in my authorities and laws					
(P1)					
26. I think that the same rules that					
exist in other countries should be					
applied in Peru (P2)					

27. I believe that the government			
should regulate the services of			
Uber, Airbnb and Grin in a			
specific way without considering			
what is done in other countries.			
(P2)			

Thank you for your time!