St. Petersburg University

Master in Management Program

**FACTORS INFLUENCING SUCCESS IN SHARING ECONOMY
FOR CONSUMER GOODS SECTOR**

Master Thesis by the 2nd year student, Concentration – Marketing – Marina Denisova

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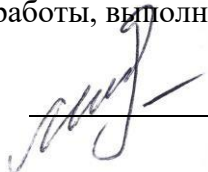
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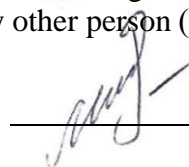
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THE MASTER THESIS

I, Denisova Marina Alexeevna, second year master student, master's program «Management», state that my master thesis on the topic «Factors Influencing Consumer Behavior in Renting Industry of Sharing Economy», which is presented to the Master Office to be submitted to the Official Defense Committee for the public defense, does not contain any elements of plagiarism.

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АННОТАЦИЯ

Автор	Денисова Марина Алексеевна
Название ВКР	Факторы успеха экономики общественного потребления в индустрии потребительских товаров
Образовательная программа	Менеджмент
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Описание цели, задач и основных результатов	Цель данного исследования - определить и проанализировать факторы, влияющие на поведение потребителей в индустрии потребительских товаров экономики совместного использования. В связи с этим, практическая направленность работы обусловлена разработкой практических рекомендаций для отделов маркетинга компаний экономики совместного потребления. В ходе работы были выявлены ключевые факторы, влияющие на поведение потребителя на данном рынке: «рискованность» и «потраченные усилия». Экспериментальный подход был применен с целью выявить степень влияния этих факторов на решение о покупке/аренде потребительских товаров. Также, с помощью эксперимента была оценена эффективность подходов, используемых компаниями для снижения влияния указанных факторов на поведение потребителей экономики совместного пользования. В результате проведенного анализа было выявлено, что оба указанных барьера значительно влияют на поведение при аренде/покупке в секторе потребительских товаров. При этом, барьер «усилий» значительно сильнее воздействует на потребителей товаров низкой степени вовлеченности, чем высокой степени вовлеченности). Также было выявлено, что различные меры, применяемые платформами совместного использования, по-разному влияют на восприятие рисков потребителями: платформы для совместного использования, предлагающие только «правила противодействия мошенничеству», воспринимаются как менее рискованные, чем платформы, предлагающие только оценку пользователей (рейтинги и отзывы), однако оба подхода эффективны.
Ключевые слова	Экономика общественного потребления, поведение потребителя, степень вовлеченности, потребительские товары, риск, маркетинг

ABSTRACT

Master Student's Name	Marina Denisova
Master Thesis Title	Factors Influencing Success In Sharing Economy For Consumer Goods Sector
Educational Program	Master in Management
Main field of study	Marketing
Year	2020
Academic Advisor's Name	M. Deniz Dalman, Assistant Professor Marketing Department
Description of the goal, tasks and main results	The aim of the given research is to determine and explore factors that influence consumer behavior in consumer goods industry of sharing economy and to develop practical recommendations (marketing techniques, strategies, approaches) for marketing departments of such sharing economy companies. In the course of the work, key factors that influence consumer behavior in this market were identified: "riskiness" and "difficulty". An experimental approach was applied to identify the level of influence of these factors on consumer's decision to purchase/rent consumer goods. Also, through the experiment, the effectiveness of the approaches used by companies to reduce the influence of these factors on the behavior of consumers of the shared economy was evaluated. As a result of the analysis, it was found that both of these barriers significantly affect consumer behavior when renting / buying in the consumer goods sector. At the same time, the "difficulty" barrier has a significantly higher effect on consumers of low involvement product category than of high involvement product category. It was also revealed that the various approaches used by the sharing platforms have different effects on consumers' perceptions of riskiness: sharing platforms that offer only "anti-fraud rules" are perceived as less risky than platforms that offer only user ratings (ratings and reviews), however both approaches are effective.
Keywords	Sharing economy, consumer goods, consumer behavior, category involvement , risk avoidance, marketing

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INTRODUCTION

People don't really need a quarter-inch drill,
they need a quarter-inch hole in the wall
- Theodore Levit

The sharing economy (also known as collaborative consumption) is one of the fastest growing business trends, that has become a rage and a phenomenon amongst the millennials. Peer-to-peer business model consists of sharing, acquiring and providing access to underused goods and services, that is usually supported by a community-based online platform. Sharing economy was stimulated by the development of technology, which led to a reduction in transaction costs and the provision of convenient for "users" and "owners" connection. A common example of sharing economy model is Airbnb platform, which is offering someone's home as a place for a temporary stay. This company doesn't own any real estate that is offered for rent. Airbnb allows owners to make money on their property and to share their home with those who are seeking for a stay.

Collaborative consumption has a large number of strengths and it solves not only personal issues, but also social and even environmental ones:

1) Financial savings: goods are getting accessible for consumers, because they don't need to pay the full price for the object in order to use it only once;

2) Preservation of the environment by reducing the rate of depletion of natural resources;

3) Reduction of environmental pollution (that which could be thrown away will be used again);

4) Opportunity for owners to earn money with help of their underused assets without losing their sense of ownership;

5) Coopetition - the interaction of companies and people whose interests lie in one plane;

6) Finally, a significant increase in the efficiency of resource usage, which is the main aspect of the problem of economic theory.

Despite significant advantages of sharing economy, people are still more likely to buy things and keep them at home without usage, than to lend or rent these goods. This way the purchased goods may bring their value only a couple of times while the cost of the purchase is usually much higher than the money that could be spent for renting these goods for the necessary number of usages.

The success of the model depends on the size of the network (community of both: users and owners). Currently there are several highly successful companies, so called "sharing-economy giants" that use the co-consumption business model. Great examples here are Airbnb (online marketplace that

connects people who want to rent out their homes with people who are looking for accommodations in that locale[1]), Uber (technology platform, that helps to solve the problem of people's movement around the world, which includes peer-to-peer ridesharing, ride service hailing, food delivery, and a bicycle-sharing system)[2]. These companies, and some others that proceed in the Mobility industry, or Tourism, hotel industry, were able to gather a huge audience of users through the business model of the shared consumption economy, and now they are successfully growing and developing. But there are other companies that have tried to develop sharing economy in other industries, but have not reached desired success and popularity. An example of such an industry is Consumer goods. Most often a person doesn't really need a drill: in fact, he needs a hole in the wall. However, in the majority of cases, the person buys the drill for the full price, uses it one or several times, and then leaves it gathering dust on the shelf without any usage. This means that the real value the purchased drill brings to its consumer is contained in a couple of usages and this value could have been reached through rent with lower costs.

Being that the rational buying behavior means that the buyer wisely spends his or her limited income to get the most satisfaction for each dollar spent (Lantos, 2011), such behavior could be even perceived as irrational and unfortunately it concerns not only repair tools, but also sports/leisure equipment, costumes/clothes, professional equipment (cameras, musical instruments), medical equipment (crutches, wheelchairs), videogames etc. All categories of goods mentioned are most likely not necessary in the everyday life, so they could have been used much more effectively. There are several companies, such as Rentomania, OneTwoRent etc. which are trying to develop consumer goods industry in sharing economy, but they are not yet in a high demand, comparing to the leading industries such as automotive and hospitality (Hwang, J., 2019).

It is interesting to identify the reasons why is the sharing economy market developing such unequally[3]: some economy-sharing industries are extremely popular, and some (which are quite promising, and able to solve social and environmental issues) cannot attract enough users to grow and develop. First of all, it is necessary to classify the types of sharing economy in order to reveal which class of companies using this business model includes consumer goods and is least demanded. Further it is necessary to study consumer behavior within the framework of the identified problem industry.

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[1] https://www.investopedia.com/articles/personal-finance/032814/pros-and-cons-using-Airbnb.asp - Airbnb: Advantages and Disadvantages
[2] https://www.uber.com/ - About the company
[3] https://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf

It is crucial to understand how people make decisions about what they want, use or buy and how they act towards a service or a company, because the way how consumers behave is what the success of the company and the industry as a whole depends on.

That is the reason why the *aim of the given research* is to determine and explore factors that influence consumer behavior in Consumer goods industry of sharing economy and to develop practical recommendations (marketing techniques, strategies, methods) for marketing departments of such sharing economy companies.

The subject of the given research is: "Factors influencing consumer behavior in consumer goods industry of sharing economy".

The object of the given research is: "Consumers in consumer goods industry of sharing economy".

1. THEORETICAL RESEARCH ON SHARING ECONOMY AND FACTORS INFLUENCING CONSUMER BEHAVIOR IN THIS INDUSTRY

1.1. Sharing economy

1.1.1. Definition and background of sharing economy

The term sharing economy (in other words, collaborative consumption or joint consumption) was for the first time formulated in 1978, but it didn't become a used concept until 1995, when eBay appeared. During the investigation of the phenomenon PriceWaterhouseCoopers identified the following 4 main social and economic changes that have contributed greatly to the rapid spread of the model:

1. The spread of advanced digital platforms and devices

2. Efforts to use material resources more efficiently, economic rationality

3. New consumer needs – closer cooperation and a change in attitudes to ownership, more environmentally friendly consumption choices

4. Social changes – globalization and urbanization

Along with these factors, one of the main reasons for the success of the sharing economy companies is the considerable cost advantage resulting from their economies of scale: global players entering the local market have a lower fixed cost ratio for their services than local participants.

In order to understand what will be discussed in this paper, we first explain what the "Joint consumption" or Sharing economy is. Harvard professor Lawrence Lessig was among the first to study the term sharing economy ("Remix" book, 2008). He stated that the economy has become "hybrid" with the development of the Internet. Digital contact between users became much simpler, and financial transactions are now increasingly focused on mutual confidence. Lessig defines sharing economy as consumption realized as a result of sharing, exchanging and renting resources without owning them.

A more complete definition of economics was given by Frenken, Meelen, Arets and Glind in (2015). They define sharing economy as an economic model based on consumers granting each other temporary access to their under-used assets ("idle capacity") from spaces to skills to stuff for financial or non-financial benefits and largely, the focus of sharing economy is to provide a platform for person-to-person transactions.

Despite the ongoing discussion on the of "sharing economy" term, this definition was added to the Oxford English Dictionary in 2015 as follows: "an economic system in which goods or services

are distributed among individuals for free or for a fee, usually via the Internet ". This definition underlines two important functions that are used in this study to characterize the companies that use the joint consumption model: (1) assets or services are distributed among individuals for a fee and are intended for temporary use; and (2) transactions are made over the Internet. In general, the business model of economic sharing is characterized by the following properties: (1) focus on unused or underused assets; (2) consumers pay for temporary access instead of ownership using the Internet platform (most likely); and (3) the business is based on network effects and social interactions between users/growth providers (Parente et.al, 2017). It should be particularly noted from the latter, that the new business model functions as an interface connecting different groups of users who interact through the virtual market in accordance with certain "rules" and recommendations (Gawer and Cusumano, 2014).

Considering the definitions above, the view on the term varies among different authors, but they overlap in most aspects. Based on the discussion above, in my thesis I define sharing economy as a peer-to-peer based activity of sharing (borrowing, renting) access to under-used assets (goods or services) that is most often performed using online platforms, but also can be facilitated offline.

1.1.2. Classification (typology) of sharing economy

There are different approaches to classifying sharing economy. First of all, goods or services can be provided both from the consumer to the consumer, and coordinated by online services or other companies, as it was mentioned above. Therefore, there is a classification of sharing services relative to the subjects of participation.

2.   C2C. The sharing economy model basically originated from the "consumer to consumer" (C2C) business model. Private individuals get in contact with each other through a digital platform and shared their spare devices, knowledge or tangible assets. In the "Joint Economy" model, the line between consumers and producers is blurred, because in the C2C scenario, the supplier will also be the consumer. An example is lending to consumer loans by other consumers, an area that was previously limited to banks as financial service providers. A significant part of innovations in C2C sharing economy comes from startups. Among them are the so-called industry giants: Uber, Airbnb, Lyft, WeWork and YouDo. While many C2C start-ups focus on financial services, mobility, and travel, examples from other industries, such as education, music, or logistics, underlie the cross-sectoral nature of this phenomenon.

3.   B2C. Building on the success of the initial operating logic, a new direction has also emerged in the economy: the so-called "business to consumer" (B2C) model, in which the company not only operates the platform, but it also provides the products and services as supplier, replacing the individual owners. Although the joint consumption focuses on exchanging goods and services among consumers, access to these resources is in many cases related to the activities of companies providing value-added services to consumers (Eckhardt and Bardhi, 2015). The main reason for this is the lack of trust between people, for example, the lender's concern about the damage to a common item that could be resolved by an intermediary providing services such as insurance. In addition, traditional service providers, such as banks, can also position themselves in the sharing economy. An example would be banks that provide C2C lending scenarios (for example, GoLend Internet Finance in Hong Kong). An example of the classification of existing companies by market type created by Gabriella Buda, Dr. József Lehota DSc. (2017) is presented in Table 1.

Model	Typical examples
B2C	BMW Carsharing, Spotify, Netflix
C2C	Uber, Airbnb, Peerby, Facebook, Youtube, Skillshare

Table 1. Models of sharing economy (Gabriella Buda, Dr. József Lehota DSc., Attitudes and Motivations of Consumers in Sharing Economy, 2017)

In continuation of this approach, an extended classification was proposed by Davide Proserpio and Gerard J. Tellis (2017). This time sharing platforms are classified based on their design and mode of operation. Specifically, it focuses on the platform's search and matching of supply and demand and its reputation mechanism. The results of the classification are presented in the table 2. In the head of the table are requirements that sharing economy platforms should satisfy.

	P2P	Asset Sharing	Assets Non-Ownership	Reputation Mechanism	Personal Interaction	Fee-Based	Internet-Based
P2P Decentralized							
Airbnb	✓	✓	✓	✓	✓	✓	✓
TaskRabbit	✓	✓	✓	✓	✓	✓	✓
Turo	✓	✓	✓	✓	✓	✓	✓
GetAround	✓	✓	✓	✓	✓	✓	✓
P2P Centralized							
Uber	✓	✓	✓	✓	✓	✓	✓
Lyft	✓	✓	✓	✓	✓	✓	✓
Instacart	✓	✓	✓	✓	✓	✓	✓
Postmates	✓	✓	✓	✓	✓	✓	✓
Crowd-based							
Kickstarter	✓					✓	✓
Indiegogo	✓					✓	✓
LendingClub	✓	✓				✓	✓
Prosper	✓	✓				✓	✓
On-Demand B2C							
Zipcar		✓				✓	✓
Rent the Runaway		✓		✓		✓	✓
Rinse		✓	✓		✓	✓	✓
Maven		✓				✓	✓

Table 2. Classification of platforms in the sharing economy. (Davide Proserpio, Gerard J. Tellis, Baring the Sharing Economy: Concepts, Classification, Findings, and Future Directions, 2017)

Regardless of the type of market, an exchange economy is beneficial to consumers, suppliers, and intermediaries (Hamari et al., 2015). For consumers, it offers increased convenience, as they can use a certain product (or service) once for a specific purpose, instead of buying a product for all occasions. Also, of course, there are economic benefits due to lower investment for the use of the product compared to its purchase. From an environmental point of view, a joint economy provides opportunities for reducing waste by reducing the production of goods and services.

The second common approach to classify activities of joint consumption is its distinction by sector (in other words, industry or category). One of the most popular typologies is the classification of R. Basselier, G. Langenus and L. Walravens (2018) in which the authors have divided the most known sharing economy companies by economic sectors. The sectors are presented in the Table 3.

Sectors of activity	Examples of businesses/platforms
Transport	Uber, Lyft, BlaBlaCar, Click&Boat
Tourism and hotel industry	Airbnb, CouchSurfing, HomeExchange
Food	ShareTheMeal
Financial sector	KickStarter, Funding Circle
Services	TaskRabbit, WeTasker

Table 3. Economic sectors in which the business model of the sharing economy are used (R. Basselier, G. Langenus L. Walravens, The rise of the sharing economy, 2018)

An extended classification by sector (category) of activity was proposed by Botsman and Rogers. In order to diversify companies by sectors, consumer websites were analyzed and grouped based on their similarities and differences. For this, a table was prepared with the 24 categories of collaborative consumption proposed by Botsman and Rogers (2010) and, for each category, three websites were identified. The websites were selected having the ones identified in academic literature as guidelines and also examples from each category presented by Botsman and Rogers (2010). The results of the classification are presented in the Table 4.

CATEGORY	ACCESSED WEBSITES
Car Usage	Zascar, HourCar, Zipcar
Car Rental	Relayrides, Getaraund, Spride
Bicycle Usage	Bixi, Itaú, B-Cycle
Shared Trips	ZimRide, GoCarShare, Karzoo
Toy Rentals	Girafun, Rent That Toy, Baby Plays
Book Rentals	CampusBookRentals, Gobooks, Chegg
Fashion Items Rentals	BoBags, Fashion Hire, DressedUp
Film Usage	Netflix, NetNow, Lend Around
Varied Objects Rentals	Getable, Rentstuff, Rentcycle
Online Commerce	Mercado Livre, E-Bay, Gumtree
Exchanges	FreeCycle, Descola Aí, Xcambo
Used Electronics	OLX, Bom Negócio, Around Again
Used Books	Estante Virtual, Paperbackswap, Livra Livros
Used Toys	Toy Swap, Swap it Baby, Mumswap
Used Clothes	99 Dresses, Retroca, BigWardrobe
Used DVDs, CDs and Games	Netcycler, Swapsity, Swap
Room Rental	Airbnb, Bed and Fed, Roomorama
Service Exchange	OurGoods, BarterCard, TaskRabbit
Crowdfunding	Catarse, Movere, Starstomegood
Skills Sharing	Skillshare, Tradeschool, Tourboarding
Knowledge Sharing	Techshop, 3rdSpaceStudio, Wikipedia
Community Support	Mútuo, Toolzdo, Doare
Rides	Caroneiros, Snappcar, Carona Brasil
Meal Sharing	Eat With Me, HouseFed, Lourish

Table 4. Classification based on web-sites, adapted from Botsman and Rogers (2010).

The most complete classification of sharing economy by sector (industry) was proposed by PricewaterhouseCoopers Magyarország Kft (2015). According to this classification, collaborative consumption is divided into 7 key industries in which the sharing economy is already significant or has a high potential for growth: Mobility industry, Consumer goods, Tourism and Hospitality industry, Entertainment and multimedia industry, Financial sector, Energy sector and Human resources sector. The classification is presented in the table 5.

Category	Description	Examples
Mobility industry	Car clubs (car sharing), real-time vehicle sharing (ride sharing), parking space rental, on-demand car and bicycle rental, community-based traffic and navigation applications	BlaBlaCar, Uber, Lyft, Wundercar, Zipcar, BMW DriveNow, Car2Go, MOL Bubi.
Consumer goods	Everyday functional objects (e.g. for housework and household tasks, kitchen, sport), food sharing, closet sharing, shopping communities, community gardens	Peerby, Shareyourmeal, Threadflip, Poshmark, Piqniq, Yummber, Miutcánk.hu
Tourism and hospitality industry	Monetised home sharing, non-monetised home sharing, home exchange, community tourism services, coworking offices	Airbnb, Couchsurfing, HomeExchange, KAPTÁR
Financial sector	Community financing (crowdfunding), c2c lending, community innovation (crowdcreation)	Kickstarter, Indiegogo, Lending Club, Zopa, InnoCentive, Creative Selector, MagNet Bank
Energy sector	Wind farms, community solar projects, virtual power plants, electricity storage solutions	Mosaic, Solar Share, Sunshot, Wien Energie, Tesla
Human resources sector	Provision of various services, odd jobs (household tasks, distance work, etc.), online teaching	TaskRabbit, Sorted, SkillShare, Polyglot klub

Table 5. Classification of sharing economy activities by 7 key sectors, PricewaterhouseCoopers Magyarország Kft (2015)

The latter typology takes into consideration the most complete and well-structured range of sharing economy applications among the other approaches and it includes such a sector as "Consumer goods", therefore it will be most suitable for this research and it will provide an opportunity to narrow the study of factors only within the consumer goods industry.

1.1.3. Advantages, opportunities and challenges of sharing economy

The concept of sharing economy is becoming increasingly popular in the economic environment. Relevance is primarily due to the change in the economic paradigm as a whole, as well as the transformation of social processes. The growth of environmental problems and risks that arose as a result of the overdevelopment of the "consumer society", the increasing spread of information technology in our lives - these are only several reasons that led to a change in consumer behavior towards joint consumption economy models (Lymar, 2018). Analysis of advantages, disadvantages and characteristics of the sharing economy provides an opportunity for a deeper understanding of this phenomenon with the further aim of defining the main factors affecting this model in terms of potential consumers.

Sharing economy allows to share unused idle resources with others to reduce waste and ultimately contributes to the increase of common interests in society." (Eunsuk, Hongbum and Lee, 2018) therefore, the main advantages of sharing economy are related to different fields (social, financial, environmental etc.) and include:

1. Incorporation of a sense of trust in the community and development of social interaction

2. The ability to use the benefit without acquiring it - saving and increasing the availability of benefits for a wider range of users; Goods are getting accessible for consumers, because they don't need to pay the full price for the object in order to use it only once;

3. No need to pay taxes on property ownership or expenses for support and maintenance of purchased equipment;

4. Saving time on checking the reputation of a particular exchange participant - the transfer of this function to an Internet service;

5. Increasing mobility – people can find the necessary thing very quickly;

6. Saving resources - preservation of the environment by reducing the rate of depletion of natural resources;

7. Reduction of environmental pollution - that which could be thrown away will be used again;

8. Expansion of business opportunities and increase of accessibility to self-employment opportunities - owners are able to earn money with help of their underused assets without losing their sense of ownership

9. Coopetition - the interaction of companies and people whose interests lie in one plane;

It may seem that sharing economy is a perfect solution for most acute and pressing problems, a perfect economic model, with a great and undoubted future. However, as a young and disruptive business model it also has some disadvantages, doubts and areas for improvement.

Firstly, these are the risks of receiving low-quality goods for the renters and damaged goods for the lenders. Secondly, the risks of fraud and scams as there often is little to no guarantee. Thirdly, the risk of lack of legal support. Currently, there is no agreement regulating the process of joint consumption: safety or privacy concerns (Lymar, 2018). These risks lead to lack of customer loyalty and trust within this model. Moreover, sharing economy businesses pose a strong threat to existing business sectors. For example, Uber destroys taxi services in the cities in which it appears while Airbnb pulls customers from local hotels.

Regarding the challenges, one of the key issues of sharing economy is to increase reliability and trustworthiness of the model. It is also very important to achieve critical mass and rapid build-up,

as customers need diverse and supervised supplies to consume the product. The success of a company depends on the number of its participants: both users and suppliers. It is very important to attract new customers, which primarily depends on the availability of sufficient supply to meet demand.

In addition, important trends impacting profitability are pricing constraints, tiered pricing and new subscription-based revenue models. Based on all these definitions, properties, opportunities and challenges of sharing, economy, it will be easier to evaluate the behavior of consumers interacting with this model, to understand what the perception of sharing economy is based on, and in what direction this market is likely to develop further.

Thus, the sharing economy has a variety of strengths and weaknesses that consumers consider. As for its obvious disadvantages, there is still a long way to go in order to improve the system. As one of the key issues of sharing economy is to increase reliability and trustworthiness of the model and to decrease its riskiness for both: lenders and renters, this challenge will be addressed and analyzed in the experimental part of this study.

1.2. Consumer behavior

1.2.1. Definition and value of Consumer behavior

Since the subject of the study are the factors that influence consumer behavior of potential participants of collaborative consumption of consumer goods in particular, it is crucial to understand the phenomenon of consumer behavior and its value. In the concept of sharing economy, the consumer has the mandate to control the direction of the business, as they indicate the stability of the business, which means companies that have integrated the model ensure that they maintain the public image (Matzler et al., 2015). Consumer behavior defines how consumers make decisions: cognitive relative to emotional, high-involvement relative to low-involvement, optimizing relative to "satisficing," and compensatory relative to noncompensatory decision making (Gourville and Norton, 2014). In other words, consumer behavior is the concept which observes the way how customers decide on what do they want, need, what to buy, how to act regarding a product, service, or brand. It is crucial to understand behavior of consumers in order to know how will people react to a new product or service.

If a marketer knows the answer to the question of why consumers buy what they buy, then this is the best opportunity to understand how to design, manufacture and promote products. The importance of knowing and understanding consumer behavior in modern marketing is vital. If you see what everyone is looking for, then you need to give them what they want. If you find out what your

customers want and why they are doing certain actions, you will get everything you need to know about how to complete the sale.

There are 6 main reasons to understand and manage consumer behavior:

1) It helps to increase revenue – it is easier to improve sales significantly when the study of consumers is applied. It becomes possible to change ways how the company sells its products depending on the why and how do consumers purchase them.

2) It helps to raise the brand equity – Continuous analysis *of* consumer insights, the company can transform its brand, or particular products, in order to change its consumer's perception of the brand or a product, that is formulated in consumer's mind. This way the companies can reach higher turnovers.

3) Expansion of product portfolio – When a company analyzes and understands behavior of its consumers for a long time, it can create an opportunity to determine gaps in the brand's product portfolio. Filling such gaps through launching new products brings the customers to satisfaction and the company itself to success.

4) Tracking market trends – As the market develops continuously, its trends also are tending to shift. Observation of consumers will be the most useful tool to indicate such alterations. For example, the new trend of healthy lifestyle was determined by McDonalds through consumer behavior analysis, and respectively at present the company delivers healthier food in their calorie loaded menu.

5) Opportunity to segment, target and forecast consumers – Since the current consumers give a clear understanding of who potential consumers are going to be, it is possible to determine, average income, wills, needs, habits etc., of the future customers. Therefore, it is getting easier to segment and target consumers and forecast demand and sales when behavior of current customers is observed.

6) Running a competitive analysis – this is one of the most valuable aspects that supports importance of consumer behavior study. The aim of competitive analysis in terms of consumer behavior is to find out which products and services produced by the competitor are your potential consumers buying, what is the reason for it and what features are the most valuable for the customers. All of these questions can be covered only if consumer behavior is studied (Makarevicz, 2013).

Thus, here are the main reasons of why it is so important for any company to study consumer behavior. Not only does it increase the revenue, and raise the brand equity, but also it helps to keep in touch with the customers and to form a strong competitive advantage this way. A deeper

understanding of consumer behavior phenomenon is necessary to identify drivers and barriers affecting consumers regarding joint consumption and to subsequently provide recommendations to consumer goods sharing services on improving the marketing strategy.

1.2.2. Consumer decision making process

Decision Making Process of a consumer is a framework, that is used to figure out how a customer decides which product or service to purchase and to track consumer journey from the beginning to the final point. It is divided into 5 stages (Kotler & Keller, 2012):

1. Problem Recognition

The consumer feels like something is missing and needs to deal with this issue in order to get back to feeling normal. The ideal time for advertising is when it is determined (if possible) that the target audience develops these wants or needs. In renting case, on this stage it is important for a rational consumer to understand, whether he/she wants to own the good, or it is more important to use it efficiently.

2. Information search

On this stage information is being gathered about stuff and on things from internet, people (recommendations) and previous experiences. This stage is also about risk management. The potential customer might weigh all advantages and disadvantages, that can help him/her with the decision. In case of renting, on this stage it is important for a potential consumer to have a previous experience of renting, or some external sources that will bring to his mind the idea that renting is also a solution. This is because it is a common situation, when a potential consumer doesn't even think about renting, because it is not a frequent behavior model. For a renting company it will be the most effective to catch consumer's attention when he/she is on this stage. Attention is necessary for information to be perceived for it to activate people's senses, it reflects how much mental activity consumers devote to a stimulus exposed to them by marketers. Attention enables consumers to learn more efficiently from their exposure to marketing stimuli and make more informed decisions. That is why it is crucially important to catch consumers' attention to make them think about the product and later consider the possibility to buy it or rent. Getting attention is a necessary element of the chain from MOA to purchasing decision.

3. Evaluation of Alternatives

On this stage the potential customer asks himself if he really needs the product/service? Maybe there is a better choice somewhere? Consumers compare and analyze prices, quality, reviews and other factors to choose the product, which will satisfy him/her mostly. The cycle of stages 2-3 can be repeated several times until the 4th stage will be reached. Talking about the renting process, this stage will be crucial for analysis, because on this phase consumer will decide, whether he will rent or buy the good.

4. Acquiring (Renting)

When the consumer has made his decision of what exact product and where he/she wants to purchase it. The final decision can be reached in different ways:

- The customer has already evaluated all the facts and came to a logical conclusion,

- The customer's decision was driven by emotional connections/experiences

- The customer was influenced by advertising/marketing campaigns,

- Most frequently, a combination of some or all factors above

5. Finally, post purchase satisfaction or dissatisfaction

On the final stage the customers answer the question: if this purchase was the right decision for him or her? Did the product meet the expectations and match on the promises of advertising? Post Purchase satisfaction or dissatisfaction is a key stage for both: the company and the customer.

If consumer is satisfied with the product or the service, he/she will most likely become an ambassador, who will help in attracting other potential customers through recommendations on the stage 2. Conversely, if the product/service did not match customer's expectations, through word of mouth it can stop potential customers from purchasing your product. Therefore, it is highly important to pay attention to the post purchase stage, and not to forget about its value.

Consumer involvement is a variable that explains how consumers process the information and how this information can influence their behavior related to decision making. The level of involvement has a very significant effect on consumer behavior. According to Herbert Krugman (2008), a researcher known for his contribution to the concept of consumer involvement, consumers approach the marketplace and the corresponding product/service offerings with varying levels and intensity of interest and personal importance. In general, involvement is defined as "the general level of interest

in the object, or the centrality of the object to the person's ego-structure" (Day, 1970, p. 45). In other words, the level of product involvement is the level of a consumer's interest in purchasing a certain product type and how committed they are to purchasing a given brand[4].

High involvement product category is including products where extensive analysis is involved and a lot of factors are weighed before the customer eventually makes a purchasing decision. High involvement goods are described as those purchased less frequently, inevitably more complicated, costlier in nature, which the consumer is prepared to spend considerable time and effort searching for. Transport and real estate sectors are two common examples of high involvement products. High involvement product category yield higher risk rates for consumers if they fail to meet buyer expectations (Tanner M., 2012). The key features of a high involvement product category are:

1) A high price - The primary point about a high involvement product is that its price is high. The consumer thinks twice before the purchase, because of the high price. However, the price is a subjective characteristic.

2) Differentiation is important - The greater the product involvement is, the greater should be the differentiation between the product or the manufacturing brands.As an example, Mercedes vs Volvo. These are 2 cars at approximately same price level. They are differentiated by a lot of points and those differentiating factors are necessary. These factors create sufficient value to incite the consumer to make a decision.

3) Customer perceived risk - Since the product's price is high and since the buyer has tremendous expectations from a highly involved company, there is a perceived risk involved in purchasing the product. Example: A company decides to purchase a laptop for their new employee. This is a purchase with a high level of involvement. Of course, since the company spends a relatively large amount for the new machine, they have the fear that the laptop should be high performing and efficient enough. Otherwise, if the machine will be underperforming, the employee will be less efficient and all the money invested will be wasted.

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[4] http://www.businessdictionary.com/definition/product-involvement.html

4) Information search - Another essential feature of high involvement products is the amount of time consumers spend to analyze data about the product prior to purchase. If you want to buy a camera or a smartphone, you will research a lot about the differences between different brands, reed reviews and ask your friends for feedback and advice.

On the other hand, low involvement product category is related to products where the consumer doesn't have to think much before buying the product. There really isn't much risk associated with purchasing of such products, resulting in a much faster decision-making process. Products with low involvement are described as those purchased relatively regularly and less expensive: They are purchased regularly and with minimal thought and effort, because they are not of critical concern and have no significant effect on the lifestyle of the customer (Murphy & Enis, 1986; Radder & Huang, 2008; Fish, 2009; Tanner & Raymond, 2012). Therefore almost all FMCG products can be assigned to low involvement category. The key features of low involvement product category are:

1. Low price - One of the initial features is that the product's price is usually lower. The customer does not think twice before making the decision, since the price is lower. An example is a soap. A soap has a relatively low price and almost all soaps are doing the same thing.

2. Low risk factor - As the price is lower, the purchase of the product does not involve a risk. The product is easily returnable or replaceable. And therefore, a consumer doesn't get heavily involved in buying such a product. Example – When buying a pack of cookies for himself, a consumer will think much less, but he might think longer and more deeply when buying a bed for his child.

3. Not much differentiation - It is very difficult to differentiate the low involvement products. Take the Twix or Kit-Kat, or Head-and-Shoulders and Nivea competition. If Head-and-Shoulders isn't available, the customer will purchase Nivea or any other available shampoo brand. It is not so easy to differentiate between the products, thus making the product a low involvement product.

4. Brand switching - Since there is not much differentiation and as the purchase risk is minimal, there is heavy brand switching wherever purchases involve low involvement. Customers can not adhere to a particular company and innovators and adopters may tend to try out different products on the market.

5. Availability and distribution - distribution is a characteristic that can make a low involvement product a success. That is why Nivea and Dove are always at loggerheads. We see related activity from other FMCG-sector labels. Product quality is a significant decision-making factor.

6. Repeated purchase - Another aspect that renders a company a company is frequent buying of the same commodity as a low participation product. For example: - a customer often used Dove as a shampoo. And he still buys the same. To buy a soap from the market is a no brainer. But if for the first time he is going to buy something new he might think a little bit more.

The decision-making process in consumer behavior is strongly dependent on the level of involvement with the product category considered. Therefore, it is crucial to consider the influence of the factors, drivers and barriers on different product categories and find out if there is a difference in the perception of these barriers when renting a low-involvement product and a high-involvement product. For this study two different products of two different involvement levels were analyzed. Video cameras are widely used as an example of the high involvement category in scientific articles and researches (Bin Gu, Jaehong Park, Prabhudev Konana 2012). Therefore, an action camera was chosen as a high involvement product for this research, as it is expensive, highly self-expressive, and purchased infrequently. Simple toys are considered as an example of a low involvement product category (Dona Vitale, 2006). For this reason, using my judgment and given the respondents' profile, I selected a volleyball as an example of a low involvement category product for this study. A volleyball is perceived as a low involvement product, since it is relatively cheap, it is usually bought with a minimum of thought and effort, this category is not of vital concern nor has any great impact on the consumer's lifestyle (Dona Vitale, 2006).

1.2.3. Factors, influencing consumer behavior in sharing economy

There is a large number of researches, that examine factors, influencing consumer behavior in general. Research papers, that analyze factors influencing consumer behavior in sharing economy can be found much less frequently. In many well-established theoretical models, such as the "tragedy of communities", the "prisoners' dilemma," game theory, and "the logic of collective action," the prevailing understanding is that human behavior is driven by selfish interests. All three theoretical approaches argue that in many situations it would obviously be more profitable for individuals to cooperate with each other. In this case, there are certain principles that determine joint activity. The main ones are the boundaries of membership and the building of trust, helping to overcome barriers to the adoption of the concept of co-consumption (Ostron, 1990)

Most common approach in research papers is to classify all factors influencing Consumer Behavior in sharing economy to 4 groups: economic, social, personal and environmental (Slobodchuk, 2012). Talking about motivations of consumers to use sharing economy companies, there are several

studies, in which different factors were defined. The motivations from consumer perspective determined by different authors are presented in Table 6.

Variables	Researcher
Enjoyment, Independence through ownership, Modern style and social experience	Hawlitschek and Teubner [20]
Cost savings, Familiarity, Trust and utility	Möhlmann [6]
Price sensitivity	Liang, Choi, and Joppe [21]
Price, Functional attributes, Unique and local authenticity, Novelty, Travel bragging, and sharing economy ethos	Guttentag and Smith [22]
Subjective norms, Perceived behavioral control, PerceivedValue, Unique experience expectation, Familiarity, eWOM	Mao and Lyu [23]

Table 6. Motivations from consumer perspective.

On the other side, there are only a few researches, that explore the motives of suppliers to participate in sharing economy market. The drivers from lenders' perspective are presented in Table 7.

Variables	Researcher
Enjoyment in Sharing, Income, Product Variety, Social Experience, Social Influence	Hawlitschek and Teubner [20]
Income, Social Interaction, Sharing (Unused Space)	Karlsson and Dolnicar [24]
Economic, Social, Environmental	Böcker and Meelen [5]

Table 7. Motivations from provider perspective.

The following factors that motivate consumers to participate in sharing economy were identified:

Many recent studies mention a cost-saving or economic benefit factor as one of the key ones: Mont claims that the satisfaction of participating in car rental services will be affected by cost savings due to the lack of an initially large amount of investment (Mont O. 2004). Lumberton and Rose believe that as sharing costs are minimized and utility is maximized compared to ownership, the propensity to choose a sharing system will increase.

Secondly, community membership or the desire to become part of it is also one of the determining drivers of sharing practices (Neilson LA. 2010). In one of their chapters in the book "From Generation to Generation", Bottsman and Rogers argue that today's generation of Facebook seeks to connect with like-minded people in online and offline communities, allowing them to practice co-consumption (Parente et. Al, 2017). Albinsson and Perera emphasize that the community is the main incentive for (regular) participation in joint events. They argue that people use communities to

exchange knowledge and goods for ideological and practical reasons (Albinsson PA, Perera BY, 2012).

Thirdly, the environmental impact is illustrated as one of the factors of participation in joint consumption. Hamari believes that in times of growing skepticism about capitalist structures and anti-consumption movements, alternative forms of green, ethical, or sustainable consumption are gaining more and more popularity (Hamari et.al., 2014). Since the combination of wealth leads to an increase in the intensity of use of one product. Less materials are needed for production, waste is reduced, there is no overproduction and excessive environmental pollution (Botsman R., Rogers R., 2010)

The fourth driver is based on the fact that Internet platforms (especially for C2C) contribute to many sharing services. Networking connects many consumers who want to share their products with each other. In addition, electronic market platforms reduce previously high search and transaction costs, as well as shorten the gaps between them. They create trust and reputation mechanisms in anonymous markets (e.g., rating and feedback) and offer integrated payment functions (e.g., payments on social networks) that provide easy and reliable compensation for using the services (Slee T. 2013).

Additional drivers were also identified: the possibility of generating income, the possibility of self-expression, a wide range of product choices, product quality and social interaction generated by participation in the joint consumption (Hawlitschek F et. Al., 2016).

In addition to the factors that motivate users and owners to use sharing economy, it is also necessary to keep in mind the factors that prevent consumers from collaborative consumption. There are few such factors formulated at the moment: these are lack of faith, unwillingness to lose the sense of ownership, inconvenience of using the sharing-economy system, the conviction that it is more profitable to buy, lack of understanding how to use the sharing economy etc. (Kim, 2019)

One of the main factors that motivates consumers to choose a purchase against a lease is the factor of "Ownership". Consumers enjoy the feeling of ownership, they believe that having benefits in ownership is a status symbol, which means that people with a lot of ownership have a higher status. This factor encourages people to store things at home that they do not use on an ongoing basis. The most common answer in this case is "what if this thing is still useful", "what if I need it one day"

Henning Turau believes that awareness of the sharing option also plays an important role. Indeed, some consumers may be reluctant to use the service for the first time, because they have no experience, but do have concerns (Henning-Thurau et. Al., 2007). Consumers are likely to perceive renting as something *effortful and time consuming*. Indeed, in order to rent a product, you need to find a suitable advertisement, contact lender, arrange a suitable meeting time, check the product, leave a

deposit, and then, using it as intended, return it back. The algorithm looks too complicated and further the consumer's decision depends on how much he evaluates the benefits of the lease in comparison with the purchase. In this regard, you can often hear the phrase "It's easier to buy." According to Shaheen S, perception is the most significant factor and if even after controlling for all costs and benefits, consumers will find it *difficult* to access the product, then the attractiveness of sharing systems will drop (Shaheen S et al, 2016). According to Lumberton, an important barrier relates to non-monetary costs associated with training and exploring options for using unfamiliar products. People are also stopped by "search costs" expressed in money or in the effort needed to determine which product to rent or in which joint consumption program to participate (Lamberton C. P., Rose, 2012)

Khavlicek also highlights such barriers as a sense of independence through property, perceived prestige from property, loss of confidentiality, lack of trust and the possibility of procedural risks. The latter two aspects are quite important in terms of sharing economy. People believe that interacting with a stranger can be dangerous, especially when it comes to money. It's difficult to trust one another when the relationship is not controlled by law and order: both people are not feeling secure in financial and physical terms. Trust is an important feeling that provides users with confidence in the reliability of the supplier and a sense of security during use or transaction. In addition, it may also apply to other users with whom the service is shared (Wirtz J, Lwin MO. 2009). In his later work, Ostrom emphasized that trust and reciprocity are the main variables that explain why people are not inclined to collaborate with each other (Cox JC, 2009). Therefore, the "riskiness" factor, which means lack of trust and reliance from both sides (leasers and renters) is a significant barrier to be analyzed in this research.

As it was mentioned before, reliability and trustworthiness are the key issues of sharing economy and the challenge of the model is to decrease its riskiness for both: lenders and renters. As one of the objectives of this research is to create recommendations for companies that are developing sharing economy in consumer goods industry, it is useful to analyze case studies of the most successful sharing economy companies and to identify approaches that they use to overcome the "riskiness" barrier. The solutions of four following companies were examined: Airbnb, Uber, YouDo and Avito.

1.   Airbnb, Inc. is an online marketplace where guests can arrange or lend accommodation, mainly homes or experiences. The organization has no real estate listings, nor does it create activities; it acts as a broker, earning fees from each reservation[5].

The reliability and trustworthiness in this company are delivered through several tools. First of all, each user of the service has a unique profile. In order to book or host, the user will be asked to include his/her full name, birth date, phone number, payment information, and email address to Airbnb. The passport is not always obligatory. The profiles are used for hosts and other guests to get to know each other. The option of reviews is provided on the platform as a tool to check if the person is reliable. If someone is curious about how did a potential guest or host behave within the sharing, he/she could look at the reviews. Guests and hosts can leave feedback to each other only after the booked stay is over, so all the feedback is based on actual experiences.

Secure payments are the second tool Airbnb uses to lower the riskiness factor. Airbnb secure platform ensures that the payment gets to the host—that's why they ask you always pay through Airbnb platform. This way the service acts as a financial facilitator, that protects both sides of users from fraud.

Thus, the key approaches of Airbnb are the reviews and secure payments via the platform.

2.   Uber is a multinational ride-hailing business providing services including peer-to-peer ridesharing, hailing trips and food delivery.

The reliability and trustworthiness in this company are delivered through a bit different tools First of all, it is necessary for a driver to undergo a multi-step safety screen before he can drive with Uber, including being checked for driving violations, impaired driving, violent crime, and other controls. Additionally, each year Uber rescues drivers and uses technology to search for intermittent problems. However, the users are registered using emails and telephone numbers and therefore they cannot be checked. For this reason, the ratings system is implemented as a solution. The drivers and the users can leave a rating to their opponent after the ride based on their experience. The ratings are open to everyone, and the higher the rating, the greater the likelihood that the ride will take place and the opponent will not cancel it.

Thus, key approaches of Uber are ratings, and id verification of drivers.

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[5] https://www.Airbnb.com/

3.   YouDo — is a convenient service that allows to quickly and safely find reliable performers for solving domestic and business problems. It is easy to submit the task to the service, and in a few minutes to start receiving offers from the performers who will be ready to fulfill it.

Contractors undergo a special check by the service (just as in Uber) so YouDo is safe for its customers. A "Risk-free Transaction" service allows contractors and customers to collaborate safely on YouDo. The cost of the task is debited from the customer's bank card, reserved until the task is successfully completed and transferred to the bank card of the contractor.

Thus, key approaches of YouDo are anti-fraud regulations and online payments via the platform.

4.   Avito is a classified Russian advertisement platform with divisions allocated to general products for sale (and rent), work, real estate, cars for sale, and services.

The only security option of Avito is the *reviews* option. Buyers, owners and renters can leave reviews to each other and therefore, the future users can rely on the feedback on the previous experience of their potential opponents.

Thus, the approaches that the "giants" of sharing economy use in order to overcome the "riskiness" barrier were observed. These tools can be divided into two groups:

1)   Peer-to-peer evaluation based on reviews or ratings for all participants (both: lenders and renters)

2)   Direct regulatory approach based on mandatory id registration, anti-fraud regulations and online payments via the platform

These approaches will be examined in the experimental part of this research. The effectiveness for both sets of tools will be tested and compared for consumer goods sharing sector. The results of this analysis will be used to create recommendations for companies that are developing sharing economy in consumer goods industry.

Barrier and driver assessment results can help managers of sharing companies to find out which groups of people have a typical attitude to the process of such a new type of use of things that will help them formulate the right marketing strategies and influence risk perception and, as a result, the tendency to participate. There are many diverse sharing services, however, to effectively manage them, it is necessary to study directly the drivers and barriers of participation in a particular industry

and a specific country, with its specifics and characteristics. It will be interesting to understand what factors and biases affect the consumer in the studied industry particularly, and how their impact differs from other sharing economy industries, which are more successful. Therefore, the one of the goals of this research is to figure out if the barriers highlighted above are applicable to consumer behavior in consumer goods industry of sharing economy and how precisely are they affecting consumer behavior in this sector particularly.

1.3. Conclusion and hypotheses

This literature review starts with an observation of existing definitions and classifications of sharing economy. Additionally, consumer behavior was investigated as a phenomenon and the factors affecting consumer behavior in sharing economy were observed.

Sharing economy is developing at an ever faster pace every year as it has various advantages for society and the economy. However, the development of this industry is uneven. On one hand there are so-called giants (Airbnb, Uber, Lyft), which are operating in successful areas of sharing economy, which are mobility and hospitality. On the other hand, there are weaker areas in which people are reluctant to switch from a traditional model to sharing. At the moment there is a large number of scientific papers that explore consumer behavior in sharing economy in general as well as the experience of successful companies from this industry. However, studies that examine the reasons why some fairly promising areas of peer-to-peer economy are not developing and the ways of improvement of this issue have not yet been studied and backed up by solid empirical proofs.

Thus, the research gap lies in the fact that these industries are under-researched in the field of sharing economics, so the purpose of this study is to find out first of all, why do people buy goods, instead of renting? What can the sharing platforms do to improve the situation and reduce the influence of the barriers? Accordingly, the following research questions were stated:

RQ1 What barriers influence consumer behavior in consumer goods industry of sharing economy?

RQ2 How do these barriers influence consumer behavior in consumer goods industry related to the level of product involvement.

RQ3 What approaches are applicable and effective for companies from consumer goods industry of sharing economy?

In the course of the literature review, the main factors that prevent the consumer from using the sharing economy model were identified and discussed. "Difficulty" and "riskiness" factors were chosen as the key ones for this research and with the aim to check how applicable they are for the consumer goods industry. Therefore, first of all, starting with the first hypothesis, we want to check whether the difficulty of the process, i.e. "the time amount and effort perceived to be spent on the action", prevents consumers from renting and pushes them to buy, even when the purchase can be perceived as economically irrational.

H1a: Renting a product is perceived to be relatively more difficult than buying.

The second hypothesis that we want to test is similar to the first, but it relates to another factor: trust between the renter and the lender. The riskiness rate in this case is understood as the level of physical and financial safeness of the process discussed.

H2a: Renting a product is perceived to be relatively riskier than buying.

It was also displayed in the literature review that the design-making process in consumer behavior is strongly dependent on the level of involvement with the product category considered. Therefore, it is crucial to consider the influence of the above factors on different product categories and find out if there is a difference in the perception of these barriers when renting a low-involvement product and a high-involvement product. For this reason, the following two hypotheses were formulated:

H1b: Relative difficulty in renting a product is more pronounced in low (vs. high) involvement products.

H2b: Relative riskiness in renting a product is more pronounced in high (vs. low) involvement products

3) It was also discussed in the theoretical part of this study that there is no full-fledged legal regulation of the shared consumption relations at the moment and this is a significant challenge of the sharing economy industry. There are approaches that facilitate reducing the impact of the "riskiness" barrier and increase the safeness perception of the peer-to-peer renting process. We examined the approaches of the most successful companies from different industries of sharing economy and identified the two most popular approaches: peer-to-peer feedback based on reviews for all participants (both: lenders and renters) and direct regulatory approach based on mandatory ID registration, clear rules, anti-fraud regulations and penalties. We want to check whether these approaches are suitable for the consumer goods industry and which of them is the most effective for

this area. In order to formulate the hypotheses, three variations of sharing platforms are presented: A, B and C. The features available within each platform, are presented in the table 8.

	Platform A	Platform B	Platform C
Information on how to use the platform	Available	Available	Available
Customer reviews	Not available	Available	Not available
Id registration and anti-fraud regulations	Not available	Not available	Available

Table 8. Platforms' features

Since we want to find out which of the platforms (i.e. which of the approaches) will be the least risky perceived. Therefore, the following hypotheses were investigated:

H3: For low involvement product categories, different measures applied by sharing platforms have different effects on consumers' risk perceptions. More specifically;

> *H3a: Sharing platforms offering only "peer-to-peer evaluation" are perceived less risky than platforms offering only "anti-fraud regulations".*

> *H3b: Sharing platforms offering only "anti-fraud regulations" are perceived less risky than platforms that do not offer any measures.*

H4: For high involvement product categories, different measures applied by sharing platforms have different effects on consumers' risk perceptions. More specifically;

> *H4a: Sharing platforms offering only "peer-to-peer evaluation" are perceived less risky than platforms offering only "anti-fraud regulations".*

> *H4b: Sharing platforms offering only "anti-fraud regulations" are perceived less risky than platforms that do not offer any measures.*

All in all, this chapter offers a summary of previous work that was done on the topic studied. It helps in understanding what is the sharing economy model, which advantages and challenges does in have and which factors or barriers are influencing consumer behavior within the industry as a whole. In this regard, the experience of the most successful companies in this field has been studied and two most popular approaches that are used to reduce the impact of barriers in this area have been identified. Moreover, it was highlighted that the level of involvement of the consumer with the product category

is crucial in terms of consumer's decision making process. Finally, the research questions and hypotheses for this study are formulated on the basis of the prior literature.

2. RESEARCH METHODOLOGY

2.1. Research Methodology Overview

Based on the specifics of the study area, two key methods were selected for this research:

a. Literature review (that is discussed in this paper's first chapter)

b. Experiments (that are integrated in 6 versions of a survey)

These methods will help to obtain two types of information:

- Secondary data from the *scientific articles* and *existing case studies,*

- Primary data from the experiments

The analysis of secondary sources of information through literature review, as well as the study of approaches and practices used by the leading companies in the sharing economy market, led to a number of conclusions, thereby formulating the methodology of this study. Firstly, due to the fact that the rapid growth of shared consumption services began not so long ago, there are not so many studies on the identification of barriers and drivers among foreign and especially Russian scientists. Moreover, research on this topic is mostly devoted to the entire industry of the sharing economy, and only a small fraction of them is aimed at studying narrower industries: Hospitality or Mobility industries, which are leaders in the sharing economy industry. However, almost no complete work was found on other industries of sharing economy, and especially the consumer goods industry. Therefore, it is necessary to figure out how are the factors affecting participation in joint consumption generally applicable to sharing services in consumer goods industry.

As it was highlighted in the previous research, there are two barriers for using sharing economy model to be analyzed:

1. Difficulty. People consider peer-to-peer renting as something time consuming, effortful and difficult to do. It is necessary to find a lender via a special renting platform, to get in touch, to agree on the time and place of meeting, to check the item, leave the deposit, and finally return the item to the owner. A common response of the customer is: "It is easier to buy"

2. Riskiness. People believe that interacting with a stranger can be dangerous, especially when it comes to money. It's difficult to trust one another when the relationship is not controlled by law and order: both people are not feeling secure in financial and physical terms.

The first objective of this study is to figure out whether the barriers described above affect consumer goods industry of sharing economy and to estimate the level of significance of these barriers in this industry.

Imagine the following circumstances. You are going to a picnic with your friends. You plan to play volleyball together for a change, but none of you has a ball. You have accepted to find a volleyball for your friends. You have 2 options:

1) You can buy it from a store for the full price and keep it at your home afterwards

2) You can rent it temporarily for a lower price from another person via a platform that allows renters and lenders to find each other.

What are you going to do in this situation?

As it was discussed in literature review, even though sharing economy model is gaining its popularity increasingly, people are still more likely to buy than to rent even if they don't really need the purchase more than once. This applies to the sharing economy as a whole, and most likely to the consumer goods industry in particular. One could say that a volleyball is cheap enough to search for even cheaper options of using it. Indeed, a volleyball is perceived as a low involvement product, which means it is bought with a minimum of thought and effort because this category is not of vital concern nor has any great impact on the consumer's lifestyle (Marketingprofs, 2008).

Imagine slightly different circumstances: You are planning a trip and you want to capture sports activities such as surfing or skiing during the trip. You don't have an action camera and it is impossible to use your smartphone to make such shots. Again, you have 2 options: to buy it from a store for the full price and to rent it temporarily for a lower price from another person via a special platform.

An action camera is a high involvement product, which means that it is expensive, risky, and purchased infrequently and are highly self-expressive. The purchase of high involvement products is followed by complex buying behavior, consumers perceive significant difference among brands (Kotler & Armstrong, 2008). If a product is used rarely and its purchase price is quite high, it seems that rental option will be economically more rational than the buying one. Nevertheless, people are buying new action cameras and using the gadget at most once or twice a year afterwards. If the economical rationality is not a significant driver for people to rent in this case, other factors and barriers should be taken into consideration.

As thy analysis of previous research has shown, no studies have yet been conducted that reveal the specific barriers affecting the use of the sharing model based on the level of involvement (high or low involvement product category). In our case, this study also significant, since the level of involvement is one of the crucial factors of consumer decision making (Jain M., 2018). This study is useful to evaluate and compare the impact of the highlighted barriers on consumers' decision to purchase/rent products of different involvement levels. Therefore, the second objective is to examine and compare the perception of these barriers related to renting a high-involvement product and a low involvement one.

The last objective of this research is to create recommendations for companies that are developing sharing economy in consumer goods industry. For this reason, case studies of the most successful sharing economy companies were investigated and the two most common approaches they use to work with the "riskiness" barrier were identified:

4) Peer-to-peer evaluation based on reviews for all participants (both: lenders and renters)

5) Direct regulatory approach based on mandatory id registration, clear rules, anti-fraud regulations and penalties

In order to understand whether these practices can be recommended for companies from of consumer goods industry in sharing economy, it is necessary to check whether the above approaches work in this industry and, if so, it is necessary to identify which of them shows higher results regarding the risk and distrust barrier reduction in the studied area.

The studies concentrate on a specific problem or, in other words, a situation study to clarify the relation patterns between variables. Experiments are the most common methods of primary data collection in studies designed for causal analysis. The aim of this method is to test different assumptions (hypotheses) by trial and error under conditions established and managed by the investigator. One or more conditions (independent variables) are permitted to change during the experiment in an organized manner and the effects of these changes on associated conditions (dependent variables) are measured, recorded, validated and analyzed for arrival. (Gneezy, A., 2016)

This method is beneficial in terms of strict granting of data collected to the research problem's objectives. In addition, the data-gathering technique is strictly regulated. This also has its drawbacks, though, as the method is very laborious and often costly, however, it covers a large number of users.

Since this study is useful for developing recommendations on attracting customers to participate in the sharing economy (SE), therefore, those who use shared consumption services and those who do

not yet use but know about them can participate in the survey. At this stage, a quantitative study is selected as the most appropriate method for addressing the research questions stated for this research.

The field experiment consists of 2 parts. The first is based on an assessment of the influence of the selected factors on the consumer under various circumstances (buying vs renting, low involvement product category vs high involvement product category). The second part is aimed at assessing the effectiveness of existing approaches to work with the "riskiness" barrier in consumer goods sharing industry.

In conclusion, empirical work will be carried out in this paper, where methods such as literature review, survey and field experimentation are used. The data gathered from the survey with experiments will be further analyzed and the practical implications will be reported based on the results. Statistical methods such as Cronbach alpha, independent t-testing, paired t-test and one-way ANOVA, box plot visualization will be used for the data analysis.

2.2. Experimental design

As it was already mentioned in research methodology overview part, field experiments are conducted for this study. Experiments are useful for testing the actual behavior of people under different conditions. This way consumers are being faced with choices to make under different influencing factors, and it is being possible to observe in practice how consumers actually react under influence of test factors.

Under the first part of the experiment conducted for the current research, there are two versions, which means that all respondents were randomly assigned to one of the versions (invited to imagine different circumstances). Participants are asked to imagine that they temporarily need a specific product that they don't use too often. Respondents have 2 options: to buy the item from a store for the full price and keep it at their home afterwards or to rent it temporarily for a lower price from another person via a platform that allows renters and lenders to find each other. The only difference between the versions is that the first one will consider a volleyball as the needed item and the second version will consider an action camera.

A volleyball is a product from a low involvement category, which means that its price is relatively low, differentiation between the products is not so easy and therefore consumer does not need to think too much before purchasing the product.

An action camera on the contrary is from a high involvement category, because its price is relatively high, a large differentiation is required between the product or the brands and therefore extensive thought process is involved and the consumer considers a lot of variables before finally making a purchase decision.

This way, the influence of the two factors ("riskiness" and "difficultness") will be examined applicable to two products with opposite level of involvement.

The experiment was conducted in online survey format, which was considered as the most efficient one it terms of self-isolation circumstances. As it was highlighted above, for the first part of the experiment all respondents were randomly allocated to two versions of survey (approximately 200 people for each). It is crucial that each participant gets only one version of the questionnaire and is unfamiliar with other versions of a survey.

The situations proposed in both versions are presented below.

Versions #1, #3, #5 (low involvement product category)	Versions #2, #4, #6 (high involvement product category)
Imagine the following circumstances:	Imagine the following circumstances:
You are going to a picnic with your friends. You plan to play volleyball together for a change, but none of you has a ball. You have accepted to find a volleyball for your friends.	You are planning a trip and you want to capture sports activities such as surfing or skiing during the trip. You don't have an action camera and it is impossible to use your smartphone to make such shots.
You have 2 options:	You have 2 options:
1) You can buy it from a store for the full price and keep it at your home afterwards 2) You can rent it temporarily for a lower price from another person via a platform that allows renters and lenders to find each other.	1) You can buy it from a store for the full price and keep it at your home afterwards 2) You can rent it temporarily for a lower price from another person via a platform that allows renters and lenders to find each other.

Having become familiar with the situation, participants of both survey versions were asked to respond to the scale items.

First of all, their likelihood to buy vs rent under the presented circumstances was measured. All questions were evaluated through Likert scale, with answers ranging from 1 (disagree strongly) to 7 (agree strongly). This scale was selected to get more detailed data from the respondents and specifically to make the survey generally more consistent.

Secondly, the influence of the "difficultness" factor was measured in terms of renting and in terms of buying. As it was mentioned before, in this study the "difficultness" factor is interpreted as "the time amount and effort spent on the action is perceived as too high". Therefore, there are two metrics examined for the "difficultness" factor: time and effort. The questions, for this step are presented in the Table 9. The first two questions are related to renting and the last two are related to buying the item.

Versions #1, #3, #5 (low involvement product category)	Versions #2, #4, #6 (high involvement product category)
1. I think that the process of renting a volleyball is time consuming 2. I think that the process of renting a volleyball is effortful for me 3. I think that the process of buying a volleyball is time consuming 4. I think that the process of buying a volleyball is effortful for me	1. I think that the process of renting an action camera is time consuming 2. I think that the process of renting an action camera is effortful for me 3. I think that the process of buying an action camera is time consuming 4. I think that the process of buying an action camera is effortful for me

Table 9. Questions related to renting and buying the item.

Thus, the data will be gathered in order to verify the first two hypotheses:

1. *H1a: Renting a product is perceived to be relatively more difficult than buying.*

In order to test this hypothesis, 2 paired t-tests will be conducted for low and high involvement products categories respectively. This way the influence of "difficultness" factor for renting and buying will be compared. The test will show if the attitude to buying and renting significantly differs within 1 sample regarding "difficultness" factor.

2. *H1b: Relative difficulty in renting a product is more pronounced in low (vs. high) involvement products.*

An independent t-test will be conducted to verify this hypothesis. This way the influence of "difficultness" factor linked to high- and low-involvement products will be compared. The independent t-test will show if the rental attitude differs significantly between 2 samples (low and high involvement) with respect to "difficultness" factor.

Before conducting a t-test in every hypothesis, an F-test will be executed in order to check variances' equality. It will be done in order to prove that data spread in each sample does not significantly differ between the two tested samples. All statistical data analysis will be performed via MS Excel Data Analysis Toolkit due to relatively small data samples and basic statistical methods described in this chapter.

The next step was to measure the influence of the "riskiness" barrier in terms of renting and buying. As it was mentioned before, in this study the "riskiness" factor is interpreted as "the physical and financial risk" or in other words, "the action is perceived not safe enough in terms of physical and financial risk". Therefore, there are two metrics examined for the "riskiness" factor: physical safety and financial safety. The questions, for this step are presented in the Table 10. Questions #1 and #2 are related to the renting process while questions #3 and #4 are related to buying the item.

Versions #1, #3, #5 (low involvement product category)	Versions #2, #4, #6 (high involvement product category)
1. Renting this item from an individual person along with providing a deposit is not physically safe for me 2. Renting this item from an individual person along with providing a deposit is not financially safe for me 3. Buying this item from an individual person along with providing a deposit is not physically safe for me 4. Buying this item from an individual person along with providing a deposit is not financially safe for me	1. Renting this item from an individual person along with providing a deposit is not physically safe for me 2. Renting this item from an individual person along with providing a deposit is not financially safe for me. 3. Buying this item from an individual person along with providing a deposit is not physically safe for me 4. Buying this item from an individual person along with providing a deposit is not financially safe for me.

Table 10. Questions related to renting and buying process.

These items will help with collecting the data for hypotheses H2a and H2b testing:

H2a: Renting a product is perceived to be relatively riskier than buying.

In order to test this hypothesis, 2 paired t-tests will be conducted for low and high involvement products categories respectively. This way the influence of "riskiness" factor for renting and buying will be compared. The test will show if the attitude to buying and renting significantly differs within 1 sample regarding "riskiness" factor.

H2b: Relative riskiness in renting a product is more pronounced in high (vs. low) involvement products.

An independent t-test will be conducted to verify this hypothesis. This way the influence of "riskiness" factor linked to high- and low-involvement products will be compared. The independent t-test will show if the rental attitude differs significantly between 2 samples (low and high involvement) with respect to "riskiness" factor.

Thus, through the results of the first part of the experiment it is expected to figure out how are the "riskiness" and "difficultness" factors affecting participation in joint consumption in consumer goods industry. Moreover, the influence of the these two will be examined applicably to two products with opposite level of involvement.

The second part of the experiment is conducted to assess how effective are approaches that are used in leading industries of sharing economy to reduce the "riskiness" barrier in terms of consumer goods industry.

As it was highlighted in literature review, the two most common approaches to reduce the "riskiness" barrier were identified among successful sharing economy companies:

1) Peer-to-peer evaluation based on reviews for all participants (both: lenders and renters)

2) Direct regulatory approach based on mandatory id registration, clear rules, anti-fraud regulations and penalties

Therefore, three 3 versions were created: one control group and two experimental ones (for which the managerial intervention is applied). The experimental groups are exposed to modifications in the testing of the independent variable. The values of an independent variable and the result that they cause on a dependent variable are then recorded. It should also be mentioned that at one time an experiment may comprise several experimental groups. Control group is detached from the rest of the experiment, which means that, the independent variable being tested cannot influence the final outcome(s) (Helmenstine, 2017).

In this part of experiment participants are asked to imagine that they could rent the item (volleyball or action camera) via a special platform. The participants got acquainted with the fact that a renting platform is a web platform that allows renters and lenders to find each other and connect. It was also indicated that renting platforms may contain different sets of capabilities, which is shown in the Table 11:

	Platform A	Platform B	Platform C
Information on how to use the platform	Available	Available	Available
Customer reviews	Not available	Available	Not available
Id registration and anti-fraud regulations	Not available	Not available	Available

Table 11. Platforms' features

Three types of sharing platforms are presented in the table above: The Platform B (given to the first experimental group) has the option of leaving reviews to lenders and renters and to observe the other reviews. It is expected that potential renters are likely to trust the feedback of other people and to build their decisions depending on the lenders' ratings. The Platform C (given to the second experimental group), on contrary, doesn't provide a review option, but on the other hand, it implemented a direct regulatory approach based on mandatory id registration, clear rules, anti-fraud regulations and penalties. The Platform A (given to the third experimental group), that is the control, doesn't have any options besides the traditional one: it allows renters and lenders to find each other and connect and also provides the information on how to use the platform.

The participants were randomly assigned to 3 survey versions: 1 version for control group and 2 versions for experiment groups. Each version was split into 2 subversions: the first on was responding to the situation related to low involvement product category and second one was responding to the situation related to high involvement product. Thus, 6 different versions of questionnaires were created (Appendix 1). The questionnaire versions were the following: Versions #1, #2 and #3 were responding to the questions related to the low involvement product (the volleyball). On the same time, versions #4, #5 and #6 were responding to the questions about the high involvement product (the action camera). For the second part of the experiment the versions #1 and #4 were evaluating the Platform A (so these groups were considered as control group for this part of the experiment), versions #2 and #5 were evaluating the Platform B, and versions s #3 and #6 were evaluating the Platform C (Table 12).

	Version #1	Version #2	Version #3	Version #4	Version #5	Version #6
Involvement category	Low	High	Low	High	Low	High
Platform	A	B	C	A	B	C

Table 12. Survey questions about the riskiness barrier within different platform capabilities.

Each respondent gets information and following questions based on one platform only (either A or B or C). After reviewing the information on platform features, the participant is asked to imagine that he(she) could rent the item (volleyball or action camera) via the platform described. Based on the information provided, the respondents are asked to answer the two questions.

In order to evaluate the effectiveness of the highlighted approaches, the following questions (Table 13) were asked regarding the influence of the "riskiness" barrier within different platform capabilities.

Versions #1, #3, #5 **(low involvement product category)**	**Versions #2, #4, #6** **(high involvement product category)**
1. Renting the volleyball from an individual person via platform A (B or C) is not physically safe for me 2. Renting the volleyball from an individual person via platform A (B or C) is not financially safe for me	1. Renting this action camera from an individual person via platform A is not physically safe for me 2. Renting this action camera from an individual person via platform A (B or C) is not financially safe for me

Table 13. Survey questions about the riskiness barrier within different platform capabilities.

These items will help to collect the data for hypotheses H3 and H4 testing:

H3: For low involvement product categories, different measures applied by sharing platforms have different effects on consumers' risk perceptions. More specifically;

H3a: Sharing platforms offering only "peer-to-peer evaluation" are perceived less risky than platforms offering only "anti-fraud regulations".

H3b: Sharing platforms offering only "anti-fraud regulations" are perceived less risky than platforms that do not offer any measures.

H4: For high involvement product categories, different measures applied by sharing platforms have different effects on consumers' risk perceptions. More specifically;

H4a: Sharing platforms offering only "peer-to-peer evaluation" are perceived less risky than platforms offering only "anti-fraud regulations".

H4b: Sharing platforms offering only "anti-fraud regulations" are perceived less risky than platforms that do not offer any measures.

The first step for this analysis is to conduct ANOVA test in order to check if all data samples belong to one population. If the samples are significantly different, then the following steps are to be performed:

Step 1: Render Box Plot graph to visually check if confidence intervals do not interference. If there is an overlap between intervals, proceed with the next steps.

Step 2: An independent t-test to compare the "riskiness" factor for Platform A and Platform B. It will show if the attitude to renting significantly differs between 2 samples (Platform A and Platform B) regarding "riskiness" factor. This test will show if the peer-to-peer evaluation (review approach) is effective in reducing the "unsafe" perception of renting consumer goods from other individuals.

Step 3. Another independent t-test to compare the "riskiness" factor for Platform A and Platform C. It will show if the attitude to renting significantly differs between 2 samples (Platform A and Platform C) regarding "riskiness" factor. This test will show if the Id registration and anti-fraud regulations approach is effective in reducing the "unsafe" perception of renting consumer goods via sharing platforms.

Step 4. A final t-test to compare the "riskiness" factor for Platform C and Platform B. It will show if the attitude to renting significantly differs between 2 samples (Platform C and Platform B) regarding "riskiness" factor. This test will show which of the two examined approaches is the most effective in reducing the "unsafe" perception of renting consumer goods via sharing platforms. The most effective approach will be recommended for future implementation in sharing platforms of consumer goods industry.

As part of the experiment, additional questions were asked to obtain more in-depth data on the respondents' personalities.

First of all, it is necessary to check whether the opinions of the respondents coincide with the statement that a volleyball is related to the low involvement product category and an action camera is related to the high involvement product category. For this reason, "Involvement with the Category" (Flynn et al., 1996; Study) questionnaire items were used. A factor analysis on the three items retained a one-factor solution (eigenvalue > 1) with factor loadings between 0.96 and 0.97:

Versions #1, #3, #5 (low involvement product category)	Versions #2, #4, #6 (high involvement product category)
1. In general, I have a strong interest in volleyball category	1. In general, I have a strong interest in action camera category
2. The volleyball category matters a lot to me	2. The action camera category matters a lot to me
3. The volleyball category is very relevant to me	3. The action camera category is very relevant to me

Table 14. Questions about the product involvement level

Additionally, risk aversion of the respondents was rated. Risk aversion or the attitude towards risk is the behavior of consumers who, when exposed to uncertainty, attempt to lower that uncertainty. In other words, it is the hesitation of a person to agree to a situation with an unknown payoff rather than another situation with a more predictable payoff but possibly lower expected payoff. (Davies G. 2007). The following items were presented to be assessed by participants:

1. I would rather be safe than sorry

2. I want to be sure before I purchase anything

3. I avoid risky things

These questions were also evaluated through Likert scale, with answers ranging from 1 (strongly disagree) to 7 (strongly agree).

It is also important to measure the category knowledge of respondents. The reason for that is to consider that a participant with high knowledge will perceive less effort to choose and buy a product, which can affect the results of the experiment. For this reason, the following items were presented to be assessed by participants:

- How much do you feel you know about volleyballs (for versions #1, #3, #5) or action cameras (for versions #2, #4, #6)?

- Compared to your friends and acquaintances, how much do you feel you know about (for versions #1, #3, #5) or action cameras (for versions #2, #4, #6)?

- Compared to a volleyball (action camera) expert, how much do you feel you know about (for versions #1, #3, #5) or action cameras (for versions #2, #4, #6)?

Finally, participants are asked to indicate their demographic and sociological characteristics, such as gender, age, and income level. These characteristics will be useful for descriptive statistics and control of sample differentiation.

Thus, after conducting the study described above, the following findings are expected:

- To find which barriers influence behavior of consumers in consumer goods industry of sharing economy market

- To find how are these barriers perceived in terms of low and high involvement product categories

- To determine marketing approaches that are applicable and effective for sharing economy companies of examined industry.

3. DATA ANALYSIS AND RESEARCH FINDINGS

Totally 342 respondents took participation in the experiment. 6 separated versions of the survey were distributed among these people in online survey format. The participants were randomly assigned to 3 survey versions: 1 version for control group and 2 versions for experiment groups. Each version was split into 2 subversions: the first on was responding to the situation related to low involvement product category and second one was responding to the situation related to high involvement product. Thus, 6 different versions of questionnaires were created (Appendix 1). For low involvement product category there was volleyball selected as the product example. An action-camera was selected as a high involvement product.

Based on the data collected, 52% of participants are females, 48% are males (Figure 1), mostly in the age between 16 to 30 (Figure 1), living in Moscow, Saint-Petersburg and Ekaterinburg.
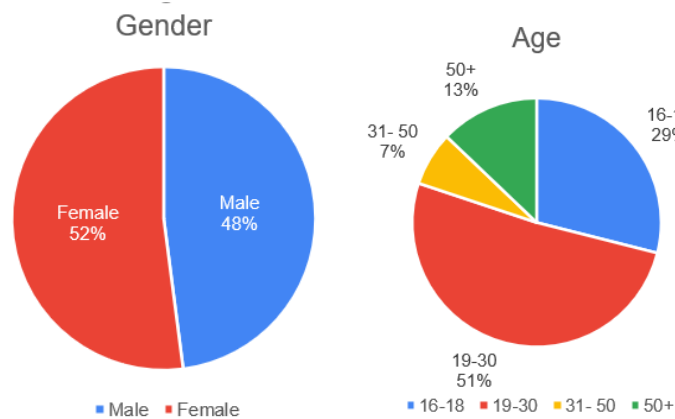
Figure 1. Studied audience demographics.

3.1. Internal consistency of the collected data

In order to ensure that the list of questions in the experiment was set correctly, the first step of data analysis included internal consistency check. The first section of the experiment contains the product involvement as a construct. To check that responses to involvement questions in the test are consistent and that respondents assess the involvement level of products accordingly, there should be calculated a composite measure of the involvement scale and should be arranged an independent t-test between two products to compare the composite variable. The composite measure is an average of responses to questions 18-20 (Cronbach alpha > 0.7, Table 14. Independent t-test result showed the

following values: composite variable of the high involvement data sample is 5.67/7, composite variable of the low involvement data sample is 2.66/7, t-test p-value = 0.00. Hence the studied audience shares the same posture about the involvement level of the presented products.

Reliability statistics	
Cronbach alpha	**0.89**
N of items	3

Table 15. Reliability statistics for product involvement level variables

3.2. Analysis of the "difficulty" factor

H1a: Renting a product is perceived to be relatively more difficult than buying.

As the next step, paired t-tests were conducted to compare the "difficultness" factor for renting (D_r) (Q3+Q4) and buying (D_b) (Q5+Q6). For D_r and D_b comparison there were used composite measures – average of Q3 and Q4, and average of Q5 and Q6, respectively. The test showed if the attitude to buying and renting significantly differs within 1 sample regarding "difficultness" factor. For accurate analysis, to test this hypothesis, 2 paired t-tests were conducted to analyze different levels of involvement separately.

H1a.1 Renting a low involvement product is perceived to be relatively more difficult than buying the same product.

H_0: Dr - Db ≤ 0

H_A: Dr - Db > 0

The studied audience assessed low involvement product renting time and effort for 6.1/7, low involvement product buying time and effort for 2.0/7, t-test p-value = 0.00. Hence, null hypothesis is rejected.

	Dr	Db
Mean	6.1	2.01
Variance	0.31	0.38
Observations	171	171
Pearson Correlation	-0.20	
Hypothesized Mean Difference	0	
df	170	
t Stat	58.86	
P(T<=t) one-tail	**0.00**	
t Critical one-tail	1.65	
P(T<=t) two-tail	**0.00**	
t Critical two-tail	1.97	

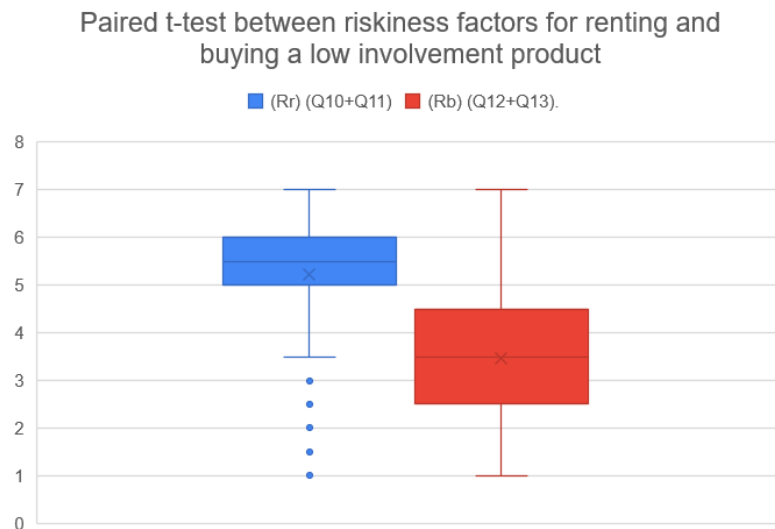*Table 16. Paired t-test between renting and buying low involvement products*

Figure 2. Box plot for Paired t-test between renting and buying low involvement products

H1a.2 Renting a high involvement product is perceived to be relatively more difficult than buying the same product.

H_0: Dr - Db ≤ 0

H_A: Dr - Db > 0

The studied audience assessed high involvement product renting time and effort for 5.0/7, low involvement product buying time and effort for 3.7/7, t-test p-value = 0.00. Hence, null hypothesis is rejected.

	Dr	Db
Mean	5.04	3.72
Variance	0.32	0.3
Observations	171	171
Pearson Correlation	0.036	
Hypothesized Mean Difference	0	
df	170	
t Stat	22.45	
P(T<=t) one-tail	**0.00**	
t Critical one-tail	1.66	
P(T<=t) two-tail	**0.00**	
t Critical two-tail	1.97	

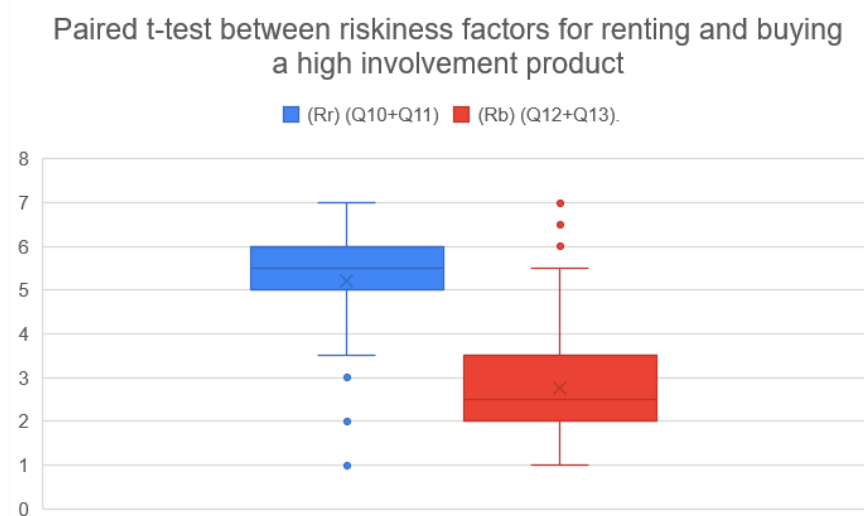*Table 17. Paired t-test between renting and buying high involvement products*
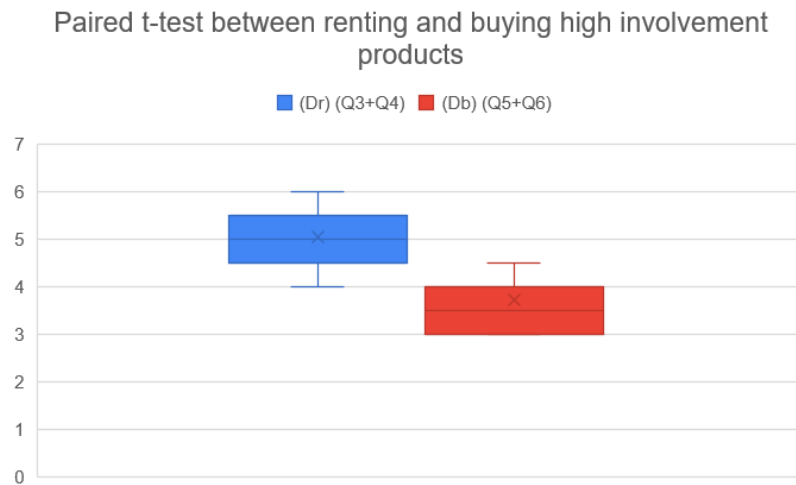
Figure 3. Box plot for paired t-test between renting and buying high involvement products

Both tests confirm the hypothesis statement: renting a product is perceived to be relatively more difficult than buying regardless the level of involvement.

H1b: Relative difficulty in renting a product is more pronounced in low (vs. high) involvement products.

In order to check this hypothesis, an independent t-test was conducted. The perception of "difficultness" factor was compared for low involvement category ((DL) Q3,Q4 average) and high

involvement category ((DH) Q3,Q4 average). The test showed if the attitude to renting significantly differs between 2 samples (low and high involvement) regarding "difficultness" factor.

H_0: D_L - $D_H \leq 0$

H_A: D_L - $D_H > 0$

	DL	DH
Mean	6.10	5.04
Variance	0.31	0.32
Observations	171	171
Pooled Variance	0.31	
Hypothesized Mean Difference	0	
df	340	
t Stat	17.5	
P(T<=t) one-tail	**0.00**	
t Critical one-tail	1.65	
P(T<=t) two-tail	**0.00**	
t Critical two-tail	1.97	

Table 17. Independent t-test between renting low and high involvement products

The test results are the following: low involvement product renting time and effort is 6.1/7, high involvement product renting time and effort for 5.0/7, t-test p-value = 0.00. Hence the null hypothesis is rejected.
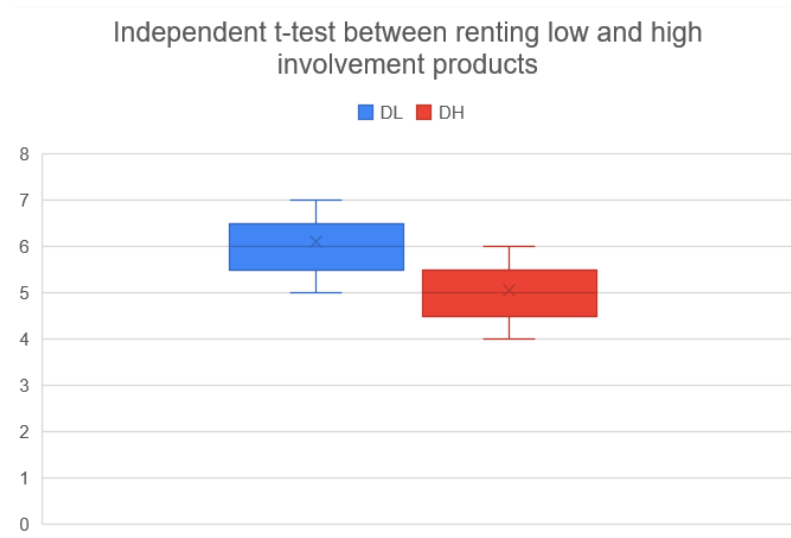
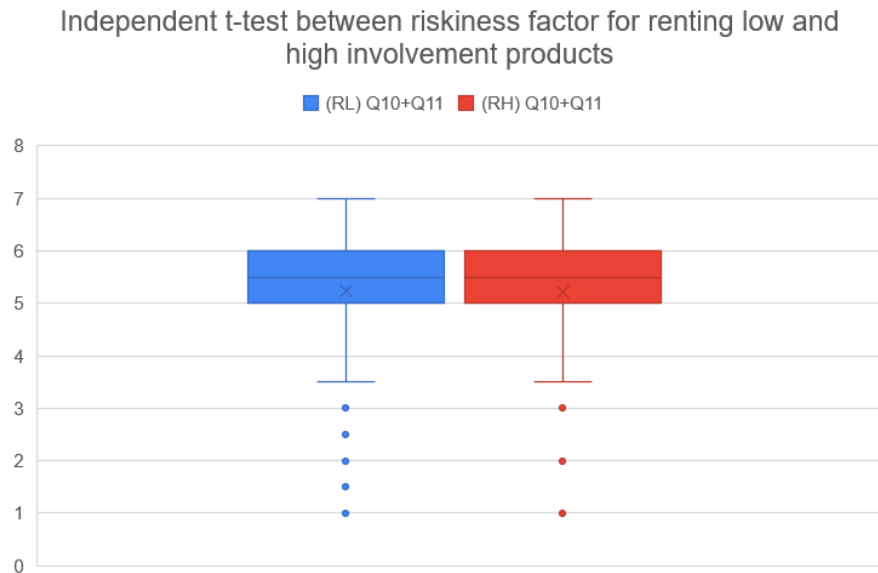*Figure 4. Box plot for independent t-test between renting low and high involvement products*

The test confirmed the hypothesis statement - Relative difficulty in renting a product is more pronounced in low (vs. high) involvement products.

3.3. Analysis of the "riskiness" factor

In order to evaluate the impact of the riskiness factor, the following hypothesis were tested.

H2a: Renting a product is perceived to be relatively riskier than buying.

As for H1a, 2 paired t-tests were conducted for both: low and high involvement product categories where the "riskiness" factor for renting ((Rr) Q10, Q11 average) was compared to the "riskiness" factor for buying ((Rb) Q12, Q13 average)).

H2a.1: Renting a low involvement product is perceived to be relatively riskier than buying the same product.

H_0: R_r - $R_b \leq 0$
H_A: R_r - $R_b > 0$

The studied audience perceive low involvement product renting riskiness as 5.23/7 and low involvement product buying riskiness as 3.45/7, t-test p-value = 0.00. Hence, null hypothesis is rejected.

	Rr	*Rb*
Mean	5.23	3.45
Variance	1.54	2.05
Observations	171	171
Pearson Correlation	0.22	
Hypothesized Mean Difference	0	
df	170	
t Stat	13.91	
P(T<=t) one-tail	**0.00**	
t Critical one-tail	1.65	
P(T<=t) two-tail	**0.00**	
t Critical two-tail	1.97	

Table 19. Paired t-test between riskiness factors for renting and buying a low involvement product

Figure 5. Box plot for paired t-test between riskiness factors for renting and buying a low involvement product

H2a.2: *Renting a high involvement product is perceived to be relatively riskier than buying the same product.*

H_0: R_r - R_b ≤ 0

H_A: R_r - R_b > 0

The studied audience high involvement product renting riskiness 5.2/7, high involvement product buying riskiness for 2.76/7, t-test p-value = 0.00. Hence, null hypothesis is rejected.

	Rr	*Rb*
Mean	5.22	2.76
Variance	1.40	1.8
Observations	171	171
Pearson Correlation	0.11	
Hypothesized Mean Difference	0	
df	170	
t Stat	19.1	
P(T<=t) one-tail	**0.00**	
t Critical one-tail	1.65	
P(T<=t) two-tail	**0.00**	
t Critical two-tail	1.97	

Table 20. Paired t-test between riskiness factors for renting and buying a high involvement product

Figure 6. Box plot for paired t-test between riskiness factors for renting and buying a high involvement product

Both tests confirm the hypothesis statement - renting a product is perceived to be relatively riskier than buying regardless the level of involvement.

H2b: Relative riskiness in renting a product is more pronounced in high (vs. low) involvement products.

In order to test this hypothesis, another independent t-test was conducted. This time the "riskiness" factor for low involvement category ((R_L) Q10, Q11 average) and high involvement category ((R_H) Q10, Q11 average). It shows if the attitude to renting significantly differs between 2 samples (low and high involvement) regarding "riskiness" factor.

H_0: $R_L - R_H \geq 0$

H_A: $R_L - R_H < 0$

The studied audience assessed high involvement product renting riskiness 5.2/7, low involvement product buying renting for 5.23/7, t-test p-value > 0.05. Hence, null hypothesis cannot be rejected.

	RL	RH
Mean	5.23	5.22
Variance	1.54	1.41
Observations	171	171
Pooled Variance	1.47	
Hypothesized Mean Difference	0	
df	340	
t Stat	0.07	

P(T<=t) one-tail	**0.47**
t Critical one-tail	1.649347611
P(T<=t) two-tail	**0.95**
t Critical two-tail	1.966965734

Table 21. Independent t-test between riskiness factor for renting low and high involvement products

Figure 7. Box plot for independent t-test between riskiness factor for renting low and high involvement products

The test rejects the hypothesis statement. Hence, relative riskiness in renting a product has the same level for low and high involvement products.

3.4. Analysis platforms' set of capabilities

In order to evaluate the impact of the platforms' features, the following hypothesis were tested. For all tests the composite measure of questions Q16 and Q17 was used.

H3: For low involvement product categories, different measures applied by sharing platforms have different effects on consumers' risk perceptions. More specifically;

H3a: Sharing platforms offering only "peer-to-peer evaluation" are perceived less risky than platforms offering only "anti-fraud regulations".

H3b: Sharing platforms offering only "anti-fraud regulations" are perceived less risky than platforms that do not offer any measures.

In order to test if the survey results belong to one population, the one-way ANOVA test was conducted. 3 independent groups were tested: Control group (A_L), experimental group 1 (B_L), experimental group 2 (C_L).

H_0: $A_L = B_L = C_L$

H_A: $A_L \neq B_L \neq C_L$

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
AL	57	358.5	6.29	0.12
BL	57	275	4.82	0.14
CL	57	175.5	3.08	0.24

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	294.51	2	147.26	879.95	**0.00**	3.05
Within Groups	28.11	168	0.17			
Total	322.63	170				

Table 22. One-way ANOVA for H3
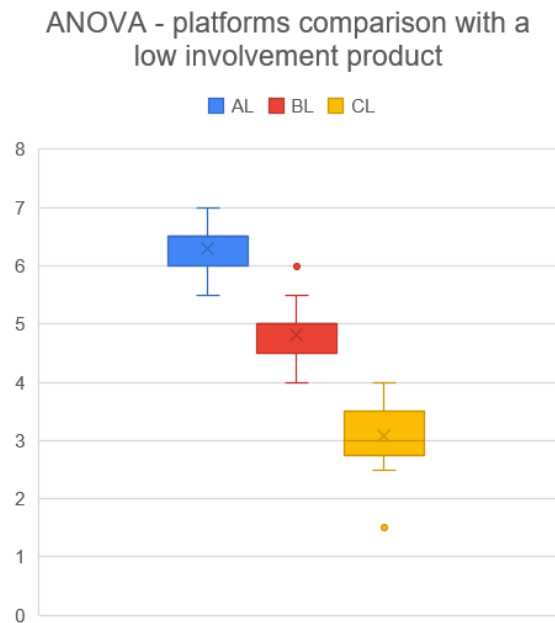
Figure 8. Box plot for H3

One-way ANOVA test results for H3 are the following:

1. P-value = 0.00. Hence, null hypothesis can be rejected.
2. Considering that there is no overlap between samples on the box plot, the following statement can be made: $A_L > B_L > C_L$

After conducting one-way ANOVA and plotting 3 independent samples on Box Plot graph, the initial H3 hypothesis should be rejected. The following statement can be made:

Relative riskiness in renting low involvement products via Platform B is greater than via Platform C but less than Platform A ($A_L > B_L > C_L$)

H4: For high involvement product categories, different measures applied by sharing platforms have different effects on consumers' risk perceptions. More specifically;

H4a: Sharing platforms offering only "peer-to-peer evaluation" are perceived less risky than platforms offering only "anti-fraud regulations".

H4b: Sharing platforms offering only "anti-fraud regulations" are perceived less risky than platforms that do not offer any measures.

In order to test if the survey results belong to one population, the one-way ANOVA test was conducted. Three independent groups were tested: control group (A_H), experimental group 1 (B_H), experimental group 2 (C_H).

H_0: $A_H = B_H = C_H$

H_A: $A_H \neq B_H \neq C_H$

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
AH	57	358.5	6.29	0.13
BH	57	275	4.82	0.17
CH	57	174.5	3.06	0.3

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	297.83	2	148.91	741.16	**0.00**	3.05
Within Groups	33.75	168	0.20			
Total	331.58	170				

Table 23. One-way ANOVA for H4
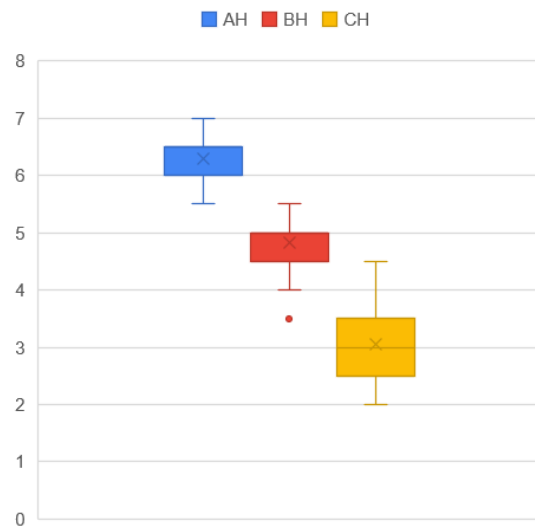
Figure 9. Box plot for H4

One-way ANOVA test results for H4 are the following:

1. P-value = 0.00. Hence, null hypothesis can be rejected.
2. Considering that interquartile ranges do not overlap, the following statement can be made: $A_H > B_H > C_H$

After conducting one-way ANOVA and plotting 3 independent samples on Box Plot graph, the initial H6 hypothesis should be rejected. The following statement can be made:

Relative riskiness in renting low involvement products via Platform B is greater than via Platform C but less than Platform A ($A_H > B_H > C_H$)

Both initial hypothesis H3 and H4 were rejected after conducting one-way ANOVA test and comparing samples' confidence interval on Box Plot graphs. There are no differences between test results in both low and high involvement product categories. Hence the following statement can be made:

Relative riskiness in renting via offered platforms regardless product involvement level for Platform B is greater than via Platform C but less than Platform A (A > B > C)

Thus, during the experiment, the influence of the two key factors, preventing consumers from peer-to-peer sharing of consumer goods, was analyzed. It was established how and to what extent

these barriers influence the intention to continue to participate in the joint consumption of consumer goods services, and the impact of these factors was compared depending on the level of involvement with the product category chosen. Thus, the basis for making recommendations for companies depending on the type of product was created. The second part of the experiment was aimed at evaluating and comparing the effectiveness of the two main approaches that companies use to increase consumer confidence in the service and each other, as well as reduce the influence of the "riskiness" barrier that affects consumers' decision to become participants in sharing. The results showed that both approaches: peer-to peer evaluation (reviews and ratings) and direct regulations (id registrations and online payments via platform) are efficient for consumer goods sharing sector. Both of them are lowering the perception of riskiness towards joint consumption. Moreover, it was identified that direct regulatory approach is more efficient than the peer evaluation one in terms of consumer good for both: low and high involvement product categories. This fact is also useful to develop recommendations for sharing platforms, that are working with consumer goods industry.

4. DISCUSSIONS AND CONCLUSIONS

4.1. Theoretical contributions and discussions

The first part was devoted to the theoretical research on previous conceptual and empirical studies on Sharing economy and factors that are influencing the actual and potential users of this model. In the review of literature, the Sharing Economy concept was defined and the key features, advantages and challenges of this model were highlighted. As one of the main challenges of the studied market, financial and physical "riskiness" of the model was identified.

Various approaches to classifying the sharing economy market were also analyzed. The approach proposed by PWC (2015) was chosen as the basis for this work. In this approach, the market is divided into sectors according to areas of activity: Mobility industry, Tourism and Hospitality industry, Consumer goods, Entertainment and multimedia industry, Financial sector, Energy sector and Human resources sector. The first two sectors are the most successful in the current market, while consumer goods sector is the one that is chosen for this study.

From the review it was revealed that development of the sharing economy market is uneven. On the one hand, there are highly successful sectors in this market, such as are mobility and hospitality in which the leading companies are operating (Airbnb, Uber etc.). On the other hand, there are weaker sectors, such as consumer goods in which people are reluctant to switch from a traditional model to sharing. A large number of scientific papers that explore consumer behavior in sharing economy in general as well as the experience of successful companies from this industry was analyzed during this research. However, studies that examine the reasons why fairly promising areas of peer-to-peer economy, such as consumer goods sector, are not developing and the ways of improvement of this issue have not yet been studied and backed up by solid empirical proofs. Therefore, factors or barriers that are influencing consumer behavior within the industry as a whole were discussed in order to create a theoretical base for the experiment.

In continuation, two key factors were chosen for the experimental analysis: the riskiness factor (lack of trust and reliance from both sides: leasers and renters) and the difficulty factor (people consider peer-to-peer renting as something time consuming, effortful and difficult to do).

Moreover, the level of involvement was discussed as an important concept for the study. It was highlighted that the level of involvement of the consumer with the product category is crucial in

terms of consumer's decision making process and therefore, this aspect was also considered it this research.

Finally, in order to create recommendations to the sharing services, the experience of the most successful companies in sharing economy market has been studied and two most popular approaches that are used to reduce the impact of barriers in this area have been identified: the first approach is peer-to peer evaluation (reviews and ratings) and the second one is related to direct regulations from the platform (id registrations and online payments via platform)

Considering research gaps highlighted above, research questions that were stated for the study were formulated:

RQ$_1$ What barriers influence consumer behavior in consumer goods industry of sharing economy?

RQ$_2$ How do these barriers influence consumer behavior in consumer goods industry related to the level of product involvement.

RQ$_3$ What approaches are applicable and effective for companies from consumer goods industry of sharing economy?

The first part of the experiment was conducted to analyze barriers that have the strongest influence on the consumer's decision to use sharing economy services in consumer goods sector.

Firstly, the influence of the "difficultness" factor was analyzed in terms of renting and in terms of buying. There were two metrics examined for the "difficultness" factor: time and effort people spend on renting or buying process. The paired t-tests were conducted to compare the "difficultness" factor for renting and buying. The test showed that the attitude to buying and renting significantly differs within 1 sample regarding "difficultness" factor. For accurate analysis, to test this hypothesis, 2 paired t-tests were conducted to analyze different levels of involvement separately. The results of the test have shown that renting product is perceived to be relatively more difficult than buying the same product. This conclusion was made for both: low involvement and high involvement product categories, which means that the "difficulty" barrier is significantly affecting the renting/buying behavior in consumer goods sharing sector.

As the "difficulty" barrier is influencing the peer-to-peer renting behavior for both: low and high involvement categories, the next step was to compare the impact of this factor on consumer behavior depending on the level of product involvement. For this reason, relative difficulty in renting

a low involvement vs high involvement products was measured. In order analyze this aspect, an independent t-test was conducted in which perception of "difficultness" factor was compared for low involvement category and high involvement category. The results of the test displayed that he attitude to renting significantly differs between 2 samples (low and high involvement) regarding "difficultness" factor. Moreover, relative difficulty of renting is more pronounced in low (vs. high) involvement products. This means that consumers perceive renting a low involvement product as a highly effortful and time-consuming action while the effort and time they might spend on renting a high involvement product is perceived relatively lower.

There might be several reasons for these results. First of all, a person, trying to think rationally, tries to subconsciously compare different options for obtaining a product in terms of benefits. This benefit can be perceived not only from a financial point of view, but also from the point of view of spent time, effort, energy and so on. Thus, when a consumer approaches the choice: to buy or rent, he evaluates how much the financial benefit that he will receive is worth the effort.

Speaking about low involvement product category on the example of a volleyball, the majority of respondents said that they are not very interested in this category, they do not distinguish between different types and brands of balls and consider this purchase relatively cheap. This means that, most likely, it is really "easier for consumers" to buy such a product than to spend time renting it and returning it at the expense of a relatively small financial gain.

Talking about the high involvement product category, considering an action camera as an example, the majority of respondents answered that this category is rather difficult to choose, they need a lot of time before buying to understand the advantages and disadvantages of each model and make the right choice. The cost of such a purchase is quite significant for most respondents, which means that in this case, the financial benefit of the renting option can be perceived more significant in relation to the time spent on the renting process. Moreover, renting makes the process of obtaining a product less time-consuming from the decision point of view, since the risk of spending a large amount on an incorrectly selected product is reduced. Therefore, the "complexity" factor has a greater effect on sharing of low involvement categories of consumer goods, which is very important to understand when working with this category.

The next step was to measure the influence of the "riskiness" barrier in terms of renting and buying. As it was mentioned before, in this study the "riskiness" factor was interpreted as "the physical and financial risk", so there were two metrics examined for the "riskiness" factor: physical safety and financial safety. The paired t-tests were conducted to compare the "riskiness" factor for renting and

buying. The test showed that the attitude to buying and renting significantly differs within 1 sample regarding "riskiness" factor. For accurate analysis, to test this hypothesis, two paired t-tests were conducted for low and high involvement product categories respectively. This way the influence of "riskiness" factor for renting and buying was compared. The test showed that the attitude to buying and renting significantly differs within 1 sample regarding "riskiness" factor, which means that renting a product is perceived to be relatively riskier than buying the same product. This conclusion was made for both: low involvement and high involvement product categories, which means that the "riskiness" barrier is significantly affecting the renting/buying behavior in consumer goods sharing sector regardless the level of product involvement.

Since the "riskiness" barrier affects the desire to rent for both low and high involvement categories, the next step was to compare the impact of this factor on consumer behavior depending on the level of product involvement. Therefore, relative riskiness perception in renting a low involvement vs high involvement products was measured. In order analyze this aspect, an independent t-test was conducted in which perception of "riskiness" factor was compared for low involvement category and high involvement category. The results of the test displayed that he attitude to renting do not differ significantly between 2 samples (low and high involvement) regarding "riskiness" factor. This means that renting is perceived equally risky in terms of low and high involvement products and therefore consumers perceive renting a low involvement product as risky as renting a high involvement product. This means that the riskiness factor is a significant barrier, that prevents actual and potential consumers from participating in joint consumption of consumer goods.

Thus, through the results of the first part of the experiment it was figured out how are the "riskiness" and "difficultness" factors affecting participation in joint consumption in consumer goods industry. Moreover, the influence of the these two was be examined applicably to two products with opposite level of involvement.

The second part of the experiment was conducted to assess how effective are approaches that are used in leading industries of sharing economy to reduce the "riskiness" barrier in terms of consumer goods industry. The two most common approaches on reducing the "riskiness" barrier were identified among successful sharing economy companies:

1) Peer-to-peer evaluation based on reviews for all participants (both: lenders and renters)
2) Direct regulatory approach based on mandatory id registration, clear rules, anti-fraud regulations and penalties

Therefore, three 3 groups were created: one control group and two experimental ones, for which the managerial interventions (approaches) were applied. The experimental groups are exposed to modifications in the testing of the independent variable. Control group was detached from the rest of the experiment, which means that, the independent variable being tested couldn't influence the final outcome (Helmenstine, 2017).

First, relative riskiness in renting low involvement products for 3 different independent was compared. In order to test if the survey results belong to one population, the one-way ANOVA test was conducted. After conducting one-way ANOVA and plotting 3 independent samples on Box Plot graph, and considering that confidence intervals on the box plot did not overlap, it can be concluded, that for low involvement products both approaches are effective, however direct regulatory approach analysis showed the lowest "riskiness" perception among all three groups.

An analogical analysis was conducted for high involvement product category. There are no differences between test results in both low and high involvement product categories. The result of this measurement showed that for high involvement products both approaches are effective, however direct regulatory approach analysis showed the lowest "riskiness" perception among all three groups.

4.2. Managerial implications

There are many different sharing services available. However, to effectively manage them, it is necessary to study directly the drivers and barriers of participation in a particular industry and a specific country, with its specifics and characteristics. The empirical results can bring benefits to stakeholders of the consumer goods sector in sharing economy market such as managers and designers of sharing platforms (for example, Rentomania, Next2u, Avito). Only having identified which factors stimulate the consumers to use sharing services, businesses are getting opportunities to develop and promote their services successfully. It is also important to understand what prevents people using these services and if the influence of these barriers differs for different categories varying in consumer involvement.

A strong relationship was revealed between the attitude of consumers towards peer-to-peer renting and the level of involvement of the product needed. It was highlighted that the lower is the involvement with the product category, the more effortful and time consuming is the renting process perceived. Therefore, unless the "difficulty" issue is solved (via delivery or fast ordering services), the sharing of low-involvement category goods is less promising than the high involvement products.

Since the core component of the sharing economy model is the trust and reliability, the highest priority in terms design and development of sharing platforms should be given to making the renting process less risky and more safe (financially and physically) for all participants (both: lenders and renters). Two key practical approaches that companies use to increase consumer confidence in the service and their trust to each other, as well as reduce the influence of the "riskiness" barrier that affects consumers' decision to become participants in sharing. It was defined that peer-to peer evaluation (reviews and ratings) and direct regulations (id registrations and online payments via platform) are both efficient for consumer goods sharing sector. Both of them are lowering the perception of riskiness towards joint consumption. Moreover, it was identified that direct regulatory approach is more efficient than the peer evaluation one in terms of consumer good for both: low and high involvement product categories. Therefore, the **recommendations for sharing platforms,** that are working with consumer goods industry are the following:

1. As was revealed in this research, the "difficulty" factor is a very significant barrier which prevents participation in sharing processes. For products with a low level of involvement, this barrier has a particularly significant effect. Therefore, during the development and improvement of a business model, sharing companies should take into account that the lower is the level of product involvement,

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the lower is the demand on renting such goods. Therefore, when choosing categories of goods to work with, it is recommended to give preference to high involvement products, since renting such goods is perceived to be less effortful and time-consuming, which means that the demand for renting such goods will be higher.

2. Additionally, since in general the "difficulty" factor concerns products from both: low and high involvement categories, sharing companies should take this barrier into account in order to attract potential users successfully. For this reason, several recommendations can be proposed based on this study:

- First of all, in order to change consumer's perception that peer-to-peer renting is something "difficult", the marketing of the sharing company should be focused on simplicity of the renting process. The words "easy", "simple", "fast" etc. should be used in the marketing slogans (for example, "Make your life easier with….". Moreover, simple explainer-videos or pictures with short instructions should be implemented to the main pages of the web-site and the app. This way all the steps of renting will be clear to the potential consumers and the whole process will be perceived less effortful and time consuming.

- Secondly, the app and the web-site of the sharing platform should have a simple, user friendly interface. It is necessary to provide a minimum set of options and functions so that a person can choose a product for rent and contact its owner quickly and easily.

- Finally, some additional features can be implemented in order to make the peer-to-peer renting process easy and comfortable. The solution to this challenge may be to introduce the option of delivery of rented goods. It is not necessary to create a corporate delivery service as there are various b2b delivery companies, that are ready to create partnerships on this base. This option has several advantages:

- Delivery of the rented goods can be carried out in any region of the country (for example, if the thing is especially unique).
- It is possible to rent without leaving home. The user can execute documents online, and transfer the parcel through a courier.
- Save consumer's time: the user will need to make a couple of clicks in the application and then will just have to wait for the parcel to be delivered to the flat, or to go to the nearest

pickup point and get the rented goods. No need to agree with the owner about a specific meeting time and go to the other end of the city to pick up the item.

Convenience and safeness. The shipments can be tracked 24/7 on delivery service sites.

3. An equally significant aspect is the «riskiness" barrier. As indicated in this paper, the issue of trust and reliability is one of the main challenges for sharing the economy as a whole. It is crucial for the sharing companies to consider the reliability of the service and trust between the participants of the sharing process as the key factors of their success. For this reason, several recommendations can be proposed to the managers of sharing businesses:

- Firstly, it is important to implement the safety component to the marketing of the service. The actual and potential users should feel that the company takes care of their safeness and takes action to help customers gain a safe and enjoyable sharing experience. For example, a company can add a special "safety" page on the company's web-site or the app (Picture 1). This page should explain, how exactly the business takes care of the safeness for its users and what should the users do (tips and rules) to be safe while using the service.
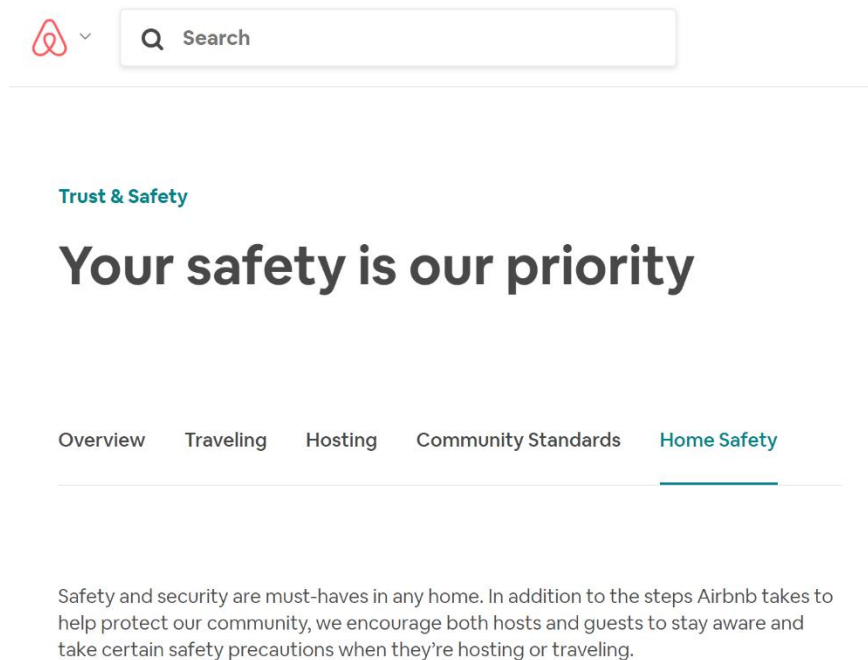
Picture 1. "Trust & Safety" page on Airbnb official web-site

- As the direct regulations approach was identified as the most effective for the consumer goods sharing, the direct regulatory tools should be implemented to such platforms first of all. These tools are: id registrations, customer verification, and most importantly, online payments via platform. These tools will reduce both: physical and financial risks of the renting process.

- It is also important to provide support to the users, so that if the customer feels unsafe within the service or something goes wrong, he could contact the support team and get some help or advice on how to react to be safe physically and financially. For example, Uber provides such a service, which makes its users feel calm and confident (Picture 2).
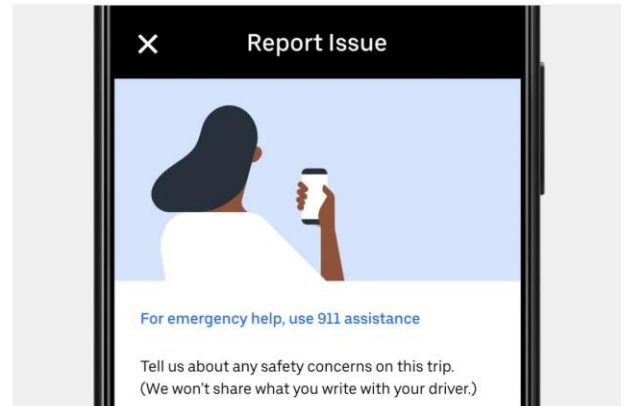
Picture 2. "Support" feature on Uber official web-site

- Additionally, if extra resources are available, it will make sense to continue through implementing a ratings and review system in order to increase the trust of the users to each other and to lower the "riskiness" barrier. Through the peer-to-peer evaluation, owners and renters can leave reviews to each other and therefore, the future users can rely on the feedback on the previous experience of their potential opponents. However, as direct regulations were perceived as "less risky" than the "reviews and ratings" approach within the experiment conducted, the former approach should be prioritized.

4.4. Limitations and future research

It is worth noting that this study is the initial stage in the study of barriers and drivers of co-consumption and is aimed at evaluating them applied to consumer goods sector. Therefore, there are opportunities to deepen research in this area. First, using the method of regression analysis, it is possible to assess the degree of influence of not only the two key factors studied, but also to determine the relationship between all the factors (identified in the theoretical part of this research) that influence the decision of consumers to start, continue or increase the frequency of sharing services usage.

Secondly, some limitations relate to the sample formation. Respondents of different ages were included in the sample, however, the distribution of the ages is uneven as almost a half of all experiment participants are students. Moreover, since this study was conducted for respondents living in St. Petersburg, Moscow, and Yekaterinburg, it is necessary to conduct a similar study also for other regions in order to see the full picture and compare the differences. Thirdly, due to limited resources, this study tested the effectiveness of only two approaches that are used to increase trust and reduce the risk of participating in sharing things. Only the two most sets of tools were taken into account, but this study can be expanded in future in order to be able offer more detailed recommendations to the sharing companies.

There are other opportunities to deepen research in this area. Sharing economy platforms as all networks are very dependent on the number of participants, both: renters and from lenders. The larger range of products is offered for rent, the more interesting the sharing platform for potential tenants becomes. And vice versa, the more renters use the sharing platform, the higher is the motivation of owners to offer their product on it. In this paper, only factors, drivers, and barriers affecting potential renters are considered. However, it is equally important to consider the other side of the process, namely motivation and barriers that affect potential and actual lenders. Thus, this area will be fully investigated and the company will receive recommendations for balanced development of their sharing business.

Thus, as a result of this work, we completed the tasks, thereby achieving the goal of the work: we identified the main factors affecting the decision of consumers to participate in joint consumption using the example of good consumer goods, quantified their impact and developed recommendations for sharing businesses from the consumer goods sector. Thus, the results of the study can serve as a basis for deepening knowledge in this industry.

APPENDIX 1

SECTION 1

<table>
<tr>
<td align="center">

Versions #1, #3, #5
(low involvement product category)

Imagine the circumstances described below.

You are going to a picnic with your friends. You plan to play volleyball together for a change, but none of you has a ball. You have accepted to find a volleyball for your friends. You have 2 options:

3) You can buy it from a store for the full price and keep it at your home afterwards
4) You can rent it temporarily for a lower price from another person via a platform that allows renters and lenders to find each other.

Please, respond to the following scale items.

</td>
<td align="center">

Versions #2, #4, #6
(high involvement product category)

Imagine the circumstances described below.

You are planning a trip and you want to capture sports activities such as surfing or skiing during the trip. You don't have an action camera and it is impossible to use your smartphone to make such shots. You have 2 options:

3) You can buy it from a store for the full price and keep it at your home afterwards
4) You can rent it temporarily for a lower price from another person via a platform that allows renters and lenders to find each other.

Please, respond to the following scale items.

</td>
</tr>
<tr>
<td>

3. I am likely to buy the volleyball

	1	2	3	4	5	6	7	
Strongly disagree	○	○	○	○	○	○	○	Strongly agree

</td>
<td>

I am likely to buy the action camera

	1	2	3	4	5	6	7	
Strongly disagree	○	○	○	○	○	○	○	Strongly agree

</td>
</tr>
<tr>
<td>

4. I am likely to rent the volleyball

	1	2	3	4	5	6	7	
Strongly disagree	○	○	○	○	○	○	○	Strongly agree

</td>
<td>

I am likely to rent the action camera

	1	2	3	4	5	6	7	
Strongly disagree	○	○	○	○	○	○	○	Strongly agree

</td>
</tr>
</table>

5. I think that the process of renting a volleyball is time consuming
 	
  1　2　3　4　5　6　7
Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
	I thing that the process of renting an action camera is time consuming
	
	  1　2　3　4　5　6　7
	Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

6. I think that the process of renting a volleyball is effortful for me
 	
  1　2　3　4　5　6　7
Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
	I think that the process of renting an action camera is effortful for me
	
	  1　2　3　4　5　6　7
	Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

7.I think that the process of buying a volleyball is time consuming
 	
  1　2　3　4　5　6　7
Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
	I thing that the process of buying an action camera is time consuming
	
	  1　2　3　4　5　6　7
	Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

8.I think that the process of buying a volleyball is effortful for me
 	
  1　2　3　4　5　6　7
Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
	I think that the process of buying an action camera is effortful for me
	
	  1　2　3　4　5　6　7
	Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

9.It makes economically more sense to buy the volleyball
 	
  1　2　3　4　5　6　7
Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
	It makes economically more sense to buy the action camera
	
	  1　2　3　4　5　6　7
	Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

10.　It makes economically more sense to rent the volleyball
 	
  1　2　3　4　5　6　7
Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
	It makes economically more sense to rent the action camera
	
	  1　2　3　4　5　6　7
	Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

11.　In general, price is important in my decision making
 	
  1　2　3　4　5　6　7
Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
	In general, price is important in my decision making
	
	  1　2　3　4　5　6　7
	Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

12.　Renting this item from an individual person along with providing a deposit is not physically safe for me
 	
  1　2　3　4　5　6　7
Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
	Renting this item from an individual person along with providing a deposit is not physically safe for me
	
	  1　2　3　4　5　6　7
	Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

13. Renting this item from an individual person along with providing a deposit is not financially safe for me 1 2 3 4 5 6 7 Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree	Renting this item from an individual person along with providing a deposit is not financially safe for me. 1 2 3 4 5 6 7 Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
14. Buying this item from a store is not physically safe for me 1 2 3 4 5 6 7 Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree	Buying this item from an individual person along with providing a deposit not physically safe for me 1 2 3 4 5 6 7 Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
15. Buying this item from a store is not financially safe for me 1 2 3 4 5 6 7 Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree	Buying this item from an individual person along with providing a deposit is not financially safe for me. 1 2 3 4 5 6 7 Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree
16. How often do you usually play volleyball? 1 2 3 4 5 6 7 Rarely ○ ○ ○ ○ ○ ○ ○ Very often	How often do you have occasions when an action camera is useful to capture activities? 1 2 3 4 5 6 7 Rarely ○ ○ ○ ○ ○ ○ ○ Very often
17. How often do you anticipate to play volleyball in the future? 1 2 3 4 5 6 7 Rarely ○ ○ ○ ○ ○ ○ ○ Very often	How often do you anticipate to have occasions when an action camera will be useful to capture activities? 1 2 3 4 5 6 7 Rarely ○ ○ ○ ○ ○ ○ ○ Very often

SECTION 2

A renting platform is a web platform 8that allows renters and lenders to find each other and connect. Renting platforms may contain different sets of capabilities. Please examine the information below in the table on Platform A (B or C):

	Platform A *Versions #1, #4*	Platform B *Versions #2, #5*	Platform C *Versions #3, #6*
Information on how to use the platform	Available	Available	Available
Customer reviews	Not available	Available	Not available
Id registration and anti-fraud regulations	Not available	Not available	Available

Imagine now you could rent the volleyball via a platform A (B or C) Please, based on the information provided above, answer the following questions.	Imagine now you could rent the action camera via a platform A (B or C) Please, based on the information provided above, answer the following questions.
18. Renting the volleyball from an individual person via platform A (B or C) is not physically safe for me 1 2 3 4 5 6 7 Strongly disagree Strongly agree O O O O O O O	Renting this action camera from an individual person via platform A is not physically safe for me 1 2 3 4 5 6 7 Strongly disagree Strongly agree O O O O O O O
19. Renting the volleyball from an individual person via platform A (B or C) is not financially safe for me 1 2 3 4 5 6 7 Strongly disagree Strongly agree O O O O O O O	Renting this action camera from an individual person via platform A (B or C) is not financially safe for me 1 2 3 4 5 6 7 Strongly disagree Strongly agree O O O O O O O

SECTION 3

Versions #1, #3, #5 (low involvement product category)	Versions #2, #4, #6 (high involvement product category)
We are now interested in understanding your attitude toward the volleyball product category in general. Please respond to the following statements by choosing the most appropriate number on the scale[6]. 20. In general, I have a strong interest in volleyball category 1 2 3 4 5 6 7 Strongly disagree Strongly agree ○ ○ ○ ○ ○ ○ ○	We are now interested in understanding your attitude toward the action camera product category in general. Please respond to the following statements by choosing the most appropriate number on the scale. In general, I have a strong interest in action camera category 1 2 3 4 5 6 7 Strongly disagree Strongly agree ○ ○ ○ ○ ○ ○ ○
21. The volleyball category matters a lot to me 1 2 3 4 5 6 7 Strongly disagree Strongly agree ○ ○ ○ ○ ○ ○ ○	The action camera category matters a lot to me 1 2 3 4 5 6 7 Strongly disagree Strongly agree ○ ○ ○ ○ ○ ○ ○
22. The volleyball category is very relevant to me 1 2 3 4 5 6 7 Strongly disagree Strongly agree ○ ○ ○ ○ ○ ○ ○	The action camera category is very relevant to me 1 2 3 4 5 6 7 Strongly disagree Strongly agree ○ ○ ○ ○ ○ ○ ○

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[6] Involvement with the Category (Flynn et al., 1996; Study)

We are now interested in knowing more about you. Please respond to the following statements by choosing the most appropriate number on the scale. (For all versions on survey)

23. I would rather be safe than sorry

	1	2	3	4	5	6	7	
Strongly disagree	○	○	○	○	○	○	○	Strongly agree

24. I want to be sure before I purchase anything

	1	2	3	4	5	6	7	
Strongly disagree	○	○	○	○	○	○	○	Strongly agree

25. I avoid risky things

	1	2	3	4	5	6	7	
Strongly disagree	○	○	○	○	○	○	○	Strongly agree

26. How much do you feel you know about volleyballs (action cameras)?

	1	2	3	4	5	6	7	
Very little	○	○	○	○	○	○	○	Very much

27. Compared to your friends and acquaintances, how much do you feel you know about volleyballs (action cameras)?

	1	2	3	4	5	6	7	
Very little	○	○	○	○	○	○	○	Very much

28. Compared to a volleyball (action camera) expert, how much do you feel you know about volleyballs (action cameras)?

	1	2	3	4	5	6	7	
Very little	○	○	○	○	○	○	○	Very much

29. Please, indicate your gender
   o   Male
   o   Female

30. Indicate your age ___

31. Would you consider your disposable income to be

	1	2	3	4	5	6	7	
Very low	○	○	○	○	○	○	○	Very high

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