Consumers’ attitude towards online shopping in Russia

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Concentration – Management

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Abstract

The main goal of this research is to identify variables that influence consumers’ intention to buy goods via the internet. Previous studies didn’t take into consideration psychographic portraits of consumers. Variables that influence consumers’ attitude towards online shopping were incorporated into a theoretical model. In order to find relationships between determinants of the models regression analysis was used.

It was concluded that 9 out of 16 independent variables have statistically significant effect on consumers’ intention to shop online: previous user’s experience; time loss risk; perceived; financial and privacy risk; perceived ease of use; attitude toward single sport activities; attitude towards single conventional shopping; attitude towards single spare time activities; trust towards online shopping.

These findings can be used by marketing managers of online stores in order to better understand attitude of consumers towards online shopping.

Key words: online shopping; e-commerce; psychographic; e-shopping.

Аннотация

Основная цель этого исследования - выявить переменные, которые влияют на намерение потребителей покупать товары через Интернет. Предыдущие исследования не учитывали психографические характеристики потребителей. Переменные, которые влияют на отношение потребителей к онлайн покупкам, были включены в теоретическую модель. Для определения взаимосвязи между детерминантами модели использовался регрессионный анализ.

На основании результатов анализа был сделан вывод о том, что 9 из 16 независимых переменных оказывают статистически значимое влияние на намерение потребителей совершать покупки в Интернете. К таким переменным относятся: предыдущий опыт онлайн покупок; риск потери времени; воспринимается; финансовый риск; воспринимаемая легкость использования; отношение к одиночным спортивным занятиям; отношение к одиночному традиционному шопингу; отношение к различным занятиям в свободное время; доверие к интернет-магазинам.

Результаты исследования могут быть использованы менеджерами по маркетингу интернет-магазинов, чтобы лучше понять отношение потребителей к онлайн шопингу.

Ключевые слова: онлайн-шопинг; электронная коммерция; психографика.
Introduction

In the modern society the Internet has become one of the most important aspects of individuals’ lives. Due to ease of use people use Internet not only as a search platform but also for different activities that were considered as offline several years ago. For example traditional retail banks develop their own online services and apps, books and airline tickets are purchased online by customers in any part of a planet where Internet connection is (Forbes, 2016).

A lot of companies use the Internet for their own benefits. They conduct different market research, communicate online with customers, and advertise their products and so on. Internet shopping also can be used by companies as a tool to increase customer value. There are some advantages of online shopping vs conventional (instore) shopping. First of all customers don’t need to stay in long lines to purchase a product. Customers also don’t need to spend time to get to a shop. Thereby, this free time can be used by a customer for other activities. In some cases online store also offer lower price compared with conventional shops (Cuneyt and Gautam 2014). In this way real income of customers increases and they have more disposable income. These factors make online shopping more favorable compared with instore (conventional) shopping.

But there are also risks associated with online shopping. For example, security is a risk that decreases intention of a customer to buy products online (Koksal and Penez, 2015). In such cases motivation of a customer to buy online is decreased high perceived risks of credit card fraud. Also customers are concerned of lack of privacy, non-delivery risk, and lack of guarantee of quality of goods (Hassan, Kunz, Pearson and Mohamed, 2006).

Despite the fact that customers perceive online-shopping as a risky activity this kind of shopping is still growing. For example, volume of the Russian Internet trading of material goods (tangibles) in 2014 was 560 billion rubles. Other 85 billion rubles fell on the cross border segment of the Internet trading. Thereby, expenses of Russian citizens to purchase material goods (tangibles) on the Internet were 645 billion rubles. But internet trading of intangible goods (software, food delivery, airline tickets order etc.) is also growing (Data Insight, 2014).

Due to the fact that online shopping is becoming more popular among all demographic groups this segment of doing business should be analyzed more accurately.

Therefore marketers should analyze customer’s attitude towards online shopping in order to understand what factors influence online shopping and what risks constrain customers from buying products online.
Research gap

Research regarding online shopping in Russia took into consideration only such parameters of a user as: age, location, level of education, online shop usage experience, amount of product categories purchased by a user online. But previous research didn’t take into consideration psychographic. According to William (1975) demographic profiles are not sufficient enough. Importance of psychographic was also highlighted by modern scholars such as Gladwell (2011), Plog (2010), Duygu (2012). However this research framework was not applied to studies in the field of online shopping.

Thereby, the main aim of the research is to identify factors that influence consumer’s attitude towards online shopping. The research gap has shown that studies regarding consumers’ attitude towards online shopping studied factors and risks influencing consumers’ intention to buy product via the internet. However these factors and risks were not examined in Russia. Studies conducted in Russia took into consideration only demographic factors such as gender, age etc. At the same time psychographic characteristics were not taken into account in any research conducted in other cultural and geographical conditions.

Chapter 1 Literature review

This chapter contains basic concepts regarding online shopping are described. First of all, current situation of online shopping in Russia are discussed. Mainly research in this were conducted by commercial firms such Data Insight (2014), PwC (2016), Yandex (2016) etc. Russian scholars usually didn’t make research in this area in Russia.

Secondly the difference between online and traditional shopping is described. This part of the literature review is important because it is necessary to understand key features of online and traditional shopping in order to apply these features to the theoretical model of the research.

The next part is dedicated to factors influencing online buying behavior are described. There are not only factors but also risks that decrease consumers’ intention to buy product via the internet. Thereby the fourth part is dedicated to risks that influence online shopping intention.

Another part of literature review is dedicated to psychographic. It is important to analyze previous research in this field of study because it is primarily related with research gap. Previous research regarding online customers in Russia took into consideration only socio-demographic factors. For the purposes of this research behavioral characteristics of customers (for example, their life style, habits and so on) should be taken into consideration.
1.1 Current situation of online shopping in Russia

The volume of the Russian Internet market of material goods for 2014 amounted to 560 billion rubles. Another 85 billion rubles fell on the segment of cross-border Internet trade. Thus, the expenses of Russians on purchases of material goods in online stores in 2014 amounted to 645 billion rubles (Data Insight, 2014). Outside of this estimate of 645 billion rubles remain:

1) Online purchases of intangible goods (software, movies, music, etc.) and services;
2) Online purchases of travel products: tickets for transportation, hotels, tours, etc.;
3) Online purchases of tickets for cultural, entertainment, sports, educational and other events;
4) Food delivery;
5) Corporate purchases in regular online stores, including purchases made by company employees (formally acting as individuals) for the needs of the company;
6) Wholesale and small wholesale purchases via the Internet;
7) Group purchases, purchases through ad services and auctions, purchases through representatives of MLM-systems.

Thereby, the research conducted by Data insight didn’t take into account intangible goods. However approximately all studies conducted in 2000’s took into consideration these categories of products (Levin A., Levin I. and Weller, 2005). Nevertheless, due to high degree of digitalization in the modern world such categories of products as books, CD’s and movies on DVD disks became available in the digital form and don’t need to be recorded on physical resources.

The growth of the Russian market of online sales of tangible goods in 2014 was 35% (42%, if purchases made by Russians in foreign online stores are taken into account). Formally, the growth rates remained at the level of previous years and even slightly exceeded them, but the structure of growth changed dramatically. If earlier the volume of the market increased almost exclusively due to the growth in the number of orders, in 2014, approximately half of the nominal growth occurred in price increases (we estimate the increase in the average check due to inflation of 15%). Thereby, the real growth of the Internet commerce market in Russia was about 17%, which is 1.5 times lower than in the previous year.

As of the end of 2016, 34% of Internet users aged 18 to 64 years were online buyers - that is, they made purchases of tangible goods in online stores at least once in the previous 12 months. With a population of 18 to 64 years in 97 million people (Federal State Statistics Service of
Russian, 2016) 2 and the number of Internet users in this age range of 74 million people 3, e-commerce penetration at 34% corresponds to 25.4 million online buyers.

<table>
<thead>
<tr>
<th>Population, 18-64</th>
<th>Amount of people, millions</th>
<th>Percentage of population, %</th>
<th>Percentage of Internet Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Users, 18-64</td>
<td>74</td>
<td>76</td>
<td>60</td>
</tr>
<tr>
<td>Online-buyers, 18-64</td>
<td>25</td>
<td>26</td>
<td>34</td>
</tr>
</tbody>
</table>

Table 2 – Penetration of E-commerce on Russia (Data Insight, 2014)

There are still users of the Internet over 64 years old and Internet users under age of 18 outside if this estimates (Data Insight, 2014). Citizens over age of 64 rarely use Internet (especially Internet shops). However Adolescents 12-18 years old (this is about 10 million people) are almost always active Internet users and many of them use the internet for purchasing of goods. Nevertheless, a substantial part of online purchases teenagers do not independently, but together with adults (for example, Measures, parents). Thus, limiting the estimate of the quantity to the age of 18-64 doesn’t have significant impact on estimates of the volume of the electronic market.

According to the previous academic studies research of data insight women are more active as buyers, so there is not surprising that there are more of them among online buyers (Koksal, Penez, 2015). Only 29% of women and only 23% of men (among Russians aged 18-64 years) have made in 2014 at least one purchase in the Internet-Store (including purchases abroad). There are 38% among women and 30% among men as a percentage of Internet-Penetration of e-commerce. Among all online shoppers In Russia, the share of women is 55% (Yandex, 2016).

So the share of women in the quantity of purchases on the Internet is already 58%. However, these purchases, on average, significantly - by almost a third - are cheaper than Purchases of men (due to a larger share of purchases in the categories of clothing and cosmetics and a smaller share of purchases in the categories of electronics and techniques). As a consequence, women account for only a few less than half of all Russians spent on the Internet money for retail purchases.

Among the age groups, the largest share of online buyers is found in the junior category - 18-24 years: online purchases over the past year were 41% of the population and 43% of Internet users in this age range. Penetration of Internet commerce declines smoothly as the age of respondent’s increases: for 45-54 years, it is only 30% of Internet users and 18% of the country's
population and in the next age range (55-64 years) it falls to 17% and 6%, respectively (PwC, 2016).

The largest category of online buyers is people aged 25-34 years: their share is 30-31% and by the number of customers and by the number of orders, and by the volume of spending on Internet purchases. Leadership of this category is ensured by the multiplicity of this generation (born in the last 10 years of the existence of the USSR) and the high level of penetration of the Internet and electronic commerce in this age range (Data Insight, 2014).

The second in terms of costs for online shopping category - people 35-44 years. Although only 22% of online shoppers belong to this category, due to the high frequency of purchases and the high average check, the share of the category in orders and expenses grows to 24% and 26% respectively (Yandex, 2016).

The share of 18-24-year-olds also accounts for 22% of the total number of online buyers (which is a lot, considering that this is a 7-year interval, not 10-year interval, like everyone else). However, a lower frequency of purchases and a smaller share of expensive purchases lead to the fact that the share of this segment of the audience in the number of orders and in the amount of spending on online purchases is less (21% and 19%, respectively).

The research conducted by Data Insight in 2014 in Russian doesn’t differ from studies conducted in 2014 (Levin A., Levin I. and Weller, 2005). The most active buyers in the Internet shops are young categories of people despite the fact that population of Russia actively uses Internet (76% from the population in the age of 18-64).

Thereby, e-commerce in Russian is growing very rapidly. Previous studies of online shopping in Russia didn’t take into account factors influencing consumer’s intention to buy products via the internet. Consulting firms which studied e-commerce n Russia took into consideration only demographic factors of customers. For this reason the field of consumer’s attitude towards online shopping in Russia is worth examining.

1.2 Comparison of online and instore shopping

E-commerce is a very broad field of study. There are a lot of definitions of e-commerce. From general perspective it can be defined as commercial online activities. A narrow point of view states that e-commerce is a concept that describes the process of buying and selling (exchanging) of products (services) and information via the Internet (Lieber and Syverson, 2012). Thereby e-commerce can be considered as an interaction between buyers and sellers. E-commerce provides an opportunity to buy and sell products over the internet (Kumar and
Vijayalakshmi, 2016). At the same time Online shopping can be considered as a form of electronic commerce which allows consumers to directly buy goods or services from a seller over the Internet using a web browser (Chen and Hung, 2015). For this reason, online shopping can be considered as a part of e-commerce. It can be considered as a demand side in the field of e-commerce.

Mobile devices such as smartphones also can be considered as a part of e-commerce and online shopping (Chen and Li, 2012). The study conducted by researchers in England showed that consumers begin to use mobile phones in their purchasing processes but mobile devices are used not as frequently as computers during purchasing process (Rowley and Byrne, 2013). This study also indicates that mobile shopping is different from online shopping and can be considered as an independent kind of shopping. Scholars that conducted this research proposed to explore use of mobile phone on different stages of consumer decision making process. Thereby, mobile channel should be viewed as a distinct channel, not only as a replication of the Internet.

When all factors that affect consumer attitude toward online shopping are defined and described it is necessary to find out differences, similarities, advantages (disadvantages) of online shopping compared with traditional or in-store shopping (Perea, Dellaert and Ruyter, 2004). The study conducted in the beginning of the new millennium showed shift from traditional store-based retailing to active use of the Internet (Keen, 2002). The same results were received by PwC (2016) and research conducted in Russia in 2014 (Data insight, 2014). Thereby, trends didn’t change since 2002 and theoretical background of previous studies can be used.

Despite the fact that online shopping includes a lot of the same characteristics as in-store shopping, consumers have different frame of mind and different informational needs when they shop online or go shopping in a traditional store (Burke, 2014). Thereby it is important to explain differences and similarities between traditional and online shopping. Based on the model proposed by Lohse and Spiller (1999) a contemporary features of online and offline shopping were proposed (Nirmala and Dewi, 2012). Traditional shopping can be considered as action or activity of purchasing goods from stores (Oxford dictionary, 2016).

<table>
<thead>
<tr>
<th>Features</th>
<th>Instore shopping</th>
<th>Online shopping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistance</td>
<td>Sales assistant service</td>
<td>Product descriptions, information pages, gift services, search function, clerk on the phone/e-mail etc.</td>
</tr>
<tr>
<td>Promotion</td>
<td>Tradition sales promotion</td>
<td>Special offers, online games</td>
</tr>
</tbody>
</table>
and lotteries, links to other sites of interest.

<table>
<thead>
<tr>
<th>Measurement of amount of stores</th>
<th>Number of store entrances and store outlets/branches</th>
<th>Number of links to a particular online retail store</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods of payment</td>
<td>Checkout cashier</td>
<td>Online shopping basket, order</td>
</tr>
<tr>
<td>Perceived quality of a product</td>
<td>Look and touch of the merchandise</td>
<td>Limited to image quality and description, potential for sound and video applications</td>
</tr>
<tr>
<td>Measurement of amount of visits</td>
<td>Number of people entering the store</td>
<td>Number of unique visits to the online retail store</td>
</tr>
<tr>
<td>Physical owning of the product</td>
<td>After purchasing</td>
<td>After delivery via post office, deliver service etc.</td>
</tr>
</tbody>
</table>

| **Table 1 – Key features of online vs conventional stores (Nirmala and Dewi, 2012)** |

In this table traditional and online store features are compared. All features of traditional stores are also represented in online shops but sometimes with in a different form that can influence the degree of consumers satisfactory (Harris, Riley and Hand, 2017). For example in an online store customers don’t experience traditional face to face communication with sales manager (assistant) despite the fact that they are also able to communicate with a shop representative but only using the Internet technologies.

One of the main differences between online and offline shopping is availability of products. For example in a study conducted in the field of luxury goods respondents in more than 60 per cent of cases answered that they buy luxury products online because luxury stores have limited geographical locations (Liu and Hou, 2013). Another study also found that customers tend to buy high-touch products in conventional stores despite the fact that it is easier and cheaper to buy it online (Chen and Hung, 2015).

In 2005 Levin and a team of researchers proposed a conceptual framework for a process underlying consumers’ preferences for shopping online or offline for different products (Levin A., Levin I. and Weller, 2005). According to this concept products evaluated for online or offline shopping on terms of the degree to which key attributes are perceived to be delivered better online or offline (attribute values) and perceived benefit for this product (attribute weight). The overall utility toward online or offline shopping are defined as the product of attribute value by attribute weight, summed over attributes.
Figure 1 - Conceptual Model of the role of product and consumer characteristics in online/offline shopping preferences (Levin A., Levin I. and Weller, 2005).

This concept also was supported by contemporary scholars. For example it was proven that some customers buy products online if perceived benefits are high despite high degree of perceived risks (Li and Kannan, 2014). It was stated that customers that are reluctant to shop online employ this kind of shopping if they believe that products bought via the internet have better quality.

In particular, the effects of individual’s cognitive factors (Internet-based information search and perceived Internet usefulness) and risk aversion on perceived deception are more relevant when consumers shop online than when they purchase from traditional stores (Riquelme, 2014).

Previous studies have investigated that so-called high touch products that consumers want to touch, smell, try are those products that require physical presence at least on the last purchase stage (Chen and Hung, 2015). Other studies also have found that opportunity to handle, inspect a product until a purchasing decision underlies the preference for conventional instore shopping methods for such products as clothing, perfume, sport goods etc. (Herrmann Wentzel and, Landwehr, 2013). On the other hand, low touch products like airline tickets, computer software, books are generally perceived by consumers as products that are preferred to be bought online rather offline. Thereby, high touch and low touch typology can be used for future research.

Differences between online and offline shopping were described in this section of the first chapter. Online shopping tend to be more convenient for a customer due to several reasons, for instance particular products can be available only in online stores (Liu and Hung, 2015). However it is also important to define factors that influence online shopping and perceived risks associated with this kind of shopping.
For these reasons online shopping looks like traditional (in-store) shopping. However there are differences between these two kinds of shopping. For example in online shopping customers can’t physically examine a product. Customers can do it only after receiving of an order. Customers also don’t pay to a particular checkout cashier. Instead of this kind of payment they transfer money to a bank account (credit card) of online vendor. Thereby, it is necessary to examine factors and risks influencing online shopping.

1.3 Factors influencing online shopping

There are a lot of definitions of online shopping that were given by different researchers at different stages of penetration of the Internet to lives of consumers. But the most coherent and straightforward was given by researchers that used technology acceptance model (TAM) that was proposed by Davis as a framework for the definition (Davis, 1989). According to this definition online shopping is using of online shops by customers until a stage of purchasing and delivery (Ashraf, Thongpapanl, and Auh, 2014). Despite the fact that TAM model was primarily used to understand employment of information technologies in the work position, this model is also suitable for adoption of e-commerce (Tong and Xiao, 2010). Thereby this theoretical model can be used as a framework of adoption of online shopping. As it was stated in a previous section online shopping can be considered as a part of e-commerce (Lieber and Syverson, 2012). For this reason TAM model is suitable for studies in the field of consumer attitude toward online shopping.

TAM is a model that employs two independent determinants of a person’s attitude toward using a new technology. The first determinant is defined by the author as usefulness. This determinant measures a degree to which a person thinks employment of a new technology would improve his productivity or performance. The second determinant is defined as ease of use. This determinant helps to measure a degree to which a person think that will be used very easily. In this way usefulness measures perception of experience but ease of use measures perception during the process leading to the final result (Davis, 1989).

There is also the third construct of TAM model. This determinant is called enjoyment or the extent to which the activity of using the new technology is perceived to provide reinforcement in its own right, apart from any performance consequences that may be anticipated (Davis et al., 1992). Thereby, TAM model considers both utilitarian and hedonic aspects of a new technology using.

There are also different types of internet users that also should be taken into consideration. Despite the fact that this classification of internet users was proposed long before active using of
the Internet by different categories of people and long before penetration of the Internet to lives of people it can be used as basic model. The first category of internet shoppers can be described as problem solvers (Babin, 1994). This category of shoppers goes shopping via the Internet to purchase a specific product. This activity they consider as work. Their main goal is to acquire a new product as efficient as possible without big time consumption. However the second category of shoppers considers online shopping as enjoyment and is looking for potential entertainment (Holbrook, 1994). This category of shoppers enjoys online shopping experience but not results. For example, they value search for a product more than purchasing of this product.

Thereby, classification of online shoppers fits for TAM model. The first determinant (ease of use) covers problem solvers but the second determinant (usefulness) covers enjoy seekers. Enjoyment construct complements this model.

However TAM framework ignores social factors of technology acceptance. It was criticized for this by different scholars (Zhang, 2012). Despite the fact that such determinant of TAM as ease of use, usefulness and enjoyment are fundamental for this framework TAM still can’t explain behavior of consumers to newly arising technologies, especially in different e-commerce markets (Ashraf, Thongpapanl, and Auh, 2014). Thereby, for online shoppers’ additional factors should be included those are beyond of three basic TAM determinants.

In order to go beyond traditional determinants if TAM five factors that influence consumer behavior were proposed (Sam and Sharma, 2015). Five factors that influence consumer behavior toward online shopping: consumer traits, situational factors, product characteristics, previous online shopping experience and trust in online shopping.

![Figure 2 – A framework of technology accepted model (Davis, 1989).](image-url)
Consumer traits include basic socio-demographic factors such as age, gender, income of a household (a person), and level of education – (Burke, 2002). For example, according to the research that was conducted in 2002 such factor as age in greater degree influence consumers' attitude toward online shopping (Wood, 2002). Compared to older people young consumers tend to be more interested in using of new technologies. It can be explained by the fact that elder consumers belief that benefits of using the Internet for shopping are less than efforts spent on acquiring new skills. Contemporary studies also supported this theory. One of the main active online buyers group is young people from 18 to 27 years old (Chang, 2013). The research conducted on the Russian e-commerce market also stated that people in age from 18 to 27 are the most active internet buyers. It was also stated that children in the age of 12 to 17 also actively buy products via the Internet (Data Insight, 2014). However this category of Internet buyers buys products with help of parents and thereby can’t be included into analysis. The studies that applied TAM model also stated that young customers adopt new technologies more easily and faster than people older people (Ashraf, Thongpapanl, and Auh, 2014). Thereby young people in the age of 18-27 years old tend to be the most active online shoppers.

It important to understand what motivates customers to adapt purchasing from website (Colton, Roth, and Bearden 2010). Despite the fact that a lot of studies were conducted in the field of consumers’ attitude toward online shopping a consensus reading acceptance of such kind of shopping has not been reached (Ashraf, Thongpapanl and Auh, 2014). Most of researches were conducted in the most developed economies such as Canada, the US, Europe. For this reason it is critical to apply TAM to other e-commerce markets, especially to Russian market.

In some cases customers use Internet but don’t buy products via websites. This situation is affected by lack of trust in e-retailer die to the fact that customers perceive online shopping as a risky activity (Clemons, Wilson, 2016). In a context of online shopping trust has been defined as the extent to which a person expects that a new technology is credible and reliable (McKnight and Chervany, 2002). However in the context of online shopping trust can be defined as the extent to which consumers expect that an e-retailer will meet their transaction expectations and will not engage in opportunistic behavior (Ashraf, Thongpapanl and Auh, 2014).

A significant amount of TAM studies has indicated that perceived ease of use and perceived usefulness are the main constructs of user’s new technology acceptance. Different scholars consider perceived ease of usefulness as an important condition of a person adoption of not only new technologies but also social networking sites and online shopping (Kulviwat, 2016).

Situational factors also play one of the most important roles in consumer attitude toward online shopping. These factors include: time pressure, lack of mobility, geographical distance
and a need for special items (Agarwal, 2013). Consumers consider convenience and accessibility as the most important characteristics of online shopping (Sam and Sharma, 2015). These characteristics make internet shopping very attractive for people who don’t have enough time and access to big malls where they can buy any product. Thereby such factors as time pressure and lack of mobility affect costumers’ intention to go shopping online.

Sometimes there are no available products on the shelf of shops for customers. In these circumstances customers order products via the Internet. Customers also order tailored products that are suitable only for them. For this reasons, such factor as a need for special items induce consumers to shop online even if they are not familiar with online shopping (Chang and Tseng, 2013).

Trust toward online shopping (online vendor) also is one of the most important factors that influence consumer intention to buy products online. It was stated that more degree of trust toward online vendor than more probability that a customer buys a product via the internet (Ashraf, Thongpapanl and Auh, 2014). However, all other factors and perceived risks should be taken into consideration.

Decision of a consumer to go shopping online also influenced by a type of a product that a person wants to buy. Some products can be suitable to buy online but there are also products that are suitable only for instore shopping. Customers don’t consider to shopping online due to lack of physical contact and support during a purchasing process on the Internet.

Some products should be touched, smelled or tried during a purchasing process. For example, such categories of products as books, flowers etc. have a higher degree to be bought online because no physical assistance should be done (Chen and Hung, 2015). But some products as perfume, healthcare products and products that require assistance from real person (cars, some kinds of electronics) have a less probability to be bought by consumers (Harris and Hand, 2017). Thereby, if a physical assistance is needed for a product under consideration intention of a consumer to shop online is very low and vice versa. Moreover, if a product should be per-trialed or there is necessity to feel, touch and smell the product a chance to be bought by a consumer is very low. But for familiar or standardized product the probability to be bought is high.

Previous online shopping experience also influences intention of a customer to shop via the Internet (Singh, Kaushik, 2013). If a previous online shopping experience was negative for a certain customer than in the future he or she will be reluctant to participate in online shopping activities. However, if a previous online shopping experience was evaluated as a satisfactory than a consumer will be actively uses the Internet for online shopping.
This section of the first chapter explained main factors that influence consumers’ intention to buy products via the internet. These factors include: previous online shopping experience; type of a product (high touch and low touch product); trust towards online vendor; perceived ease of use; perceived usefulness. At the same time there are risks that decrease customers’ motivation to buy products via the internet. These risks are explained at the next section of the literature review.

1.4 Risks associated with online shopping

In a previous section different factors that influence online buying behavior were defined. This factors can increase or decrease customer intention to buy products. But there are also risks associated with online shopping. Despite the fact that online shopping is more suitable and convenience for customer a recent worldwide study conducted by PwC found out that majority of consumers still prefer to shop in-store (PwC, 2016). So, even in a world where degree of internet penetration is high people still are afraid of online shopping.

A conceptual model of perceived risk was proposed in 1960. According to this concept, it is not possible for a consumer to avoid risk in purchasing as there is uncertainty about the consequences before the actual purchase takes place (Bauer, 1960). Perceived risk can be divided on two parts: uncertainty and negative consequences (Dowling, 1986).

There are a lot of studies regarding perceived risk. But there are main dimensions of perceived risk. These dimensions include: perceived financial risk, perceived performance risk, perceived time loss risk, perceived social risk, perceived psychological risk, presided physical risk and perceived privacy risk (Bhatt, 2012). These types of perceived risk can be applied to online shopping.

Perceived financial risk can be defined as concern of some financial losses occurred during online shopping process (Koksal, Penez, 2015). This type of perceived risk can be associated with possible future expenses of product return and such hidden factors as delivery. Also this kind of risk can include other financial losses such as absence of credit card security. Customers also are afraid of difficulties to get money back (Bhatt, 2012).

Perceived performance risk can be defined as concern over sustainability of communicational channel (in this case Internet). It includes uncertainty over Internet performance. Customers are not sure enough that the Internet will deliver the promised benefits (Vinhal and Mitchell, 2012). This type risk includes uncertainty over announced characteristics of a product. For example, customers are afraid to receive a product that doesn’t look like a picture on the web site.
Customers also can perceive psychological risk during online shopping process. Buying of unsatisfied product can result in such feelings as frustrating, disappointing and shameful. Psychological risk can be described as possibility of suffering mental distress resulting from a purchasing made online (Sheeba, 2013). It is one of the most frequent reasons why customers don’t want to shop online (Forsythe, Shi, 2013). This kind of risk significantly affects consumers considering e-commerce transaction (Weatherman, Well, 2010).

Security risk is also one of the top reasons why consumers refuse to buy products online despite the fact that this kind of shopping is field security risk can be defined as a degree of uncertainty and doubts nascent from thoughts of more convenient rather than traditional (in-store) shopping (Coker, Ashill and Hope, 2011). In e-commerce disclosure private and financial information online and that it is personal belief of the insecurity of using the Internet for online shopping purposes (Coker, Ashill and Hope, 2011).

Security risk also can include consumers’ perception toward unknown third party that can hack into web browser and illegally access transaction-related, private or information regarding credit card (Chiu Chen, 2012).

Privacy risk is another type of risk that influences online buying behavior. Perceived privacy risk relates to shoppers being unsure whether or not online seller will collect, use and distribute information about them and their behavior to other parties without their prior knowledge and agreement (Weatherman, Miyazaki and Sprott, 2010). This kind of risk looks like security risk. But in the situation of privacy risk customers are not afraid that their information (credit card numbers etc.) will be stolen.

Studies have proved that when there is high quality information on a website customers perceive information regarding the product as accurate and current. In such situation customers believe that online seller fulfills the obligations regarding the information (Kim, Forsyth, 2008). Therefor if a seller provides detailed and completed information regarding the product the trust of consumers can be enhanced. Researchers also proved that high quality information can satisfy.

In majority of cases consumers perceive buying risk at the earliest stages of decision making process. According to Kotler consumers usually go through five traditional stages of buying decision process (Kotler, Armstrong, 2016). There are five main stages according to Kotler:

1) Need recognition
2) Information Search
3) Evaluation of alternatives
4) Purchase decision
5) Post-purchase decision
It is a general model and it can be applied to online shopping process (Cunningham, 2005). Risk occurs on the earliest stages (product need recognition) and can remain until a phase purchase decision. Therefore, risk perception can be considered as a pre-purchase uncertainty since the result of buying is unidentified (Murray, 1991). Results of different studies show that consumer risk perception can affect as offline as online buying behavior. These studies examined a broad range of products over time. These studies have found that consumers’ perceived risk have a direct negative influence on intention to use online shopping to buy products (Dai, Forsythe and Kwon, 2014).

During several years different authors tried to investigate different risk reducing strategies that were used by consumers to overcome their perceived risk during online shopping process (Zheng, 2012). Such types of products as clothing, computers, printers, consumer electronics and airline tickets were analyzed. It was found that top five risk reducers were payment security, information of product specification, price, website reputation and ability to communicate with online shop representative (Zheng, 2012). These results were compared with results of study that was conducted 10 years prior (Cases, 2002). And it was found that even after 10 years security issues continue to be the important factors that decrease customer intention to shop online.

Another study conducted by Zheng (2012) also found that such factors as payment security, money back guarantee, and previous experience with a product were the most important factors influencing online shopping behavior. But this study was restricted only by clothes. Thereby even after deep penetration of the Internet to lives of people still are reluctant to online shopping due to security reasons..

A system of perceived risks influences consumer intention to buy online. Thereby even after deep penetration of the Internet to lives of people still are reluctant to online shopping due to security reasons. However different types of customers perceive risks differently. For some customers financial and privacy risk is more important than time loss risk (Coker, 2011). Thereby, it is important to understand why some customers perceive the same type of risks differently. Psychological aspects of customers should be analyzed.

Previous studies took into consideration the main risks that decrease customers’ intention to buy products via the internet. Such risks include: time loss risk; performance risk; finical and privacy risk and psychological risk. This system of risks was examined in different cultural and geographical context. However customers can perceive these risks differently in the context of Russia.
1.5 Psychographic aspects of consumer behavior

Demographic profile of a customer is probably one of the most common marketing tools for description of a customer. Such indicators as age, income education etc. of position in a social hierarchy influence many types of consumer behavior that users of a product (brand), viewers of TV program (Internet users in a case of online shopping) probably differ from the rest of the population on one or more of the common demographic characteristics (Wellis, 1975). It is not so difficult to collect demographic characteristic of customers that is why marketers use them. But demographic profiles of consumers are not sufficient enough as it can be seemed.

There are a lot of definitions of psychographic that were proposed in the 20th century but these definitions are still relevant. There is no common definition of psychographic because each psychographic research finds something new regarding the topic. But Wellis (1975) defined some common elements of psychographic research.

All psychographic studies move beyond tradition demographic characteristics of a customer. The amount of these added dimensions can be vary from two to several hundred depending on researcher's objectives and these dimensions can include activities, interests, opinions, need, value, attitudes and personal traits (Wellis, 1979).

Psychographic studies are quantitative. All researchers in the field of psychographics use precoded, objective questionnaires that may be self-administrated or conducted by traditional interviewers. Precoding method makes the data adaptable to complex multidimensional statistical analysis. Ease of administration makes possible employment of big representatives’ samples. These practices distinguish psychographics studies from qualitative research (Wellis, 1975).

In general psychographic research can be defined as quantitative research designed to place consumers on psychological (distinguished from demographic) dimensions research (Wellis, 1975). These studies can a new insight and unordinary conclusions because they go far beyond accepted standards. These studies also give a chance to use large representative samples due to quantitative origin of research.

AIO (activates, interests, opinions) is a psychographic technique designed for consumers’ lifestyle measurement (Gladwell, 2007). This technique helps to analyze activities, interests and opinions of consumers. Customers are offers to answer the questions in the form of conclusions and their task to respond depending on the degree of agreement (disagreement).

AIO psychographic studies employ the list of psychographic statements that are developed in mind relevant aspects of consumers’ personality, interests, buying motives, attitude, believes and values (Plog, 2010). Consumers’ lifestyle can be measured by asking consumers question
regarding their activities interests and opinions. Activities can be defined as actions during work, shopping and leisure time. The way how people do their work, amounts and types of their hobbies, behavior during shopping process are the most important characteristics that describe consumer profile.

Usually this psychographic technique is implemented on a large scale samples employing standard questioners that contain many questions that require agree (disagree) answers. These questions should be clear, coherent and precise. Such lifestyle research use AIO technique that leads to deliver lifestyle typology by using cluster analysis (Wellis, 1979). Responses of consumers are measured according with a scale of Likert (from “completely disagree” to “completely agree”). Using this technique it is possible divide customers with similar responses into market segment. Such statements of responses are called inventory.

Questions regarding psychographics are classified under four major terms: reliability, applications to real-world marketing problems and contribution to study of consumer behavior (Wellis, 1975). Reliability can be used in the restricted technical sense, for example it can be freedom from random error. Despite the fact that reliability is quite important it is not only the one determinant that should be considered. During reliability assessing process it is also important to distinguish between two main uses for physiographic measurement. One of them is public opinion poll. For instance, an investigator wants to know how many respondents agree with a statement. In this case random errors tend to cancel but overall averages as rule quite stable.

Another use of psychographic is in relationships. Reliability is important in studies of relationships because unreliable measurements can, in and of themselves, make strong relationships appear to be weak. Not so much has been published on the reliability of homemade psychographic items and scales. In a review made in 1971 Pessemier and Bruno (1971) showed a range of six-month test-retest reliability coefficients for individual items from "less than .30" to "over .80" with a median between .60 and .69. And they reported reliability coefficients for multi-item scales ranging from .64 to .90, with a median of about .80.

Current available data has shown that psychographic measurements and analytical can have satisfied reliability. But in majority of cases satisfied reliability doesn’t imply adequate reliability in all cases. It can be especially fairly for dependent variables because they contain some degree of random error. Thereby measured behavior is not sustainable in nature (Wellis, 1979). On the other hand unreliability reduces confidence that can be revealed in relationships detected in cross tabulations and regressions. It is essential to cross validate tabulations, regressions and clusters against holdout samples.
Validity is a measurement to the degree that it really measures and what it was supposed to measure (Wellis, 1975). Psychographic measurement can be reliable without being valid. These measurements can be relatively free of random errors but at the same time can be full of irrelevancies and biases. The question of validity in psychographic can’t be answered simply due to difficulty and complexity. There are four types of validity in psychographic: construct validity of homemade psychographic variables, construct validity of standardized scales, construct validity of segments and also predictive validity (Pessemier and Bruno, 1971).

Construct validity is determined by showing that it relates to other variables and is not related with other variables. A process of established construct validity is usually spread over time. It includes consistent accumulation of evidences, usually performed by independent investigators.

Psychographic studies that use standardized scales are less dependent on face validity but studies that use own set of independent variables (Pessemier and Bruno, 1971). At least almost all published scales of attitude and personality inventories are accompanied by some validity data but some instruments are accompanied by a lot of validity. It’s almost impossible to make a valid generalization regarding the construct validity of standardized Identity and attitude scales. Actually, it usually seems that the more a scale is investigated the less agreement there is as to its true meaning.

In econometrics, the validity of a model is established by its ability to predict the summed or averaged behavior of large numbers of individuals. In psychometrics, the validity of a test is established by its ability to predict the behavior of separate individuals. This distinction is important because the degree of accuracy that can be expected of predictions at the aggregate level is much higher than the degree of accuracy that can be expected of predictions at the individual level (Wellis, 1979).

In some cases it is difficult do give a brief answer to the question whether psychographic measurement are valid. This answer heavily depends on types of validity questions in mind. Answers greatly vary from study to study even if there is single type of validity. In general psychographic variables are interconnected between each other and relates to demographics.

The evidence on predictive validity shows that psychographic variables seldom account for large portions of the variance of individual behavior. However, this evidence also shows that psychographic variables are capable of producing substantial differences between groups of consumers, and that these differences are often larger than the differences produced by the standard demographic profile (William, 1975).

In the sphere of online shopping not so much studies using psychographic techniques were conducted. However a research conducted in 2014 in the sphere of online shopping
perceived deception stated that due to the inherent tendency of risk-averse consumers to be later adopters of any novelty shopping situation, they can develop less knowledge and experience in online shopping settings, so they may be less able to gather accurate product information and, thus, have a greater likelihood of choice error when they shop online (Riquelme, 2014). However psychographic portrait of internet shoppers was not developed in this study.

Thereby psychographic methods offer one of the best ways to describe consumers for marketing practitioners. These methods have many advantages over alternatives methods despite the fact that a lot of work on reliability validity should be done. Psychographic offers new ways for solvation of old problems and new vocabulary for description of consumers (Duygu, 2009).

Each psychographic research creates own psychographic portrait of a customer. However all these profiles are based on a model that was proposed in 1970’s by Wellis (1975). For example Duygu clustered consumers in the research into several groups: people who prefer single activities and people who prefer group activities (Duygu, 2012). These customers’ characteristics were also subdivided into several groups. In a limitation of the research the author proposed to create own portraits of consumers because is clusterization of customers based on their interest is not ultimate.

A research conducted in the field of consumer psychology identified several restrictions in psychographic studies (Pham, 2013). It was stated that in the field of consumer psychology previous research faced issues of relevance. Previous research didn’t take into consideration aspects of nonpurchase modes of acquisition (motives beyond customer intention to buy products). Theoretical research conducted by Pham (2013) emphasized issues described by Wellis in 1975. The contents of consumers' thoughts, beliefs, feelings, motives, values, desires, and actions are critical for our understanding of consumer behavior. Thereby, AIO model is suitable for the research.

In this chapter factors that influence consumer intentional toward online shopping and different kinds of risks that decrease motivation to buy products online were described. All models that were developed in 1980-1990’s are still relevant. All previous studies didn't take into consideration customers portraits (activities, interests, opinions etc.). The model described in the second chapter incorporates factors and risks influencing online shopping and customers’ profiles.
Chapter 2 Research methodology

This chapter describes and explains methodological framework of the research. Data collection, data analysis and data analysis are described.

2.1 Research approach

The literature review conducted in the first chapter has shown that despite the fact that online shopping is more convenient than the traditional one (in-store) shopping people still perceive this kind of shopping as risky activity. However, a research conducted in 2014 in Russia has proved that despite some perceived risks associated with online shopping the volume of such kind of shopping activity is increasing. Statistics also shows that online shopping is the most popular among the junior category (18-24 years) and desire to buy products online is decreasing among other age groups (Data Insight, 2014). Other studies also showed that people tend to buy products in conventional shops if such products can be smelled, touched or inspected in other ways (Levin, 2003). But the research conducted by Data Insight (2014) analyzed only material goods and intangible goods such as airline tickets were excluded from the research.

In order to set up the research design it is necessary to define research questions that deliver framework of the data collection and direct the entire implementation of the research methodology (Bryman and Bell, 2003).

The research gap has shown that studies regarding consumers’ attitude towards online shopping studied factors and risks influencing consumers’ intention to buy product via the internet. However these factors and risks were not examined in Russia. Studies conducted in Russia took into consideration only demographic factors such as gender, age etc. At the same time psychographic characteristics were not taken into account in any research conducted in other cultural and geographical conditions. Thereby, these research questions address the research gap:

- RQ1 – What factors affect consumer’s intention to buy product via the internet in Russia
- RQ2 – What risks affect consumer’s intention to buy product via the internet in Russia
- RQ3 – Do psychographic characteristics affect consumer’s intention to buy product via the internet in Russia
A particular approach of research conduction that depends on a type of required data for research question answers should be chosen. There are three main approaches that help to get reliable and valid results. There are three accepted by the scientific community methods: quantitative, qualitative and mixed that includes elements of both quantitative and qualitative research (Williams, 2007). For the purposes of this research quantitative approach is more convenient. Thereby, for this research quantitative method was adopted.

According to the definition of quantitative research this methodology help to collect anylize data that can be qualified and statistically handled (Creswell, 2003). Quantitative research establishes and tests mathematical relationships between variables. It is also possible to generalize acquired results to a large population (Leedy and Ormrod, 2014). Especially causal comparative research allows testing the same nature of independent variables to dependent variables. This approach was adopted to define the main activities, interests and opinions among different groups of online shoppers.

Consumer attitude toward online shopping is not well covered yet due to the fact that all previous studies took into consideration only demographic features of online buyers. However previous studies are taken into consideration in this research because perceived risks and factors influencing consumer intention to buy products online are covered enough. Thereby, this research aims to develop psychographic portrait of online shoppers.

Research design is the most important stage of scientific research. Research design is a plan of collection, measurement and analysis of this collected data. Different components of the strategy are integrated into united and logical mode (Vaus, 2001). Research design aims to guarantee that acquired evidences help to solve the problem in the most effective way logically and unambiguously. Such aspects of the research design as sampling, choice and data collection are described in this chapter.

The topic of this research is not sufficiently examined by previous studies. All contemporary studies in the field of consumer attitude toward online shopping concentrated only on demographic aspects of consumers. This incorporates as demographic as psychographic aspects of consumers. Thereby, for the development of hypothesis not so much theory represented.

For the stated reasons this research fall into explanatory category of research. According to Shield (2013) such kinds of research examine problems that were not clearly defined. The studies in the field of psychographics were conducted even in 1970’s (Wellis, 1979) but this research technique was not applied to the field of online shopping. For this reason questions for the questionnaire are based on the studies that are not related to the topic of online shopping.
In order to conduct an accurate research the design of the study should be set up. According to Malhotra (2012) a research design is a framework or a plan to conduct an applied marketing research. It details the procedure necessary for obtaining the information needed to structure or solving the research problem. A good and coherent research design makes ensures that the research is conducted in the most effective way. Thereby the next stage in the research is to identify a proper research design.
2.2 Theoretical model

This theoretical model of the research incorporates different models and theories that were developed by scholars. Thereby, this framework can be divided into four parts. The core part in this model is consumer intentions to buy products online. The first part of this structure is dedicated to perceived risks. A system of perceived risks is borrowed Dowling (1986) who was the first research who developed a system of perceived risks. This system was also further

Figure 3 – Theoretical model of the research
developed and applied to consumer behavior in the field of online shopping (Hassan, Kunz, Pearson and Mohamed, 2006).

The second part of this model is dedicated to the Technology Accepted Model (Davis, 1989). Determinants of this model can be applied to consumer attitude toward online shopping research and are highly interconnected with performance risk and time loss risk (Weatherman, Well, 2010). Perceived usefulness is correlated with perceived performance risk. The greater the degree of usefulness, the less the degree of performance risk. Thereby, consumer the degree of intention to buy a product online is also high. There is the same situation between time loss risk and perceived ease of use. If a consumer thinks that online shopping is an activity that can be performed easily (he or she doesn’t need to spend a lot of time handling how to do it) than time loss risk is low. Thereby, in this case a probability to buy product online by a consumer is also high.

Customer characteristics also influence consumer attitude to buy product online and are interconnected with technology accepted model. There are two types of internet users that were described in the first chapter: problem solvers and enjoy seekers (Babin, 1994). This type of users also can be classified according to their interest, opinions and activities (Wellis, 1979).

Previous online experience directly influences intention to buy products online. Studies conducted in the beginning of 2000’s proved that if such kind of experience was positive than a consumer probably will use the Internet for shopping activities (Shim, 2001). Thereby, previous online shopping experience directly affects intention to buy products online but for example it can’t be applied to problem solvers because for such kind of customers difficult online buying process brings satisfaction (Babin, 1994).

Type of a product also influences intention to buy products via the Internet (Levin, 2003). So called physical products that should be smelled, touched etc. tend to be bought in traditional shops but other types of products tend to be bought online (Chiang, 2003). Types of products are connected with types of perceived risks (Weatherman, Well, 2010). Especially type of product is correlated with perceived psychological risk. If a customer had a high expectation regarding a product bought on the Internet than perceived psychological risks is high. For so called high touch product this type of perceived risk is always high.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Theory</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Time loss risk</td>
<td>Theory of perceived risks</td>
<td>The likelihood of lost time during online shopping (Lim, 2003; Coker, 2012)</td>
</tr>
<tr>
<td>Performance risk</td>
<td>Theory of perceived risks</td>
<td>Perceived degree of uncertainty toward buying a product over the internet (Coker, 2012)</td>
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<tr>
<td>Financial and privacy risks</td>
<td>Theory of perceived risks</td>
<td>Risk of losses in economic terms, in the internet terms it can be considered as a net loss of money to a consumer (Forsythe, 2001; Mallapragada, Chandukala and Liu, 2016)</td>
</tr>
<tr>
<td>Psychological risk</td>
<td>Theory of perceived risks</td>
<td>Possibility of suffering mental destress resulting from a purchase made online (Lim, 2003; Featherman and Wells, 2013)</td>
</tr>
<tr>
<td>High touch type of a product</td>
<td>-</td>
<td>Products that can be handled, inspected until a purchasing decision (Levin, 2005; Landwehr and Hermann, 2014)</td>
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<tr>
<td>Low touch type of a product</td>
<td>-</td>
<td>Products that shouldn’t be touched or inspected before purchasing (Levin, 2005; Landwehr and Hermann, 2014)</td>
</tr>
<tr>
<td>Perceived usefulness</td>
<td>TAM framework</td>
<td>A degree to which a person thinks employment of a new technology would improve his productivity or performance (Davis, 1989; Ashraf, Thongpapanl and Auh, 2014)</td>
</tr>
<tr>
<td>Perceived ease of use</td>
<td>TAM framework</td>
<td>A degree to which a person think that the new technology</td>
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<td>Factor</td>
<td>Measure</td>
<td>Description</td>
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<tr>
<td>Previous online shopping experience</td>
<td>-</td>
<td>Emotions experienced during online shopping (Khan, 2015)</td>
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<tr>
<td>Trust towards online shopping</td>
<td></td>
<td>The extent to which consumers expect that an e-retailer will meet their transaction expectations and will not engage in opportunistic behavior (Ashraf, Thongpapanl and Auh, 2014)</td>
</tr>
<tr>
<td>Attitude towards single sport activities</td>
<td>AIO model</td>
<td>Measurement of consumer lifestyle; The extent to which a consumer thinks that sport activities without accompanying of other people is suitable for him (Wellis, 1979; Duygu, 2012)</td>
</tr>
<tr>
<td>Attitude towards group sport activities</td>
<td>AIO model</td>
<td>Measurement of consumer lifestyle; The extent to which a consumer thinks that sport activities with friends, relatives etc. is suitable for him (Wellis, 1979; Duygu, 2012)</td>
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<tr>
<td>Attitude towards single conventional shopping</td>
<td>AIO model</td>
<td>Measurement of consumer lifestyle; The extent to which a consumer thinks that conventional shopping without accompanying of other people is suitable for</td>
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<td>AIO model</td>
<td>Measurement of consumer lifestyle; The extent to which a consumer thinks that some activities are suitable for him (Wellis, 1979; Duygu, 2012)</td>
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<td>Attitude towards group</td>
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<td>conventional shopping</td>
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<td>Attitude towards family</td>
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<td>Attitude towards single</td>
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<td>activities</td>
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Table 3 – The constructs of the theoretical model

Based on this theoretical model and its constructs the following Hypotheses are formulated:

- High touch type of a product has no statistically significant effect on the consumers’ intention to buy products via the internet
- Low touch type of a product has statistically significant effect on the consumers’ intention to buy products via the internet
- Attitude towards single sport activities has statistically significant effect on the consumers’ intention to buy products via the internet (Wellis, 1979; Duygu, 2012)
- Attitude towards group sport activities has no statistically significant effect on the consumers’ intention to buy products via the internet (Wellis, 1979; Duygu, 2012)
- Attitude towards single activities has statistically significant effect on the consumers’ intention to buy products via the internet (Wellis, 1979; Duygu, 2012)
- Attitude towards family activities has no statistically significant effect on the consumers’ intention to buy products via the internet (Wellis, 1979; Duygu, 2012)
- Attitude towards single conventional shopping has statistically significant effect on the consumers’ intention to buy products via the internet (Wellis, 1979; Duygu, 2012)
- Attitude towards group conventional shopping has no statistically significant effect on the consumers’ intention to buy products via the internet (Wellis, 1979; Duygu, 2012)
- Time loss risk has statistically significant effect on the consumers’ intention to buy products via the internet (Coker, 2012)
- Performance risk has statistically significant effect on the consumers’ intention to buy products via the internet (Coker, 2012)
- Financial and privacy risk has statistically significant effect on the consumers’ intention to buy products via the internet (Mallapragada, Chandukala and Liu, 2016)
- Psychological risk has statistically significant effect on the consumers’ intention to buy products via the internet (Featherman and Wells, 2013)
- Perceived usefulness positively has statistically significant effect on the consumers’ intention to buy products via the internet (Ashraf, Thongpapanl and Auh, 2014)
- Perceived ease of use has statistically significant effect on the consumers’ intention to buy products via the internet (Ashraf, Thongpapanl and Auh, 2014)
- Trust toward online vendor has statistically significant effect on the consumers’ intention to buy products via the internet (Ashraf, Thongpapanl and Auh, 2014)
- Previous online shopping experience has statistically significant effect on the consumers’ intention to buy products via the internet (Khan, 2015)

2.3 Sample strategy

Sampling design process has six main steps. These steps are highly interconnected and relevant to all aspects of the research. Sample design should be consolidated with other decisions in the research (Wills, Malhotra, and Birks, 2012):

- Define the target population.
- Determine the sampling frame.
- Select sampling techniques.
- Execute the sampling process.
- Validate the sample.
It is impossible to gather information regarding the whole population. However for the purposes of this research Russia is considered as the targeted population. But due to the fact that population of Russia is 143, 5 million of people (Federal Statistics Service of Russia, 2014) it is impossible to examine all regions of Russia. Thereby, Federal cities can be considered for sampling design due to the fact that all other regions catch up trends of the federal cities. According to the research conducted by Yandex (2016), penetration rate of the internet in Moscow was 79%, in Saint-Petersburg penetration rate of the internet is a little lower 78%. Average penetration rate of the Internet in Russia is 68%. Thus, Moscow and Saint-Petersburg can be considered as regions for sampling.

According to the research conducted by Data Insight (2014) the most active group of internet buyers are 18-24 years old. However people from other age groups also use internet for online shopping but the amount of people in other age groups are lower than in the most active one (Data Insight, 2014). A research regarding the internet usages conducted by Yandex stated that people from 12-24 years old are the most active Internet users group. Data Insight didn’t include adolescence from 12-18 years old due to the fact this category of internet users purchase products online under supervision of adults. Thereby, for the sampling design individuals of Saint-Petersburg and Moscow in the age of 18-30 can be interviewed for the purpose of the research. In total 400 people were targeted for the research.

For the purpose of this research probability sampling is used. Probability samples allow statistical projection of the results to a target population (Wills, Malhotra, and Birks, 2012). This kind if sampling is favorable for estimation of overall market.

2.4 Data collection methods and procedures

The most convenient and efficient instrument for data collections is self-administrated questionnaire because it gives opportunity to collect a big amount of data without high costs of data acquiring. One of the most important advantages of this method is ease of administration. Also this methods allows to receive high level of responses quality during a short period of time (Schmee and Oppenlander, 2010).

The questionnaire was prepared only in electronic forms due to the fact that all people who shop online are active internet users. The Google Forms service was used in order to make the survey available for online audience. Social network website vk.com was used is order to distribute the questionnaire. There are several reasons for selection of such approach:
According to a research conducted by Yandex, vk.com is the most popular website among young people from age of 12-29 years old (Yandex, 2016). As it was stated above the most active internet buyers are people from 18-27 years old (Data Insight, 2014);

There are about 85% of internet users in the age of 18-30 in Saint-Petersburg (Yandex, 2016);

Google forms helps to avoid missing data problems because a respondent should answer all questions before finish of the survey.

A design of the service consists of 16 parts where each part consists of two questions. Each part of the questionnaire test constructs of the theoretical model. Respondents evaluate different factors influencing their intention to buy product via the internet using Likert scale from 1 to 5 where 1 is “totally disagree” and 5 is “totally agree”

The following questionnaire was developed using a conceptual model and constructs of this model:

**Trust**

Unit 1 I make an online purchase if an online vendor has a positive reputation (Ashraf, Thongpapanl and Auh, 2014)

Unit 2 I make an online purchase if my friends have positive comments about an online vendor (Mallapragada, Chandukala and Liu, 2016)

**Previous experience**

Unit 3 I buy products via the internet if my previous online shopping experience was positive

Unit 4 I buy products via the internet if experience of my friends was positive

**Type of a product**

Unit 5 I prefer to buy products via the internet that don’t need to be touched or smelled) before purchasing (Levin A., Levin I. and Weller, 2005)

Unit 6 I prefer to buy via the internet all type of products (Levin A., Levin I. and Weller, 2005)

**Time loss risk**

Unit 7 I don’t buy products via the internet because I can faster buy it in a conventional shop (Lim, 2003; Coker, 2012)

Unit 8 I don’t buy products via the internet because I think that online shopping take more time because I need to wait delivery of the product (Lim, 2003; Coker, 2012)

**Performance risk**

Unit 9 I don’t buy products via the internet because ordered product may not meet my expectation (Cheng, 2012)
Unit 10 I don’t buy products via the internet because it is difficult to evaluate quality of a product (Cheng, 2012)

**Financial and privacy risk**
Unit 11 I don’t buy products via the internet because I am afraid that money can be stolen from my credit card (Mallapragada, Chandukala and Liu, 2016)
Unit 12 I don’t buy products via the internet because I am afraid that I can’t exchange the product and receive money if I don’t like an ordered product (Mallapragada, Chandukala and Liu, 2016)

**Psychology risk**
Unit 13 I don’t buy products via the internet because I can fell mental destress if an ordered product doesn’t meet my expectation (Featherman and Wells, 2013)
Unit 14 I don’t buy products via the internet because I don’t feel satisfaction during online shopping process (Featherman and Wells, 2013)

**Perceived Usefulness**
Unit 15 I buy product via the Internet because it helps me to save time and spend it on other activities (Ashraf, Thongpapanl and Auh, 2014)
Unit 16 I buy products via the internet because it helps me to receive more detailed information of a product (Ashraf, Thongpapanl and Auh, 2014)

**Perceived Ease of use**
Unit 17 I buy products via the internet because internet shopping is an easy activity (Ashraf, Thongpapanl and Auh, 2014)
Unit 18 I buy products via the internet because I can easy find products that I am interested in (Ashraf, Thongpapanl and Auh, 2014)

**Attitude towards sport activities**
Unit 19 I prefer to spend my spare time doing sport activities alone (Wells, 1975; Boone, 2014)
Unit 20 I prefer to spend my spare time doing sport activities with my friends (Wells, 1975; Boone, 2014)

**Attitude towards conventional shopping**
Unit 21 I prefer to spend my spare time doing shopping alone (Wells, 1975; Boone, 2014)
Unit 22 I prefer to spend my spare time doing shopping with my friends (Wells, 1975; Boone, 2014)

**Attitude towards spare time activities**
Unit 23 I prefer to spend my spare time with my family (Wells, 1975; Boone, 2014)
Unit 24 I prefer to spend my time alone (Wells, 1975; Boone, 2014)
2.5 Data analysis and processing

The best instrument for such kind of research is statistical analysis because collected information from the survey has a quantitative nature.

Regression analysis is the best instrument in order to find factors that affect consumer’s intention to buy product via the internet. Thereby this instrument can be used to find the relationship between factors. Regression analysis is a statistical process for estimating the relationships among variables (Gordon, 2015).

Before running a regression, first, it is required to find Cronbach’s alpha for the sets of units forming each construct/factor. This check allows to verify validity of the questionnaire testing reliability of designed scale. (Kaplan and Saccuzzo, 2012). Second, presence of collinearity between constructs has to be tested. This step has special importance when a large number of explanatory variable are included in a model (Hill and Adkins, 2001).

If there is no collinearity found between independent variables, then regression analysis can be run with entire set of 16 variables described above.

Chapter 3 Factors, risks and consumers characteristics influencing online shopping

This chapter describes outcomes received from regression analysis. The full process of data analysis is described in this chapter. Factors, risks and psychographic consumer characteristics influencing online shopping in Russia are identified and described.

3.1 Regression analysis of factors influencing online shopping

Scale validation is the first step of regression analysis. For this purpose Cronbach’s alpha should be used for each construct of the theoretical model

<table>
<thead>
<tr>
<th>Name of the construct</th>
<th>Cronbach’s alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>0.621</td>
<td>2</td>
</tr>
<tr>
<td>Previous experience</td>
<td>0.805</td>
<td>2</td>
</tr>
<tr>
<td>Type of a product (low touch)</td>
<td>0.801</td>
<td>2</td>
</tr>
<tr>
<td>Type of a product (high touch)</td>
<td>0.721</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Time loss risk</td>
<td>0.715</td>
<td>2</td>
</tr>
<tr>
<td>Performance risk</td>
<td>0.863</td>
<td>2</td>
</tr>
<tr>
<td>Financial and privacy risk</td>
<td>0.691</td>
<td>2</td>
</tr>
<tr>
<td>Psychology risk</td>
<td>0.701</td>
<td>2</td>
</tr>
<tr>
<td>Perceived Usefulness</td>
<td>0.807</td>
<td>2</td>
</tr>
<tr>
<td>Perceived Ease of use</td>
<td>0.737</td>
<td>2</td>
</tr>
<tr>
<td>Attitude toward single sport activities</td>
<td>0.759</td>
<td>2</td>
</tr>
<tr>
<td>Attitude toward group sport activities</td>
<td>0.732</td>
<td>2</td>
</tr>
<tr>
<td>Attitude toward single conventional shopping</td>
<td>0.637</td>
<td>2</td>
</tr>
<tr>
<td>Attitude toward group conventional shopping</td>
<td>0.705</td>
<td>2</td>
</tr>
<tr>
<td>Attitude toward family activities</td>
<td>0.736</td>
<td>2</td>
</tr>
<tr>
<td>Attitude toward single activities</td>
<td>0.723</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 5 – Reliability statistics

Multicollinearity check is the next step of regression analysis. Information regarding collinearity for one of independent variable statistics is represented in the table 6.
Table 5 – Collinearity statistics

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>Experience</td>
</tr>
<tr>
<td></td>
<td>Time</td>
</tr>
<tr>
<td></td>
<td>Performe</td>
</tr>
<tr>
<td></td>
<td>Psychology</td>
</tr>
<tr>
<td></td>
<td>Use</td>
</tr>
<tr>
<td></td>
<td>Financial</td>
</tr>
<tr>
<td></td>
<td>Ease</td>
</tr>
<tr>
<td></td>
<td>Groupsport</td>
</tr>
<tr>
<td></td>
<td>Singlesport</td>
</tr>
<tr>
<td></td>
<td>Singleshop</td>
</tr>
<tr>
<td></td>
<td>Family</td>
</tr>
<tr>
<td></td>
<td>Single</td>
</tr>
<tr>
<td></td>
<td>Groupshop</td>
</tr>
<tr>
<td></td>
<td>Typelow</td>
</tr>
<tr>
<td></td>
<td>Typeshigh</td>
</tr>
</tbody>
</table>

a. dependent variable: Trust

In this case all VIF value are lower than 3. It means that there is no correlation between Trust variable and other variables. All combinations of multicollinearity analysis were run. The highest VIF value was lower than 3.

Table 6 – Test of Parallel lines

Test of Parallel Lines

<table>
<thead>
<tr>
<th>Model</th>
<th>-2 Log Likelihood</th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null Hypothesis</td>
<td>556,919</td>
<td>15,134</td>
<td>16</td>
<td>.262</td>
</tr>
<tr>
<td>General</td>
<td>435,539</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

a. Link function: Logit.
Another step of the analysis is to check assumption of proportional odds. If this assumption is met than difference between assessed odds model can be considered as not statistically significant. For this reason it is necessary to look at a test of parallel lines. In this case p-value should be less than .05. As it can be seen p-value for this model is greater than .05. Thereby, test the ordinal logistic regression could be applied to analyze the collected data.

Next, ordinal logistic regression was conducted with ‘consumerintention (VARD)’ as dependent variable and 16 following dependent variables: experience (VAR1), time (VAR2), perform (VAR3), psychology (VAR4), use (VAR5), financial (VAR6), ease (VAR7), groupsport (VAR8), singlesport (VAR9), singleshop (VAR10), familiy (VAR11), single (VAR12); groupshop (VAR13); typelow (VAR14); typehight (VAR 15); trust (VAR 16)

After running the regression the following table represented in figure 3 came out.

![Warnings](image)

Figure 3 - Missing values combination warning

This means 586 different possible combinations of explanatory variables are not presented in the data. In order to verify whether this issue is significant for quality of the model, overall goodness-of-fit tests should be conducted. Table 7, contains Pearson and Deviance tests that helps to measure how badly this model fits the data. Consequently, we want this test not to have statistically significant results.

<table>
<thead>
<tr>
<th></th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>507,577</td>
<td>525</td>
<td>.683</td>
</tr>
<tr>
<td>Deviance</td>
<td>503,713</td>
<td>525</td>
<td>.685</td>
</tr>
</tbody>
</table>

Table 7 – Goodness of Fit

In this case both Pearson and Deviance tests have results (.683 and .685 respectively) far from statistical significance level.

The next model fitting information is shown in tables 8 and 9. However, according to Laerd expertise (2016), those measures represent the portion of variance explained not well, in any case, the values in these table goes along with the majority of similar studies.
The likelihood ratio test is the best tool to verify the ordinal logistic model fitting characteristics. Its results presented in the table 9.

**Table 8 – Pseudo R-Square**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cox and Snell</td>
<td>.286</td>
</tr>
<tr>
<td>Nagelkerke</td>
<td>.263</td>
</tr>
<tr>
<td>McFadden</td>
<td>.133</td>
</tr>
</tbody>
</table>

**Table 9 – Likelihood ration test**

According to the results, it might be concluded that the final model statistically significantly predicted the dependent variable over and above the intercept-only model, Chi-Square equals to 78,768, p < .05.

As the overall model is statistically significant, it is possible to form logistic regression equations using values from the table 9.

**Table 9 – Parameter estimates**
<table>
<thead>
<tr>
<th>Parameter</th>
<th>B</th>
<th>StdError</th>
<th>Lower</th>
<th>Upper</th>
<th>WaldChSquare</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% WaldConfidence interval</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold BuyIntention = 0</td>
<td>2.356</td>
<td>0.554</td>
<td>1.682</td>
<td>4.332</td>
<td>9.540</td>
<td>1</td>
<td>0.003</td>
<td>10.937</td>
<td>2.190</td>
<td>53.633</td>
<td></td>
</tr>
<tr>
<td>BuyIntention = 1</td>
<td>4.164</td>
<td>0.867</td>
<td>2.540</td>
<td>6.694</td>
<td>27.168</td>
<td>1</td>
<td>0.000</td>
<td>72.541</td>
<td>13.740</td>
<td>382.987</td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>1.534</td>
<td>0.717</td>
<td>1.154</td>
<td>1.911</td>
<td>3.047</td>
<td>1</td>
<td>0.066</td>
<td>1.893</td>
<td>1.657</td>
<td>1.634</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>1.100</td>
<td>0.393</td>
<td>0.804</td>
<td>1.394</td>
<td>4.065</td>
<td>1</td>
<td>0.049</td>
<td>1.891</td>
<td>1.079</td>
<td>1.746</td>
<td></td>
</tr>
<tr>
<td>Performe</td>
<td>1.478</td>
<td>0.336</td>
<td>1.421</td>
<td>0.518</td>
<td>3.485</td>
<td>1</td>
<td>0.066</td>
<td>1.905</td>
<td>0.633</td>
<td>1.188</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>0.132</td>
<td>0.166</td>
<td>-0.220</td>
<td>0.484</td>
<td>0.910</td>
<td>1</td>
<td>0.340</td>
<td>0.918</td>
<td>0.716</td>
<td>1.196</td>
<td></td>
</tr>
<tr>
<td>Use</td>
<td>1.110</td>
<td>0.368</td>
<td>0.814</td>
<td>1.424</td>
<td>3.992</td>
<td>1</td>
<td>0.046</td>
<td>1.326</td>
<td>1.054</td>
<td>1.572</td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>1.201</td>
<td>0.356</td>
<td>0.956</td>
<td>1.459</td>
<td>5.923</td>
<td>1</td>
<td>0.015</td>
<td>1.376</td>
<td>1.082</td>
<td>1.776</td>
<td></td>
</tr>
<tr>
<td>Ease</td>
<td>1.514</td>
<td>0.345</td>
<td>1.424</td>
<td>0.515</td>
<td>3.319</td>
<td>1</td>
<td>0.049</td>
<td>1.215</td>
<td>1.655</td>
<td>1.016</td>
<td></td>
</tr>
<tr>
<td>Groupsport</td>
<td>1.355</td>
<td>0.373</td>
<td>1.222</td>
<td>1.498</td>
<td>4.323</td>
<td>1</td>
<td>0.159</td>
<td>0.854</td>
<td>0.672</td>
<td>1.054</td>
<td></td>
</tr>
<tr>
<td>Singlesport</td>
<td>1.539</td>
<td>0.331</td>
<td>1.239</td>
<td>1.842</td>
<td>12.535</td>
<td>1</td>
<td>0.002</td>
<td>1.537</td>
<td>1.246</td>
<td>2.145</td>
<td></td>
</tr>
<tr>
<td>Singleshop</td>
<td>1.499</td>
<td>0.336</td>
<td>1.126</td>
<td>0.805</td>
<td>4.398</td>
<td>1</td>
<td>0.038</td>
<td>1.104</td>
<td>1.050</td>
<td>1.432</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>1.100</td>
<td>0.319</td>
<td>0.480</td>
<td>1.720</td>
<td>1.000</td>
<td>1</td>
<td>0.114</td>
<td>0.831</td>
<td>0.615</td>
<td>1.159</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>0.321</td>
<td>0.336</td>
<td>0.096</td>
<td>0.545</td>
<td>0.412</td>
<td>1</td>
<td>0.669</td>
<td>0.950</td>
<td>0.147</td>
<td>1.267</td>
<td></td>
</tr>
<tr>
<td>Groupshop</td>
<td>0.225</td>
<td>0.311</td>
<td>0.017</td>
<td>0.433</td>
<td>0.336</td>
<td>1</td>
<td>0.058</td>
<td>0.798</td>
<td>0.584</td>
<td>1.092</td>
<td></td>
</tr>
<tr>
<td>Typelow</td>
<td>0.228</td>
<td>0.314</td>
<td>0.021</td>
<td>0.439</td>
<td>0.166</td>
<td>1</td>
<td>0.178</td>
<td>0.895</td>
<td>0.763</td>
<td>1.012</td>
<td></td>
</tr>
<tr>
<td>Typehigh</td>
<td>0.105</td>
<td>0.316</td>
<td>0.038</td>
<td>0.189</td>
<td>0.189</td>
<td>1</td>
<td>0.191</td>
<td>1.054</td>
<td>0.452</td>
<td>1.010</td>
<td></td>
</tr>
<tr>
<td>Trust (Scale)</td>
<td>0.175</td>
<td>0.040</td>
<td>0.168</td>
<td>0.224</td>
<td>5.866</td>
<td>1</td>
<td>0.019</td>
<td>1.456</td>
<td>1.472</td>
<td>1.205</td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: BuyIntention
Model: (Threshold), Experience, Time, Performe, Psychology, Use, Financial, Ease, Groupsport, Singlesport, Singleshop, Family, Single, Groupshop, Typelow, Typehigh, Trust

a Fixed at displayed value
Now it is possible to set up a cumulative logic regression equation:

\[ \text{Ln (Customer Intention)} = 2.356 - (0.564 \times \text{Experience} + 0.130 \times \text{Time} - 0.478 \times \text{Performance} - 0.132 \times \text{Psychology} + 0.110 \times \text{use} + 0.209 \times \text{Fin} + 0.514 \times \text{Ease} - 0.355 \times \text{Groupsport} + 0.539 \times \text{Singlesport} + 0.499 \times \text{Singleshop} - 0.100 \times \text{Family} + 0.321 \times \text{Single} - 0.225 \times \text{Groupshop} - 0.228 \times \text{Typelow} - 0.105 \times \text{Typehigh} + 0.175 \times \text{Trust} ) \]

There is also another equation for this set of data:

\[ \text{Ln (Customer Intention)} = 4.164 - (0.564 \times \text{Experience} + 0.130 \times \text{Time} - 0.478 \times \text{Performance} - 0.132 \times \text{Psychology} + 0.110 \times \text{use} + 0.209 \times \text{Fin} + 0.514 \times \text{Ease} - 0.355 \times \text{Groupsport} + 0.539 \times \text{Singlesport} + 0.499 \times \text{Singleshop} - 0.100 \times \text{Family} + 0.321 \times \text{Single} - 0.225 \times \text{Groupshop} - 0.228 \times \text{Typelow} - 0.105 \times \text{Typehigh} + 0.175 \times \text{Trust} ) \]

In this case coefficients of the slope are the same but value of thresholds differs.

Taking into consideration results of the regression analysis it can be concluded that a cumulative odds ordinal logistic regression with proportional odds was conducted in order to determine the effect of 16 variables: previous user’s experience (Variable 1), Time loss risk (Variable 2), performance risk (Variable 3), psychology risk (Variable 4), perceived usefulness (Variable 5), financial and privacy risk (Variable 6), perceived ease of use (Variable 7), attitude towards group sport activities (Variable 8), attitude toward single sport activities (Variable 9); attitude towards, attitude towards single conventional shopping (Variable 10); attitude towards family activities (Variable 11); attitude towards single activities (Variable 12); attitude toward group conventional shopping (Variable 13); low touch type of a product (Variable 14); high touch type of a product (Variable 15); trust towards online shopping (Variable 16), on the dependent variable – consumer’s intention to buy goods online (the extent to which a customer tends to buy product via the internet).

### 3.2 Interpretation of regression analysis

It can be concluded that 9 out of 16 independent variables have statistically significant effect on the dependent variable. These variables are previous user’s experience (Variable 1) - Emotions experienced during online shopping (Ashraf, Thongpapanl and Auh, 2014); Time loss risk (Variable 2) – the likelihood of lost time during online shopping (Lim, 2003; Coker, 2012); Variable 5 perceived usefulness -A degree to which a person thinks employment of a new technology would improve his productivity or performance (Davis, 1989; (Ashraf, Thongpapanl and Auh, 2014)); (Variable 6) - financial and privacy risk -Risk of losses in economic terms, in the internet terms it can be considered as a net loss of money to a consumer (Forsythe, 2001;
(Mallapragada, Chandukala and Liu, 2016); (Variable 7) – perceived ease of use - degree to which a person think that the new technology will be used very easily (Variable 9) - attitude toward single sport activities; (Variable 10) -, attitude towards single conventional shopping; (Variable 12) - attitude towards single activities; (Variable 16) - trust towards online shopping - The extent to which consumers expect that an e-retailer will meet their transaction expectations and will not engage in opportunistic behavior (Ashraf, Thongpapanl and Auh, 2014)
Chapter 4 Discussion and conclusions

The chapter explains findings received in the previous chapter. Theoretical analysis of the quantitative research is explained in this chapter. This part of the research also devoted to managerial implication because this research has two aims: to give theoretical contribution and to give managerial contribution. This chapter also explains limitations of the research and directions how to solve these problems in the future studies.

4.1 Theoretical background analysis

The first part of the research explained theoretical framework and helped to define a research gap. Several theoretical concepts such as technology acceptance model, psychographic characteristics of customers, theory of online shopping, factors and risks regarding online shopping behavior were analyzed. This analysis helped to identify constructs if the theoretical model that was used in this research. In the third part of the research a quantitative analysis were conducted in order to identify what construct of the theoretical model have statistically significant effect on the consumers’ intention to buy products via the internet.

4.2 Analysis of research questions

Based on the research gap the following research questions were identified:

- RQ1 – What factors affect consumer’s intention to buy product via the internet in Russia
- RQ2 – What risks affect consumer’s intention to buy product via the internet in Russia
- RQ3 – Do psychographic characteristics affect consumer’s intention to buy product via the internet in Russia

In order to answer research question a regression analysis was conducted. This analysis revealed that 9 out of 16 variables have statistically significant effect on the consumer’s intention to buy products via the internet. Previous user’s online shopping experience; time loss risk; perceived usefulness; financial and privacy risk; perceived ease of use; attitude toward single sport activities; attitude towards single conventional shopping; attitude towards single activities; trust towards online shopping.
It was proved that Russia customers are affected by their previous online shopping experience. If previous online shopping experience was positive than consumers tend to buy products online. This construct (previous online shopping experience) also included online shopping experience of consumers’ friends, realities etc. thereby, if previous online shopping experience of consumers’ friends, relatives etc. was positive than consumers tend to buy products online.

Perceived usefulness also affects consumer’s intention to buy goods via the Internet. Consumers perceive this kind of shopping as very convenient activity because they can easily find more detailed information about the product, compare price etc. At the same time they perceive it as useful activity because they don’t need to go to a shop and spend their free time in a shop. The can easily spend it on other activities.

Perceived ease of use affects consumer’s intention to buy goods via the Internet. It can be explained by the fact that consumers can easily order the product and find goods. Also consumers perceive this kind of shopping as an easy activity.

At the same time there are risks that constrain consumers from buying goods via the internet. Regression analysis has shown that such risks as psychology risk and performance risks don’t affect consumers’ intention to buy products via the internet. It can be explained by the fact that I the context of Russia consumers perceive shopping not as seriously as consumers from other cultural backgrounds cultural backgrounds. Consumers in Russia don’t experience felling of emotional destress if a product doesn’t meet their expectation.

However there are still risks that constrain consumers from buying online. Such risks include financial and privacy risk and time loss risks. Despite the fact that customers perceive this kind of shopping as easy they still perceive it risky I financial point of view. Consumers can easily pay for an order but they are not sure about reliability of financial transaction. Consumers also perceive time loss risk. It can be explained by the fact that they need to wait delivery of a product that can take several days. Sometimes consumers don’t a product I several days they need at a particular moment.

The analysis also has shown the introverted type of consumers tend to be more active online shoppers rather than extroverted type. It was concluded that such determinants of a theoretical model as attitude towards single activities, attitude towards single sport activities and attitude towards sing conventional shopping have statistically significant effect on consumer’s intention to buy products via the internet. It can be explained by the fact that introverted consumers don’t like to spend their time with other people. Thereby, they get more satisfaction when they shop online. On the other hand, extroverted consumers want to share their spare time (shopping, sport etc.) with other people. For such kind of consumers shopping is not the main
goal. For such consumers companionship is more important. For this reason they are not interested in online shopping as much as introverted consumers

4.3 Managerial implication

Theoretical results can bring managerial benefits to online shops or entrepreneurs, big companies etc. that plan to buy their products via the internet in Russia. For example in previous studies it was stated that type of a product influence consumers’ intention to buy products via the internet. It was stated that customers don’t want to buy high touch products via the internet. However this research has shown that it doesn’t matter for customers. For this reason online vendors can increase amount of high touch products that are sold via the internet.

Financial and privacy risk was always a problem for online shopper. Previous studies stated that even if such kind of shopping is more convenient customers still are afraid to transact money to a vendor via the internet. Thereby online vendor should apply the most reliable online payment systems.

Customer characteristics also influence consumer’s intention to buy products via the internet. Moreover customers that prefer to spend time or make other activities alone tend to buy online more than customers who prefer group activities. Thereby marketing managers should apply this finding in marketing campaigns.

4.4 Limitations of the research

First of all only residents of Moscow and Saint-Petersburg aged from 18-30 were taken into consideration in this research. This study can be conducted in cities of Russia with population of more than 1 million people due to the fact that internet providers are presented on the whole territory of Russia. Other age groups also should be part of the research.

Secondly this research was conducted only in the internet. For more reliable results questioners should be not only in electronic form but also in paper based because people who are not active internet users should also be taken into consideration.

And finally this research took into consideration only six main characteristics of a customer (attitude towards single/family activities; groups/single conventional shopping; single/group sport activates). There are more consumers’ portraits in the field of psychographic that can be used in this research.
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