Saint Petersburg State University

Graduate School of Management

Master in Management Program

#### **Master Thesis**

## Personalization as Phenomenon in Online Retail Context: Consumer Characteristics Affecting Intention To Use Personalized Offers

Second-year student of "Master in Management" program,

Nikita Yatin

Supervisor:

Associate Professor, Head of Marketing Department, GSOM,

Maria M. Smirnova

Saint Petersburg

## STATEMENT ABOUT THE INDEPENDENT CHARACTER OF THE MASTER THESIS

I, Yatin Nikita Sergeevich, 2<sup>nd</sup> year master student, program «Master in Management», state that my master thesis on the topic « Personalization as Phenomenon in Online Retail Context: Consumer Characteristics Affecting Intention To Use Personalized Offers», which is presented to the Master Office to be submitted to the Official Defense Committee for the public defense, does not contain any elements of plagiarism. All direct borrowings from printed and electronic sources, as well as from master theses, PhD and doctorate theses which were defended earlier, have appropriate references.

I am aware that according to paragraph 9.7.1. of Guidelines for instruction in major curriculum programs of higher and secondary professional education at St. Petersburg University «A master thesis must be completed by each of the degree candidates individually under the supervision of his or her advisor», and according to paragraph 51 of Charter of the Federal State Institution of Higher Professional Education Saint-Petersburg State University «a student can be expelled from St. Petersburg University for submitting of the course or graduation qualification work developed by other person (persons)».

(Student's signature)

01.06.2023 (Date)

# ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

Я, Ятин Никита Сергеевич, студент второго курса магистратуры направления «Маster in Management», заявляю, что в моей магистерской диссертации на тему «Персонализация как феномен в контексте онлайн-ритейла: характеристики потребителей, влияющие на намерение использовать персонализированные предложения», представленной в службу обеспечения программ магистратуры для последующей передачи в государственную аттестационную комиссию для публичной защиты, не содержится элементов плагиата. Все прямые заимствования из печатных и электронных источников, а также из защищенных ранее выпускных квалификационных работ, кандидатских и докторских диссертаций имеют соответствующие ссылки.

Мне известно содержание п. 9.7.1 Правил обучения по основным образовательным программам высшего и среднего профессионального образования в СПбГУ о том, что «ВКР

выполняется индивидуально каждым студентом под руководством назначенного ему научного руководителя», и п. 51 Устава федерального государственного бюджетного образовательного учреждения высшего профессионального образования «Санкт-Петербургский государственный университет» о том, что «студент подлежит отчислению из Санкт-Петербургского университета за представление курсовой или выпускной квалификационной работы, выполненной другим лицом (лицами)».

\_\_\_\_\_(Подпись студента)

\_\_01.06.2023\_\_ (Дата)

#### **ABSTRACT**

Master Student's Name	Nikita S. Yatin			
Academic Advisor's Name	Mariya M. Smirnova			
Master Thesis Title	Personalization as Phenomenon in Online Retail Contexts Consumer Characteristics Affecting Intention To Use Personalized Offers			
Description of the goal, tasks and main results the research	The present study is aimed at investigating how consumers' shopping orientation, deal proneness, privacy concerns and reactance determines their intention to use personalized offers and recommendations while shopping in online stores.			
	The objectives of the study assume the following: developing theoretical model of influence of shopping orientation, deal proneness, privacy concerns and reactance on intention to use personalized offers and recommendations; testing the model by analyzing online survey responses; conducting 10 semi-structured interviews after statistical testing for explaining and complementing the determined relationships between studied variables; making conclusions and determining future research directions.			
	Using online survey and semi-structured interviews in sequential mixed methods research design allowed to obtain the following results. Both dimensions of shopping orientation as well as deal proneness lead to increased intention to use personalized offers and recommendations. Consumers perceive personalized offers as help and support in the process of online shopping. Deal-prone consumers tend to respond to personalized price offers and promotions, provided that these personalized offers correctly match consumers' current preferences. Privacy concerns of consumers diminish their personalized offers usage intention. Reactance does not affect consumers' intention to use personalized offers because consumers do not perceive personalized offers as something that limits their freedom.			
	The results of the research led to formulation on the following recommendations for online retailers: personalized offers should be characterized by full compliance with the current preferences of consumers in combination with personalized price promotions and discounts.			
Keywords	Personalization, personalized offers and recommendations, shopping orientation, deal proneness, privacy concerns, reactance, intention to use personalized offers and recommendations			

### **АННОТАЦИЯ**

Автор	Ятин Никита Сергеевич		
Научный руководитель	Смирнова Мария Михайловна		
Название ВКР	Персонализация как феномен в контексте онлайн-ритейла: характеристики потребителей, влияющие на намерение использовать персонализированные предложения		
Описание цели, задач и основных результатов исследования	Настоящее исследование направлено на изучение того, как ориентация потребителей на покупки, склонность к заключению сделок, беспокойство о конфиденциальности персональных данных и реактивное сопротивление определяют их намерение использовать персонализированные предложения и рекомендации при совершении покупок в интернет-магазинах.		
	Задачи исследования предполагают следующее: разработка теоретической модели влияния ориентации на покупки, склонности к заключению сделок, беспокойства о конфиденциальности личных данных и реактивного сопротивления на намерение использовать персонализированные предложения и рекомендации; тестирование модели путем анализа ответов на онлайнопрос; проведение 10 полуструктурированных интервью после статистического тестирования для объяснения и дополнения выявленных взаимосвязей между изучаемыми переменные; формулирование выводов и определение направления будущих исследований.		
	Использование онлайн-опроса и полуструктурированных интервью в исследовательском дизайне со смешанными методами позволило получить следующие результаты. Оба аспекта ориентации на покупки, а также склонность к заключению сделок приводят к росту намерения использовать персонализированные предложения и рекомендации. Потребители воспринимают персонализированные предложения как помощь и поддержку в процессе совершения покупок в интернетмагазинах. Потребители, склонные к заключению сделок, как правило, реагируют на персонализированные ценовые предложения при условии, что эти персонализированные предложения в точности соответствуют текущим предпочтениям потребителей. Беспокойство потребителей о конфиденциальности персональных данных снижает их намерение использовать персонализированные предложения. Реактивное сопротивление не влияет на намерение потребителей использовать персонализированные предложения, поскольку потребители не воспринимают персонализированные предложения как нечто, ограничивающее их свободу.		

	Результаты исследования привели к формулированию
	следующих рекомендаций для интернет-магазинов:
	персонализированные предложения должны
	характеризоваться полным соответствием текущим
	предпочтениям потребителей в сочетании с
	персонализированными ценовыми акциями и скидками.
Ключевые слова	Персонализация, персонализированные предложения и
	рекомендации, ориентация на покупки, склонность к
	сделкам, беспокойство о конфиденциальности
	персональных данных, реактивное сопротивление,
	намерение использовать персонализированные
	предложения и рекомендации

## **Table of contents**

Introduction	8
Chapter 1. PERSONALIZATION AND CONSUMER BEHAVIOR	12
1.1. Personalization in online retail	12
1.1.1. Personalization	12
1.1.2. Recommendation systems	13
1.2. Consumer characteristics and behavioral intention	14
1.2.1. Intention to use personalized offers and recommendations	14
1.2.2. Shopping orientation	15
1.2.3. Deal proneness	16
1.2.4. Privacy concerns.	18
1.2.5. Reactance	20
Chapter 2. RESEARCH DESIGN AND DATA COLLECTION. RESULTS OF DATA ANALYSIS	22
2.1. Quantitative part. Online survey	22
2.1.1. Methodology	22
2.1.2. Results	25
2.2. Qualitative part. Semi-structured interviews	28
2.2.1. Methodology	28
2.2.2. Results	31
Chapter 3. DISCUSSION OF THE RESULTS	40
3.1. General discussion and theoretical implications	40
3.2. Managerial implications	42
3.3. Limitations of the study and suggestions for future research	43
Conclusion	45
References	47
Appendix A. Interview Guide	53
Appendix B. Example Excerpts from Interview Transcripts	56

#### Introduction

Technological development creates new opportunities for retailers to enhance customer experience by providing better service through personalization. For example, development of Big Data, increasing computing power, rapid development of AI and neural networks allow online retailers to utilize highly personalized service for their customers by processing huge amounts of consumers' personal data. From consumer side, there is a lot of statistics about what consumers think about personalized services by companies. According to the survey conducted by Accenture in November 2017 in North American and European countries (Accenture, 2018), more than 90% of consumers will more likely shop with brands who are able to provide relevant personal recommendations, and more than 80% of consumers are ready to disclose their personal data in exchange for personalized experience. In 2022, more than 60% of consumers worldwide who made an online purchase during the past 6 months indicated that a brand would lose them as loyal customers if this brand provided a non-personalized experience for them (Marketing Personalization Worldwide, 2022). According to the E-commerce Personalization Benchmark Report (2021) by Netcore Cloud company, more than 75% of consumers would like to have a more personalized customer experience, and more than 30% of consumers would have a more willingness to share their personal information with retailers if they had more awareness of how their data is used. Summing up, it is important for retailers to use personalization in their marketing activities to attract more customers.

Recent literature on marketing and consumer behavior indicates the importance of managing customer experience and customer engagement by companies (Lemon & Verhoef, 2016; Gogua & Smirnova, 2020; Grewal et al., 2017). Personalization and personalized recommendations in particular helps companies to provide a better customer experience, enhance engagement and brand loyalty (Basu, 2021). Considering the importance and relevance of the study of consumer perception of personalization activities in online retailing context, the focus of this paper falls into exploring consumer behavior in relation to personalized offers and recommendations in online stores.

This study investigates the behavioral intention of consumers to use personal offers and recommendations because intention is the main predictor of consumer behavior (Ajzen, 1991). Characteristics of consumers which are studied in this paper as determinants of behavioral intention to use personalization are divided into two groups: 1) online shopping related characteristics – shopping orientation and deal proneness (since this study examines personalization and consumer behavior towards it in online retail context); 2) psychological

characteristics of consumers that are connected to the implementation of personalization marketing strategies by companies – privacy concerns and reactance. All these consumer characteristics are widely studied in contemporary marketing research; special interest of the author lies in expanding the existing knowledge on these consumer characteristics constructs as well as investigating the relationship between these consumer characteristics and consumers' intention to use personalized recommendations. To the best of author's knowledge, there are no papers among currently existing studies which examined the integrated framework of the influence of such consumer characteristics as shopping orientation, deal proneness, privacy concerns and consumer reactance on their usage intention of personalized offers and recommendations in online shopping context. To address this gap, the present study is conducted.

The **purpose** of the present study is to investigate how consumers' online-shopping related characteristics (shopping orientation and deal proneness) and psychological characteristics (privacy concerns and reactance) influence consumers' intention to use personalized offers and recommendations in online retailing context.

#### **Objectives** of the study are the following:

- 1. Develop a theoretical model of the influence of four characteristics of consumers (shopping orientation, deal proneness, privacy concerns and psychological reactance) on their intention to use personalized offers and recommendations in online stores.
- 2. Test the developed model by analyzing quantitative data collected through the survey.
- Conduct 10 semi-structured interviews to gain detailed consumers' insights about their intention to use personalized offers and recommendations within the framework of the developed theoretical model.
- 4. Analyze and compare the results of two methods, make conclusions, and determine suggestions for future research.

#### **Research questions:**

- 1. What are the relationships between consumers' characteristics (online shopping related and psychological) and consumers' intention to use personalized recommendations?
- 2. How are the various dimensions of the studied characteristics of consumers related to their intention to use personalized offers in online stores?

Analysis of extant marketing literature on the subject of this study led to formulation of hypotheses which are tested in the methodological part. Proposed hypotheses are the following:

**H1a**: Hedonic shopping orientation of consumers positively affects their intention to use personalized offers and recommendations.

**H1b**: Utilitarian shopping orientation of consumers positively affects their intention to use personalized offers and recommendations.

**H2**: Deal proneness of consumers positively affects their intention to use personalized offers and recommendations.

**H3**: Privacy concerns of consumers negatively affects their intention to use personalized offers and recommendations.

**H4**: Consumers' reactance negatively affects their intention to use personalized offers and recommendations.

This study applies mixed methods research design. It has the sequential structure: first, the proposed hypotheses are tested through analyzing the results of the survey; then, based on the statistical results, 10 semi-structured interviews are conducted to explain and complement the determined relationships between consumer characteristics and their intention to use personalized offers and recommendations by collecting and structuring consumers' thoughts and feelings. This structure of research design allows to study the relationships between variables in more detail, as well as fully answer the research questions.

This study has both theoretical and managerial contributions. The study contributes to existing theory in two perspectives: 1) to consumer behavior literature on such widely discussed concepts as consumer shopping orientation, deal proneness, psychological reactance and privacy concerns by deepening and expanding the knowledge about these characteristics and their dimensions; 2) to marketing literature on personalization and consumer behavior in online retail environment by identifying the influence of aforementioned characteristics of consumers on their intention to use personalized offers and recommendations. As for managerial implications, online retailers are offered to combine two main characteristics in personalized offers algorithms to increase consumers' intention to use personalized offers and recommendations: precise matching of products in personalized offers with current consumers' preferences and interests along with personalized price promotions and discounts.

This paper is structured in the following way: Chapter 1 is devoted to the theoretical analysis of modern approaches in exploring consumer characteristics under study in relation to personalization and proposing hypotheses; Chapter 2 explains the research design of this study and provides the results of hypotheses testing as well as qualitative results; Chapter 3 is devoted to

discussion of the results, theoretical and managerial implications of the research. The final part of the paper is the conclusion that demonstrate the overall result of the research and its practical implications.

#### Chapter 1. PERSONALIZATION AND CONSUMER BEHAVIOR

#### 1.1. Personalization in online retail

#### 1.1.1. Personalization

In a broad sense, personalization can be defined as "a process that changes the functionality, interface, information access and content, or distinctiveness of a system to increase its personal relevance to an individual or a category of individuals" (Fan & Poole, 2006). The authors of this definition integrated the knowledge about personalization from different fields of research such as marketing, information and computer science, cognitive science, architecture/environmental psychology, and social sciences (anthropology, sociology, and communication). As can be seen from the definition, various properties of a system are adjusted to the preferences, needs and interests of an individual or a group of people to increase the quality of user interaction with this system.

As this paper concentrates on the personalization in the field of marketing, it is necessary to provide the definition of personalization in the online marketing context. Tam & Ho (2006) define the aim of web personalization as the delivery of "the right content to the right person at the right time" for maximization of company's current and prospective business opportunities. The process of personalization provides to companies the opportunity to strengthen one-to-one customer relationships by understanding customers' needs (Riecken, 2000; Aguirre et al., 2015). One important feature of personalization in online marketing context is the utilization of customers' data about previous behavior and purchases (Montgomery and Smith, 2009). Personalization is strongly connected with customer experience: firms actively use different personalization tools to affect the customer experience across myriad touch points which is accompanied by positive and negative consequences for both consumers and companies (Gogua & Smirnova, 2020). Recent research indicated that personalization processes used by online retailers lead to enhancing playful customer experience (Lambillotte et al., 2022). The authors of this research also prove that personalized content on the retailer's website allows customers to pay more attention to their favorite products, which ultimately leads to customers choosing to buy products that match their interests and preferences.

Wedel & Kannan (2016) identified and described three main methods of personalization:

1) pull personalization (it is implemented when customers explicitly request for such type of personalized service, e.g., customization of products in terms of predetermined characteristics of product);

2) passive personalization is connected with delivering of personalized information to

customers based on their previous activities; this type of personalization still requires customers to perform certain actions in order for this personalized information to be created and delivered in an appropriate way (obvious examples are personalized coupon systems in retail stores which are based on customers' purchase history stored on their loyalty cards or online recommendation systems which are functioning on the basis of shoppers' history of product search or previous purchases); 3) the third type is defined as push personalization; it is implemented without special requests by customers (for example, creating personal lists of songs or movies in streaming services based on the genres initially selected by the user or the similarity between the music or movies the user consumes and the content in the databases).

#### 1.1.2. Recommendation systems

Companies make every effort to improve customer service for engaging and retaining their customers and, consequently, enhance customer experience. While being based on history of purchases or personal profile of customers, product or service recommendations are useful tools for companies to facilitate the decision-making process of their customers (Chinchanachokchai et al., 2021). In online retailing, recommendation systems (recommendations agents) are considered as powerful personalization tools which can increase company's profits (Li et al., 2018); these systems are based on machine learning algorithms and serve as interactive decision-making assistance for customers in evaluating and choosing right options among numerous available options on the website of the online store (Ricci et al., 2011). The essence of the functioning of recommendation systems is to select similar products and services on the basis of past preferences and transactions history of customers and display these offers to customers (Wedel & Kannan, 2016).

In the literature, there are three main types of recommendation systems identified: 1) user-based collaborative filtering recommendation systems which predict preferences and interests of customers and provide personalized recommendations to these customers using preferences of a group of similar customers; 2) content-based filtering systems which operate with the available data about customer's past interests and preferences, history of transactions, and provide personal recommendations to customers on the basis of similarity between customer's profile of interests and preferences and the description of the product; hybrid recommendation systems which combine the features of two previous types (Wedel & Kannan, 2016, Chinchanachokchai et al., 2021).

Recent research distinguishes personalized product recommendations and personalized price recommendations, while product recommendations provide assistance to customers for

choosing the right products for them, and price promotions increase the value of such products (Hallikainen et al., 2022; Venkatesh et al., 2021).

Recommendation systems are widely used by online retailers because of their effectiveness in attracting consumers (Xiao and Benbasat, 2007; Ampadu et al., 2022), in increasing of customer loyalty, and in an implementation of such practices as cross-selling and up-selling (Srivastava et al., 2020). The use of recommendation systems by online retailers on their websites and in mobile apps can lead to both positive (for example, customer satisfaction – Martin et al., 2017) and negative responses of consumers (reduced trust – Martin et al., 2017, Bleier & Eisenbeiss, 2015; reactance towards the usage of personal recommendations – Fitzsimons & Lehmann, 2004; Bleier & Eisenbeiss, 2015).

The following part of the paper will be devoted to the discussion of the literature concerning the main constructs of proposed research model and hypotheses development.

#### 1.2. Consumer characteristics and behavioral intention

#### 1.2.1. Intention to use personalized offers and recommendations

In this study, the relationship between two groups of consumer characteristics and consumers' intention to use personalized recommendations and offers will be investigated. Intention is a widely studied construct in psychology and consumer behavior. According to the Theory of Planned Behavior, behavioral intention is a predictive factor for behavioral action (Ajzen, 1991): the higher the level of intention of individual to perform particular behavior, the greater the probability of occurring of this behavior. Numerous studies regarding behavioral intention have been conducted, and they have shown that this construct is the closest mediator of behavior, and the share of variance that intention explains is more than such share of variance explained by norms, attitudes, personality factors, socio-demographic characteristics etc. (Fishman, Lushin, & Mandell, 2020). Therefore, for understanding consumer behavior towards personalized offers and recommendations in online stores, it is important to examine how different consumer characteristics are related to consumers' usage intention of these personalized offers and recommendations. The present study develops and tests the model that explains these relationships.

Consumer characteristics that are studied in this paper are divided into two categories: 1) online shopping related – shopping orientation and deal proneness; 2) psychological characteristics – privacy concerns and reactance to advices and recommendations.

#### 1.2.2. Shopping orientation

Shopping orientation is a widely studied construct in marketing and consumer behavior research (Scarpi, 2020; Ben Mimoun et al., 2021; Cervellon et al., 2015). The concept of shopping orientation of consumers refers to their behavior in the shopping environment and their attitudes to the shopping process; it is based on consumers' propensity to participate in shopping activities and make purchases (Scarpi, 2020). Consumers' shopping orientations are explained by that consumers tend to search information about different products, evaluate a variety of options that are available in the store, gather information for future purchase decisions, and finally select products for purchase; consumers also have their opinions and interests towards the process of shopping (Büttner et al., 2014).

In the contemporary literature, there are two main dimensions of consumers' shopping orientations identified: 1) hedonic and 2) utilitarian (Scarpi, 2020). Hedonic shopping orientation is connected with the desire of consumers to enjoy the shopping process; consumers with such type of shopping orientation consider shopping as playful pastime, they are not driven by a specific goal. In contrast to this, utilitarian shopping orientation is peculiar to those consumers who are engaged in shopping in order to meet the needs or perform the tasks they have been assigned (when shopping is "rational and task-oriented"). Summing up, hedonic shopping orientation is related to playful and enjoyable shopping experience, when consumers shop not to just buy a particular, predefined product, but for abstract reasons which are connected with pleasure, escapism, and curiosity and not connected with physical characteristics of product; utilitarian shopping orientation, on the contrary, is connected with completing the specific tasks, it requires shopping to be quick, convenient, and effective (Scarpi et al., 2014).

As this paper concentrates on the personalization in online shopping environment, it is useful to provide insights from extant literature about connection between personalization and shopping orientation of consumers in the online retailing context. Recent study empirically confirmed how different mobile shopping motivations of consumers (hedonic and utilitarian) affect their intention to use web personalization in mobile shopping context taking into account the timing factor of personalization (Huang, & Zhou, 2018). This study revealed that some shopping motivations have a significant influence on the use of web personalization by consumers. Judging from the study results, the authors assumed that consumers with hedonic shopping motivations are more likely to use before-search web personalization, while task-oriented utilitarian consumers prefer to use after-search web personalization. Considering the results of this study, it is possible to assume that both hedonic and utilitarian shopping orientation of consumers have a positive effect on their intention to use personalized offers and recommendations in online

retailing context; then, it is important to investigate how different types of shopping orientation of consumers (hedonic and utilitarian) are connected with their personalization usage intention.

Considering the knowledge about extant research on shopping orientation of consumers, it could be hypothesized that more shopping-oriented consumers will find personal recommendations and offers by the online retailer useful. It is also important to investigate how different types shopping orientation (hedonic and utilitarian) affect consumers' intention to use personalized recommendations. Based on the literature analysis, it is possible to hypothesize that both hedonic and utilitarian dimensions of consumers' shopping orientation could have a positive effect on their intention to use personal offers and recommendations in online stores: for hedonistically shopping-orientated consumers personal offers and recommendations could enhance playful shopping experience; for consumers who prefer shopping only from the utilitarian point of view, personal offers and recommendations could be useful in searching for suitable products or services.

Consequently, the following hypotheses are formulated:

**H1a**: Hedonic shopping orientation of consumers positively affects their intention to use personalized offers and recommendations.

**H1b**: Utilitarian shopping orientation of consumers positively affects their intention to use personalized offers and recommendations.

#### **1.2.3.** Deal proneness

Retailers often provide to customers different offerings of products with lowered promotional prices: it could be coupon systems, various promocodes, rebates, or just sales. Among consumers there are those who are ready to actively respond to such sales promotions: in marketing literature, such consumers are characterized as deal-prone. They tend to be interested in and actively seek for such types of "deals". In recent literature, researchers often refer to the definition of deal proneness proposed by (Lichtenstein et al., 1990, p. 55): deal proneness of consumers is "a general proneness to respond to promotions because they are in deal form". One important note here is that consumers' deal proneness relates not to buying of goods but to their psychological proclivity to buy a product which is under promotion. A number of studies confirm that deal proneness is not a unidimensional construct (Schneider & Currim, 1991; Alford & Biswas, 2002). For example, Schneider & Currim (1991) distinguish two types of deal-prone consumers: active and passive. Active deal-prone consumers prefer to be engaged in intensive search of different

price promotions (without linking to a specific store), while passive deal-prone consumers are more likely to react to in-store promotions, and their propensity to actively search for better deals is limited to the environment of the store.

Recent research is concentrated on the study of different aspects related to deal proneness such as relations between deal proneness of consumers and price sensitivity and brand loyalty (Gázquez-Abad & Sánchez-Pérez, 2009), study of heterogeneity of deal proneness (Kwon & Kwon, 2013), or its moderating effects on the relationship between need for closure and choices of premium subscriptions by customers (Biraglia et al., 2022). In their work, Kwon & Kwon, (2013), investigated unidimensionality of deal-proneness of consumers in respect to cost of deal shopping and shopping capital using the in-depth interview method. Cost of deal shopping is defined by the time and effort that consumers spend on deal purchase to save their money, while shopping (human) capital refers to consumer's knowledge of the market and his/her capability to effectively use this knowledge; the authors of the paper claim that the higher the level of shopping capital the consumer has, the less the cost of deal purchase for such consumer, i.e. consumers with higher level of shopping capital more easily participate in deal shopping. This study revealed three basic types of deal-proneness: 1) value-mining (this type is inherent in those consumers who tend to find the best quality for particular price and use much shopping capital to process large amounts of information for making the decisions); 2) price-mining (refers to consumers who try to find the best price for particular quality; they use less shopping capital while search for deals because finding the best price requires less number of alternatives to compare and thus less amounts of information to process); 3) encounters (this type of deal proneness is inherent in those consumers who use advantageous offers only when they accidentally encounter them without actual search for such offers and promotions; this type of deal proneness does not require any shopping capital since it does not involve any information processing and alternatives comparison). This classification has similar features as active-passive division of deal prone consumers by (Schneider & Currim, 1991) because it also utilizes the degree of consumers' propensity to participate in deal shopping). In the present paper, the classification by Kwon & Kwon (2013) presented above will be also used as a reference point while conducting interviews and analyzing the results.

To the best of author's knowledge, the literature about the connection of deal proneness of consumers and their use of personalization is scarce. As deal-prone consumers spend their time and efforts in seeking beneficial promotions treating such promotions as deals, personal recommendations should be in the focus of attention of such consumers. By analyzing profiles and search history of such consumers, recommendation algorithms provide relevant offers to these consumers; especially, when it comes to relevant price promotions. Judging from these arguments,

the positive effect of deal proneness on customers' intention to use personalized recommendations in online retailing could be hypothesized. Therefore, the following hypothesis is formulated:

**H2**: Deal proneness of consumers positively affects their intention to use personalized offers and recommendations.

#### 1.2.4. Privacy concerns

Use of personalization could provide benefits for both companies and consumers. It requires companies to collect and analyze customers' personal information. However, as the volume of known to the company customers' personal data increases, it could cause consumers to feel vulnerable in terms of their privacy and decrease consumers' desire to disclose their personal information. This phenomenon refers to the term personalization-privacy paradox which represents the tension between the consumer's necessity to be private and the company's requirement to use personal information of consumers for enhancing the quality of personalized services. Although firms' usage of consumers' personal data is aimed at personalized communications, consumers may consider that there is the risk of misuses of these data or transfer it to the third parties (Cloarec, 2020). Consumers' concerns about their privacy may lead to decreasing of customer engagement (Aquirre et al., 2016).

The topic of consumers' concerns about their data privacy in relation to online personalization is widely discussed and studied in marketing research. It is necessary to indicate the two main aspects of electronic privacy concerns which exist in the literature: these are consumers' awareness that their personal information is collected by firms and consumers' control over their personal data (Treiblmaier & Pollach, 2007). As for consumers' awareness about the collection of their data, Aguirre et al. (2015) proved that overt data collection by companies diminishes consumers' feelings of data vulnerability which, in turn, lead to increased advertisements click-through rates and consumers' intention to disclose their personal information (in contrast to the situation when personal information is collected covertly). Therefore, consumers require the transparency of information collection and usage by companies. Control of personal data flows is also an important issue for consumers; it includes the influence of consumers on how their data collected and used by firms. For example, Tucker (2014) conducted field experiment that showed that consumers with high level of perceived control over their personal information tend to have a greater click-through rate on advertisements on social media websites. Cloarec (2020) examined the existing literature regarding contemporary decisions for dealing with

consumers privacy controls and highlighted the importance of providing consumers control over their privacy and transparency of personal data flows.

Some authors refer to the term customer data vulnerability which implies receptivity of consumers to potential harm as a consequence of different uses of their personal data by companies; this feeling of vulnerability is connected with customer's concern about possible damage they could be exposed to due to firm' actions with their personal information (Martin et al., 2017). Martin et al. (2017) showed that consumer data vulnerability emerges when companies just have access to personal data and intensify due to inappropriate use of these data by firms; vulnerability leads to negative outcomes such as negative word-of-mouth, falsification of information and customer switching behavior. The authors also indicated that data transparency and control of their personal data from customers side diminishes their privacy concerns.

Recent study provided a particular solution for personalization-privacy paradox by proving the importance of self-disclosure stage before providing personalized services to customers: if consumers voluntarily disclose their personal data, this leads to a positive purchase response of consumers to personalized promotions (Zeng et al., 2021). This study also suggests practices for mitigating consumers' concerns about their privacy: providing detailed information to customers about what personal information will be used and how for personalization activities before their self-disclosure. These results are consistent with another study (Gouthier et al., 2022).

A number of contemporary empirical studies indicate that consumers' concerns about disclosing their personal information decreases their willingness to use online advertising or personalized services or follow the advice of personalized messages and recommendations (Alkis & Kose, 2022; Lei et al., 2022). Xie & Lei (2022) in their study examined the influence of anthropomorphism of service on customers' intention to use personalized services which utilize service robots through mediation effect of privacy concerns of customers in the context of travel industry. This study empirically revealed that customers' concerns about their privacy influence their usage intention of service robots in a negative way.

Based on the discussion above, it is necessary to examine the issue of consumers' privacy concerns in relation to personalized offers and recommendations in the online retailing context. In line with the extant literature, this paper expects that consumers' concerns about their privacy while using websites of online stores will play a role of inhibitor of their intention to use personalization. In other words, it is supposed that privacy concerned consumers will have an intention to use personalization with less probability, in contrast with those who have less privacy concerns. Therefore, the following hypothesis is formulated:

**H3**: Privacy concerns of consumers negatively affects their intention to use personalized offers and recommendations.

#### 1.2.5. Reactance

The use of personalization tools by firms can cause both positive and negative customer reactions towards it. One of such reactions is consumer reactance (Tucker, 2014; Bleier & Eisenbeiss, 2015; Martin, Borah, Palmatier, 2017). The concept of consumer reactance refers to the psychological state of the consumer when his/her freedom is under threat. This concept was developed in marketing research from the concept of psychological reactance which was proposed in 1966 by American psychologist Jack Brehm. Consumer reactance could be described as a consumer's response to attempts of persuasion. Such persuasion attempts could be treated and perceived by consumers as forcing and threatening their freedom; therefore, consumers are trying to behave in opposite way in order to return their lost freedom (Edwards et al., 2002). Some authors use the term personalization reactance when describing consumer reactance as a response of consumers to personalized messages and recommendations (White et al., 2008).

On the one hand, the broad access of firms to personal information and profiles of customers allows marketers to achieve the relevant target groups of customers on the market and successfully tailor product and price recommendations to customers' interests and preferences. On the other hand, personalized recommendations and messages can lead to negative consequences such as privacy intrusions or occurrence of customers' vulnerability to data leakages and online fraud; these undesirable consequences force customers to feel that they lost their privacy and stimulate them to try to recover their missing freedom (Martin & Murphy, 2017).

Marketing literature widely discusses the connection between privacy concerns of customers and their reactance to personalization as well as the effect of these constructs on click-through intentions of consumers. Tucker (2014) showed that if the company allows users to have more control over their personal identification data on the website, this results in decreased reactance as well as increased number of clicks on the personalized ads. Bleier & Eisenbeiss (2015) studied the moderation effect of retailer trust and revealed that privacy concerns and reactance of consumers in relation to personalized ads could decrease if the customer trusts to retailer which, in turn, enhance the level of click-through intentions. Chen et al. (2018) studied the consumer reactance to online personalized advertising and examined the mediating role of individual rational choice factors (the most important factor is privacy concerns) in relationships between affective

factors and reactance; their study revealed that privacy concerns have a significant positive effect on consumer reactance.

Earlier study examined consumers' response to online recommendations through a series of experiments and revealed that unwanted advices (or recommendations) which contravene the preliminary attitudes and impressions of consumers about the options to choose may lead to the occurrence of a reactional state that motivate consumers either just ignore such recommendations or deliberately do the opposite (Fitzsimons & Lehmann, 2004).

Recent study provides a comprehensive literature analysis regarding the concept of consumer reactance and formulates numerous hypotheses, including the presence of the direct effect of personalization reactance on personalized ad click-through intentions (Amarnath & Jaidev, 2020).

The present paper involves an investigation of the impact of consumer psychological reactance on consumers' intention to use personalized offers and recommendations in online retail context. In accordance with the results of analyzed studies, it is appropriate to assume that this impact will be negative. Therefore, the following hypothesis can be proposed:

**H4**: Consumers' reactance negatively affects their intention to use personalized offers and recommendations.

# Chapter 2. RESEARCH DESIGN AND DATA COLLECTION. RESULTS OF DATA ANALYSIS

The present paper implies mixed method research design which consists of two steps. First step implies testing the proposed hypotheses using the results of the survey (1253 respondents, from all Federal Districts of the Russian Federation) that was conducted by Center for Strategic Marketing and Innovations of the Graduate School of Management, Saint-Petersburg State University in 2021. Statistical analysis was performed using statistical software (IBM SPSS Amos 28.0). The second step of the research design is qualitative, and it implies conducting semi-structured interviews to complement the results of testing of proposed hypotheses. 10 participants from Saint-Petersburg, Moscow, Kazan, and Pskov were interviewed face-to-face by the author of this paper. Scope of the study is the Russian market.

#### 2.1. Quantitative part. Online survey

#### 2.1.1. Methodology

The quantitative part of this study includes the analysis of data that was collected by researchers of Center for Strategic Marketing and Innovation at Saint Petersburg State University. The data was obtained through the questionnaire in 2021. The sample consists of 1253 adults from all federal districts of the Russian Federation who has independently made at least one purchase in online stores over the past month. All respondents are equally distributed by gender (50.1% males and 49.9% females); age of respondents is in the range from 18 to 73 (the mean age is 38 years, SD = 10.76). Detailed information about socio-demographic characteristics of respondents is presented in the Table 1.

Sample descriptive statistics				
Age	Frequency	%		
18-24	113	9.0		
25-34	414	33.0		
35-44	388	31.0		
33-44	300	31.0		
45-54	225	18.0		
55+	113	9.0		
Gender				
Male	628	50.1		
Female	625	49.9		
Geography (Federal district of				
the Russian Federation)				
Central	339	27.1		
Northwestern	125	10.0		
Southern	137	10.9		
North Caucasian	88	7.0		
Volga	250	20.0		
Ural	100	8.0		
Siberian	139	11.1		
Far Eastern	75	6.0		

**Table 1**. Survey sample characteristics.

For measuring items of every construct under study 5-point Likert scale was used (from 1 – "strongly disagree" to 5 – "strongly agree"). The scales for the questionnaire were adopted from the existing literature: 1) intention to use personalized recommendations – Tran (2017), Lee & Lee (2009); 2) deal proneness – Anglin, Stuenkel, & Lepisto (1994); 3) shopping orientation – Büttner et al. (2014); 4) psychological reactance – Hong & Faedda (1996), Edwards, Li, & Lee (2002); 5) privacy concerns – Mpinganjira & Maduku (2019), Malhotra, Kim, & Agarwal (2004).

In the measurement model, all the measurement items of every construct represent one specific factor. As for consumers' deal proneness, psychological reactance and intention to use personalization, these constructs are defined by the group of items which clearly describe the concept of each construct. The items of privacy concerns construct predominantly relate to consumers' concerns about confidentiality of their personal data and consumers' desire to be aware of how their personal information is used by online stores. The item that was deleted at the step of data editing and cleaning measures consumers' belief that they can control privacy of their personal behavioral information by using privacy settings on the websites. Shopping orientation construct is represented by the items which measure only hedonic dimension of consumers' online shopping orientation (measuring the utilitarian dimension of shopping orientation turned out to be impossible after editing and cleaning the data in the final model). The following paragraph

indicates the process of cleaning and editing the data before conducting the analysis of proposed hypotheses.

Before running the measurement model all constructs were tested on reliability and validity. After tests results, it was decided to delete 1 item in privacy concerns construct (EFA indicated that only this item represent another factor; it was confirmed by CFA stage); it was also reasonable to remain only 3 items in Shopping orientation (according to the wording of items, all of them represent hedonic dimension of consumers' shopping orientation). 4 items of shopping orientation were deleted from the measurement model. 1 item was deleted after conducting reliability and factor analysis because it had the negative impact on the measurement scale, and it was not related to 2 defined factors – hedonic and utilitarian dimensions. After this procedure, two factors were clearly identified – hedonic (4 items) and utilitarian (2 items). Every dimension of shopping orientation construct was tested then on reliability and validity. The results indicated that 1 item for hedonic dimension could be removed (wording of the item also unclearly represent the measuring dimension); 2 items of utilitarian dimension of shopping orientation demonstrated low level of reliability (Cronbach's Alpha = 0.543), but the analysis was continued to check the results of CFA for the whole measurement model. These results demonstrated that these 2 items can potentially cause multicollinearity because standardized regression coefficients for these items were greater than one; the results of testing the hypothesis (Utilitarian Shopping orientation -> Intention to Use Personalization) indicated that the influence was not statistically significant, but these results could not be reliable due to multicollinearity problem; based on this, it was decided to remove these items from the model. As a result, hypothesis H1b (Utilitarian Shopping orientation -> Intention to Use Personalization) will not be tested in the final model.

Consequently, the list of constructs remained in the model after data editing and cleaning procedure is the following:

- 1) Hedonic Shopping Orientation;
- 2) Deal Proneness;
- 3) Privacy Concerns;
- 4) Reactance;
- 5) Intention to Use Personalization.

#### **2.1.2. Results**

All proposed hypotheses (except for H1b) were tested in IBM SPSS AMOS 28 using Structural Equation Modelling technique. Every latent construct was tested on reliability and validity before running a model. Reliability was tested using the following criteria: internal consistency reliability, composite factor reliability and factor loadings of measurement items. Analysis of internal consistency was conducted in IBM SPSS to calculate Cronbach's Alpha coefficient. Table 2 shows that each construct has an acceptable level of internal consistency since the values of Cronbach's Alpha are greater than 0.7. Results of confirmatory factor analysis (CFA) indicated that composite reliability values also exceed its minimum level for all constructs (0.7). Factor loadings of items of all constructs lie in the range from 0.53 to 0.906 exceeding the minimum acceptable level (0.5). The validity of measures was checked by testing convergent and discriminant validity. Firstly, convergent validity was assessed using the values of average variance extracted (AVE). As it shown in Table 2, AVE are greater than 0.5 (minimum acceptable threshold) for all constructs, except for consumer reactance construct. Discriminant validity was evaluated based on Fornell & Larcker (1981) criterion which suppose that all squared correlations between variables should be less than minimum square root of AVE for the whole model. Judging from Table 3, it can be concluded that discriminant validity is proven for all latent constructs. Overall, reliability and validity of the model are supposed to be proven. The only potential problem could be with the reactance construct because its convergent validity is questionable (AVE = 0.36). It is also worth noting that none of the adjustments of the reactance construct scale did not improve its convergent validity.

Construct/items	Standardized factor loading, p<0.05	Cronbach' s Alpha >0.7	CR >0.7	AVE >0.5
Privacy Concerns		0.876	0.88	0.54
I am concerned about the need to provide my personal information on the Internet, because I cannot foresee how it will be used	0.805			
I am concerned that the information I provide on the internet may be misused.	0.739			
I'm worried about what others might do with the information I leave on the internet.	0.806			
When online stores request personal information from me, I will think twice before providing it.	0.708			
I am concerned that I give my personal information to too many online stores.	0.725			
It is very important to me that the information related to me is confidential.	0.622			
Reactance		0.783	0.77	0.36
I am happy only when I make a choice of my own free will.	0.53			
I resist people's attempts to influence me.	0.62			
I get angry when someone is given to me as an example and asked to behave the same way.	0.632			
When I am forced to do something, I feel the desire to do the opposite.	0.666			
I consider other people's advice an interference in my life.	0.586			
Tips and recommendations most often encourage me to do the opposite.	0.54			
Hedonic Shopping Orientation		0.761	0.77	0.52
I enjoy the process of shopping in online stores.	0.655			
For me, online shopping is a way to have fun.	0.702			
For me, shopping online is a pleasant way to spend time.	0.808			
Deal Proneness		0.75	0.76	0.52
When planning to buy something, how often do you do the following: I am looking for favorable offers on the Internet (for example, coupons) and promo codes for the purchase of goods and services.	0.704			
When planning to buy something, how often do you do the following: I am browsing websites where information about discounts and special offers is aggregated	0.834			
When planning to buy something, how often do you do the following: I use websites and applications that allow me to compare prices and characteristics of goods and services.	0.597			
Intention to Use		0.934	0.93	0.73
I am ready to get acquainted with personal recommendations and offerings.	0.808 0.821			
I am ready to rely on personal recommendations and offerings.				
I plan to accept personal recommendations and offerings.	0.906			
I plan to follow personal recommendations and offerings.	0.848			
I expect to use personal recommendations and offerings.	0.88			

Table 2. Measurement items standardized factor loadings, reliability and validity.

Constructs	Mean	Standard deviation	1	2	3	4	5
1. Privacy Concerns	3.8268	0.73825	0.73				
2. Reactance	3.5138	0.62459	0.16	0.6			
3. Hedonic Shopping Orientation	3.4238	0.84995	0.02	0.003	0.72		
4. Deal Proneness	3.2575	0.85948	0.0002	0.004	0.09	0.72	
5. Intention to use	3.2779	0.86906	0.05	0.04	0.12	0.12	0.85

Note: Bold numbers on the diagonal show the values of square root of AVE for each construct. Numbers below the diagonal represent squared construct correlations.

**Table 3**. Descriptive statistics, correlations, and average variance extracted for the measurement model constructs.

The goodness of fit of the measurement model was evaluated using a confirmatory factor analysis. Judging from the Table 4, it can be concluded that the model has a good overall fit: Chi-square/dF = 2.084 (p < 0.001), Goodness of fit Index (GFI) = 0.969, Tucker-Lewes index = 0.979, Comparative fit index = 0.982, Root Mean Square of Approximation = 0.029 (p of close fit = 1.000).

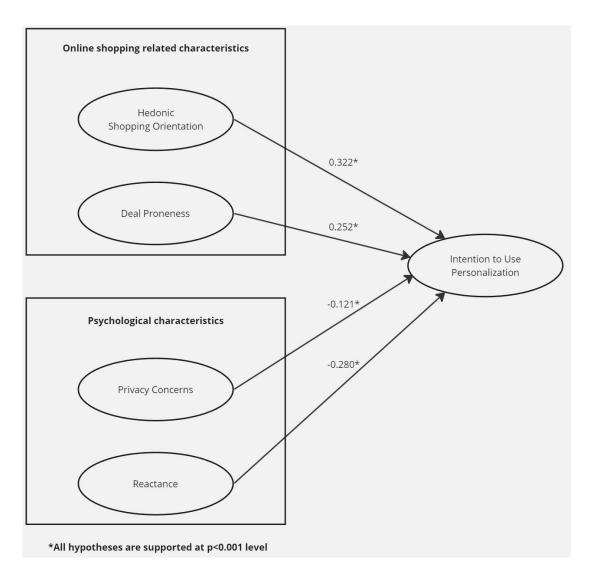
Model fit	
Goodness of fit - chi square/DF (p-value)	2.084 (<0.001)
Goodness of fit index (>0.9)	0.969
Tucker-Lewes index (>0.9)	0.979
Comparative fit index (>0.95)	0.982
Root Mean Square of approximation (Pclose)	0.029 (1.000)
Convergent validity	
C.R. (> 1.96)	+
Standardized regression weights (> 0.5)	+

Table 4. Overall model-data fit.

Next, the measurement model was analyzed in order to test the proposed hypotheses. Table 5 provides the results of hypotheses testing. The model was analyzed by the assessment of path coefficients between independent variables and dependent variable. Hedonic shopping orientation of consumers, as it was hypothesized, positively affects their intention to use personalized offers and recommendations ( $\beta = 0.322$ , p < 0.001), there H1a is supported. H2 is also supported ( $\beta = 0.252$ , p < 0.001) which suggests that consumers' deal proneness positively affects consumers' intention to use personalized offers and recommendations. H3 and H4 are also supported (for H3:  $\beta = -0.121$ , p < 0.001; for H4:  $\beta = -0.280$ , p < 0.001), indicating that both privacy concerns and psychological reactance of consumers negatively affect consumers' intention to use personalized offers and recommendations. Overall scheme of the model with the results of hypotheses testing is provided in Figure 1.

Paths	Std. coefficient	t-value	p-value	Hypotheses Testing	
Hedonic Shopping Orientation -> Intention to use	0.322	7.626	0.000	H1a supported	
Deal Proneness -> Intention to use	0.252	7.582	0.000	H2 supported	
Privacy Concerns -> Intention to use	-0.121	-3.85	0.000	H3 supported	
Reactance -> Intention to use -0.28 -4.029 0.000 H4 supported					
Note: it was decided not to test hypothesis H1b after data editing and cleaning (see paragraph 2.1.1)					

**Table 5**. Hypotheses testing results.



**Figure 1**. Measurement model. Results of hypotheses testing.

#### 2.2. Qualitative part. Semi-structured interviews

#### 2.2.1. Methodology

The results of hypotheses testing showed that all tested hypotheses are supported. Hypothesis H1b supposed a positive effect of utilitarian shopping orientation on consumers' intention to use personalized recommendations and offers, and it was not tested in quantitative part. Nevertheless, the connection between utilitarian shopping orientation and intention to use personalization will be studied through interviews.

The results of quantitative part of this study indicated that hedonic shopping orientation of consumers leads to increased intention to use personalization as well as deal proneness, while concerns about privacy and reactance of consumers result in decreased level of usage intention.

Further analysis is directed to gaining insights from consumers using the qualitative method of research – semi-structured interviews. The questions in the interview are composed on the basis of predefined structure, but the majority of questions are open-ended questions. The aim of the interviews is to complement the results of hypotheses tests, provide detailed explanation of identified relations between studied constructs by collecting and structuring consumers' thoughts and feelings, and finally to fully answer the research questions indicated at the beginning.

Socio-demographic characteristics of the respondents are represented in Table 6. There are 10 participants (4 males and 6 females); all of them are more than 18 years old, and they have higher education degree. A set of filter questions was used at the stage of search and selection of respondents to choose the right respondents for the study (all participants have independently made at least one purchase in online stores over the past month, and they are familiar with personalized recommendations and offers in online stores). Initially, respondents are selected only based on the two filtering questions outlined above; then, respondents could be selected with the use of additional filtering questions to cover different aspects and dimensions of all constructs under study (for example, to study hedonic and utilitarian shopping orientation of consumers in relation to the intention to use personalized offers and recommendations).

#### Geography of research:

- 1) Northwestern Federal District of the Russian Federation Saint Petersburg (4 respondents), Pskov (4 respondents);
- 2) Central Federal District of the Russian Federation Moscow (1 respondent);
- 3) Volga (Privolzhsky) Federal District of the Russian Federation Kazan (1 respondent).

Pseudonym	Age	Gender*	City of residence	
Alexey	23	M	Kazan	
Anastasia	24	F	Saint Petersburg	
Anna	44	F	Pskov	
Daniil	24	M	Pskov	
Elena	38	F	Saint Petersburg	
Ivan	48	M	Pskov	
Maria	24	F	Saint Petersburg	
Nadezhda	41	F	Moscow	
Natalia	46	F	Pskov	
Vadim	26	M	Saint Petersburg	
Gender*: M - Male, F - Female.				

**Table 6**. Socio-demographic characteristics of the respondents.

Interviews were conducted face-to-face with all respondents by the author of this paper during April and May 2023. All interviews were recorded on a voice recorder, and then audio recordings were transcribed verbatim. The interview locations were selected in agreement with the participants: the author's home, participants' homes, or public places. All interviews were conducted in Russian and then translated into English.

The interview structure is primarily based on the structure of the model that have been tested in the quantitative part of the study. Detailed interview guidance is provided in Appendix A. Example excerpts from interview transcripts can be found in Appendix B.

The first part of the interview is a block of questions regarding online shopping related consumer characteristics: shopping orientation and deal proneness (Block 1). First set of questions addresses to the respondent in order to find out the respondent's attitude to online shopping in general, determine whether the respondent is shopping orientated and which category he/she belongs to (hedonic or utilitarian). The second set of questions is related to deal proneness and aimed at investigating whether the respondent is deal-prone or not and to define the degree of participant's propensity to participate in deal shopping. Finally, there are questions which refer to respondent's intention to use personalized offers and rely on them while shopping online (why these offers could be useful for the respondent).

There is also set of two additional questions in the end of Block 1 in case the respondent is a deal-prone consumer. They are aimed at checking for two points: 1) does the respondent consider personal offers and recommendations as a way to make profitable purchases; 2) whether respondents use or intend to use price recommendations and promotions while shopping in online stores and why. In the second question, four examples of personal offers are shown to respondents; among them, there is an example with a personal discount on the product recommended to the consumer (personal price promotion). Other examples demonstrate regular personal product recommendations.

Next block of questions is related to psychological characteristics of consumers: privacy concerns and reactance (Block 2). Firstly, the respondent is asked about his/her attitude to personal data related issues in the context of personalization (why he is concerned, what exactly he is worried about). The next question relates to what could reduce respondent's concerns about personal data privacy. The last question about privacy concerns is related to how personal information concerns of the respondent affect his/her intention to use personalized recommendations and why. The last set of questions is related to reactance (does the respondent have this characteristic or not; how it relates to his/her intention to use personalization).

#### **2.2.2. Results**

This paragraph discusses how and why consumers' characteristics that are researched in the present study influence consumers' intention to use personalized offers and recommendations in online stores. Results of conducted interviews will be divided into four subparagraphs for each consumer characteristic.

Shopping orientation.

All respondents showed an online shopping orientation to some extent. First of all, they highlighted the advantages of online shopping in comparison with shopping in physical stores. Among these advantages, there are several of the most important. These are time and effort saving, the opportunity to buy the goods that are not available in physical stores (for example, order delivery from another city or another country), as well as the opportunity to save money:

"I treat online shopping as positively as possible; I think this is a good opportunity to save money, get the goods you need, that is, to find what is available 100%, and delivery is usually very convenient". (Alexey)

"I often buy something in online stores. ... For example, I order delivery of food products from grocery shops or food from restaurants. All this is very convenient, it saves your time. My goal of online shopping is to find something that is not available in physical stores. The most striking example is my last purchase. I bought sneakers for myself, and they are delivered from Moscow. I just couldn't go to Moscow for the sake of buying these sneakers, but with the help of delivery, they will come to me, and if the size doesn't suit me, I can always return it. So, I make online purchases in order to find something that is not available in stores and simplify my life, save time; often this can save my money, because there can be a lot of discounts or cashback for online purchases". (Anastasia)

All respondents noted that the main purpose of online shopping for them is the purchase of goods which they need. They are engaged in online shopping only in order to purchase a necessary product or several products, that is, all of them are characterized by a utilitarian dimension of shopping orientation. At the same time, the overwhelming majority of respondents expressed their willingness to use and rely on personal offers and recommendations in online stores:

"For what purpose do I make purchases... if I need something, then I go to an online store and buy it. ... I like doing it. I basically like to shop. And the online shopping is no exception. If I have found what I need, then I feel a sense of satisfaction that I have done the necessary, important thing. ... I am ready to rely on personal offers and use them,

because sometimes I am offered practical things that I need, so I definitely pay attention to this". (Natalia)

"It is very convenient for me as a consumer not to waste unnecessary actions on going to the store and to choose products there; I already know what I want to order, it is enough to analyze the price and make a purchase. ... Am I ready to use personalized offers? Yes, of course, I'm ready, because it's convenient, you don't lose anything from it, and why not use it. ... I had a situation, I was looking for a bag for my mother for the New Year as a gift, but I couldn't find the right one anywhere. And one day Lamoda just throws me a recommendation: "you were looking for a black bag recently, look, we have such bags". And it was really what I wanted, what I imagined. And I bought it right away". (Maria)

"I think that, of course, personal offers are useful, since the store itself tells you, offers more options and alternatives. First you chose one, then you saw the second, third, seventh, and already compared it somehow, and finally chose one particular thing. ... I am ready to use these personal offers; relying on them is not really, since I always want to check and see reviews". (Anastasia)

"Recommendations make it easier to find some kind of image in clothes. I'm ready to rely on it, because it's hard to choose clothes for myself, and sometimes even such simple recommendation can help me with this". (Alexey)

"The degree of readiness depends on whether I need it or not. That is, I am not a shopaholic, I will not buy everything that is needed and not needed. If the offer suits me and I need this product right now, then I will use it". (Daniil)

As can be seen from the respondents' answers, the main arguments in favor of using personal offers are:

- 1) The ability to find the necessary product in the case when an independent search does not give any results, or to find suitable supplementary goods to the already purchased goods;
  - 2) The opportunity to consider various alternatives and choose the best option from them.

Among the respondents, only two reported that they enjoy online shopping or consider it as an opportunity to have fun and enjoy their spare time, but only in the context of searching and choosing the required product:

"In general, I really like to buy something and spend money. Shopping always gives me pleasure. ... Shopping in general for me is more like some kind of meditation, relaxation,

well, because I love shopping, and when you can save energy on endless walking, bumping into someone, waiting in line in fitting rooms, then online stores are very helpful. ... I will take the opportunity to look at the products in personal offers, but it is not necessary to buy. In general, I get pleasure not only from what I buy, but also from what I still view". (Anastasia)

"Well, it also happens that I can start looking for some product on Wildberries, and I can just hang there for an hour, for example. For me it will be like a little entertainment. You start looking through the goods, putting something in the shopping cart. It's not a fact that you will buy it, of course, but there is a moment when I'm bored, I can start walking around the virtual store, looking for something, reading reviews, and for me it's nice, interesting. I can, for example, go to an online store and just lose an hour". (Elena)

Thus, none of the respondents expressed a hedonic shopping orientation in full. Respondents who demonstrated some hedonic orientation towards online shopping expressed willingness to use and rely on personal offers, and they also showed a high degree of deal proneness.

#### Deal proneness.

The respondents can be divided into four main groups according to the degree of proneness to deals in the process of online shopping:

- Consumers who are always looking for various favorable offers, coupons and discount promo codes without reference to a specific online store, using every available resource:
  - "Among those sites that I use frequently, I can highlight Pepper.ru. This is the website where users add offers that they consider profitable, and others can give these offers a rating, raise it or lower it, put plus or minus. And usually there are the most profitable offers in the top, which is moderated by the masses. That is, it is a collective filtering of the most profitable and most interesting offers". (Alexey)
- 2) Consumers who do not search for any coupons and promo codes, but they actively use various promotions, discounts, promo codes that are offered to them in some specific stores. At the same time, such consumers can easily buy some necessary goods for them without a discount:

"I'm not looking for any coupons or promo codes, but there are always some promo codes in Samokat that I can use, personal ones. For example, there are a lot of promo codes, such that, for example, if I make a purchase for certain amount of money before 22:00, then I will get a 20% discount, and, of course, I make a purchase and get this discount. ... If I need something and there is no discount, then I will buy it". (Maria)

3) Consumers who never use promotions, coupons, and promo codes intentionally, but at the same time, they try to buy goods at the lowest price among the options offered in the market:

"I'm not looking for promo codes and coupons intentionally at all, I just look at the offers offered by some online stores, and then I analyze them and choose what suits me best". (Ivan)

"I never use coupons, discounts. It just doesn't add up: I don't have them, and I'm not looking for them, I don't find them, and they just are not present in my life. And as for the best offer, in terms of some utilitarian things, the most relevant example is to look for the best offers in terms of price-quality ratio". (Vadim)

4) Consumers who can purchase the necessary goods at any price, without discounts, but consider discounts or promo codes as a pleasant bonus (not deal prone consumers):

"In general, I'm not a fan of discounts, but if they are, for example, for my favorite sour cream, then it's nice. Promo codes... if there are any, then it's nice, of course, I use them; if not, then it's okay, I'll order without it. If I need something, I can order it without a promo code or without a discount. If there is a promo code or a discount, then this is just a nice bonus that is saving my finances". (Nadezhda)

Almost all respondents from all mentioned groups have shown the intention to use personal offers and recommendations. The majority of them also noted that personal offers with lowered price can be useful for making profitable purchases:

"If personal offers carry some kind of favorable discount or special price for this product, if this product is selected taking into account my preferences, and this product is familiar to me, I know that it is good, I can choose this profitable personal offer to make a better purchase". (Ivan)

"Yes, I think that personal offers can be useful for making profitable purchases. There are usually discounts on such products, so it is profitable to buy, I save my money". (Elena)

"If the offer suits me and I need this product right now, then I will use it. ... The value of personal offers for me is that they help to save time, save money. Am I ready to use such personal offers? Yes, I'm ready, I'm already using them. Why? Because they save my time and my money". (Daniil)

At the same time, Alexey, while being an active deal-prone consumer, often does not see any benefits in personal offers:

"In many cases, I think recommendations rather help you find the product you need, as well as interest you, motivate you to buy, or increase your average check there, but you won't get any benefits". (Alexey)

Based on provided respondents' answers, it is possible to conclude that different types of deal-prone consumers have an intention to use personalized offers and recommendations, and the most important thing for them is the matching the products offered to them with their current preferences; less significant for them is the personal discount.

Personal price promotions. For this section, questions in interviews were asked only to respondents who showed a high degree of deal proneness (groups 1 and 2). From the proposed list of options, highly deal-prone respondents always chose an option with a personal discount on the offered product (example of personal price promotion). But at the same time, they focused on two main factors when choosing the "best" example: 1) how well the offer is tailored to their interests and preferences; 2) the type of goods used in personal offers; for example, if these are goods that are bought once for a specific task, then respondents consider personal offers useless and ignore them; if these are goods that are bought regularly and are expendable (for example, personal hygiene products or food), then respondents express interest in such personal offers and are ready to use them. Thus, we can conclude that deal prone consumers are willing to respond to such personal price recommendations and promotions, but only if the offer is correctly tailored to their interests and preferences.

#### Privacy concerns.

Almost all respondents expressed a low degree of concern about the personal data which they provide to online stores:

"In general, I am neutral about providing my personal data to online stores. I am ready to provide my data. The only thing that bothers me is whether they will leak somewhere or

not. I don't care about anything else. That is, I do not mind that they are used to select products according to my preferences. The only thing that bothers me is leaks, nothing else". (Daniil)

"Which types of personal information we provide... full name, date of birth, phone number, email address. All this can be provided, without any problems. The rest of the data, for example, passport data and so on, is not, of course. As for activity and behavior on the Internet... I am ready to provide such information, it doesn't bother me much. In general, I am ready to provide all data, except for passport data, for example". (Nadezhda)

They are also ready to provide their personal data to online stores in order to receive suitable personal offers and recommendations:

"In general, I am ready to use personalized offers from online stores that use my personal data, because such offers are already configured specifically for me". (Elena)

"I am ready to use personal offers, since the most important personal data for me is not used". (Ivan)

"I am ready to use personal offers... If personal data is leaked, then nothing more than a first name, last name, and phone number will be needed there. I have no worries about this". (Daniil)

One respondent, in contrast to all other respondents, demonstrated a high level of privacy concerns and expressed reluctance to use personalized offers and recommendations and rely on them:

"I have a negative attitude towards providing personal information on the Internet. I am not ready to provide my personal data to online stores. If this is some basic information, for example, which buttons I clicked in the application, which pages I looked at, this is their right, ok. I would say that I am against it, but nobody will listen to me. ... Personal offers don't work for me ... I am absolutely not ready to use them". (Vadim)

Based on the participants' responses, it became possible to identify two main categories of personal data which consumers may be concerned about to varying degrees while providing this data to online stores. Personal data that respondents are willing to share with online stores is their full name, date of birth, email address, their own activity and behavior on the Internet in general and in the process of online shopping in particular. Respondents are less willing to provide their phone number, passport data, as well as their banking card data. Moreover, the first category of personal data, according to respondents' opinion, is mainly used by online stores to provide

personalized offers, while the second category of data is not required, and it is not used for this purpose. Therefore, those respondents who showed a generally low level of privacy concerns may be more concerned about providing the second category of data, but this does not affect their intention to use personal offers.

Another important factor for respondents is the reputation of an online store: the more well-known and reliable an online store is, the more respondents are willing to share their personal data with this online store.

All respondents understand that online stores use their personal data for various purposes (including providing personalization). The main reason why respondents may be concerned about the security of their personal data is the likelihood of their leakage or illegal transfer to third parties (fraudsters, in particular).

#### Reactance.

Almost all respondents reported that they show a strictly negative reaction if someone tries to persuade them or force to do something; some respondents expressed a strong desire to do the opposite in such cases:

"The reaction is sharply negative. When someone tries to force me to do something, my reaction is to do the opposite; I basically won't do what someone wants me to do, that is, I want to choose myself what I should do and what I shouldn't." (Natalia)

At the same time, tips and recommendations are perceived neutrally by the majority of respondents: everyone is ready to listen to them, especially if the advice is given by a person who is a professional in a particular field, but everyone makes the final decision independently, carefully considering all the information received by them:

"I will listen to advice or recommendations, but I have my own opinion, and I will probably turn to some other specialist; I will never rely on the opinion of one specialist if I don't understand it; I will listen to several opinions, and then make some conclusion for myself." (Elena)

When it comes to respondents' intention to use personalization, psychological reactance turned out not to be a problem for the majority of respondents. There are two main reasons for such a result.

Firstly, some respondents indicated that they do not perceive personal offers and recommendations in online stores as a clear advice for action. They view these personal offers as a help and support in evaluating different options and making final purchase decisions:

"No, I don't take personalized offers as advice for action. In fact, I perceive it more as a kind of offer, as some kind of help, but not as advice for action. ... they do not cause me any negative reaction, because they don't force me to buy, they just offer me something. I react to them absolutely normally." (Elena)

Secondly, some respondents reported that they perceive personal offers as advice for action, but either they neutral attitude to this fact, or they indicate that it has a positive effect in the form of speeding up the process of making a previously considered decision:

"Well, yes, I definitely perceive it as advice for action. The emotions they evoke in me... well, I look through them sometimes, I highlight something interesting for myself. Initial reaction... It's interesting to see; maybe I'll find something for myself". (Daniil)

"To some extent, I can characterize personal offers as advice for action. Although they are not as explicit as the advice of another person, but they can be considered as advise for action partly. ... When I go back to the online store, I will see the same smartphone in my offers, and this will motivate me to go to the page of this product again, look at it again, compare it with others and think about buying". (Alexey)

Both groups of respondents indicated that they do not have any negative emotions associated with personal offers and recommendations; their intention to use personalization is more influenced by the need to purchase the products that are offered at this moment:

"I am ready to use them as needed. I perceive them as a kind of offer; I absolutely do not perceive them as if someone is forcing me to buy something. Therefore, if I need something from this list, I will be happy to purchase it." (Elena)

"If such offers relate specifically to groceries, then I will use them constantly. If they relate to a product that I haven't bought yet, but I want to buy, I will always click on them. And if I don't really need the goods, I'll just ignore them." (Alexey)

In addition, some respondents indicated that personal offers and recommendations in online stores are not perceived as a call to action or persuasion from other people; it is easier to just ignore such recommendations:

"To some extent, I can characterize personal offers as advice for action. Although they are not as explicit as the advice of another person, but they can be considered as advise for action partly". (Alexey)

"At first, of course, they cloud your judgement, but then you remember that... you can handle it somehow because it's not human pressure; humans put pressure on you with emotions, but here it's like without emotions, and it's easier to retreat from it, it's easier to turn away." (Anastasia)

Thus, psychological reactance of consumers turned out not to be a problem for their intention to use personalization. The reaction of the majority of respondents to personal offers is formed based on how these offers correspond to their preferences and interests: if the goods in personal offers are interesting to consumers, then they will not refuse to use them; if the offered goods are not interesting to consumers, then they try to simply ignore them. Moreover, some consumers may perceive personal offers and recommendations in online stores easier than the impact of other people. Personalized offers often do not cause consumers to feel the loss of their own freedom of action. Consequently, there is no negative influence of psychological reactance of consumers on their intention to use personalized offers and recommendations indicated.

# **Chapter 3. DISCUSSION OF THE RESULTS**

## 3.1. General discussion and theoretical implications

The findings of the presents study shed light on the connection between consumers' intention to use personalized offers and recommendations in online stores and consumers' characteristics which can be divided into two groups: 1) online shopping related – shopping orientation and deal proneness; 2) psychological – privacy concerns, and psychological reactance.

Study of online shopping orientation of consumers (with its two dimensions - hedonic and utilitarian) had some limitations. Firstly, statistical testing of proposed hypotheses in quantitative part allowed only to support hypothesis H1a, meaning that hedonic shopping orientation positively affects intention to use personalization. In case of hypothesis H1b (positive effect of utilitarian shopping orientation on the intention to use personalization), potential multicollinearity problem of utilitarian shopping orientation construct did not allow to test this hypothesis. At the same time, the results of conducting interviews show a lack of qualitative data from consumers who have a hedonic shopping orientation. Nevertheless, qualitative part of the study indicated that both dimensions of online shopping orientation of consumers are positively related to their intention to use personalized offers in online stores. These results complement the conclusions of Huang, & Zhou (2018) about significant positive influence of different shopping motivations on the use of before-search and after-search web personalization. Interview respondents indicated two main reasons why personalized offers can be useful for them in the process of online shopping: 1) it is easier to find the necessary product in the case when an independent search does not give any results, or to find suitable supplementary goods to the already purchased goods; 2) it gives the opportunity to consider various alternatives and choose the best option from them.

As for deal-proneness, the results of quantitative part indicated that deal-proneness of consumers positively affects their intention to use personalized offers and recommendations. Qualitative part results showed that there are four groups of consumers according to the degree of manifestation of deal-proneness: 1) consumers who are always looking for various favorable offers, coupons and discount promo codes everywhere on the Internet using every available resource; 2) consumers who do not search for any coupons and promo codes, but they actively use such promotions if they are offered in some specific stores; 3) consumers who never use promotions, coupons, and promo codes intentionally, but at the same time, they try to buy goods at the lowest price among the options offered in the market; 4) consumers who can purchase the necessary goods at any price, without discounts, but consider discounts or promo codes as a pleasant bonus. Group 4 include those consumers who are not deal prone. Groups 1 and 2 are

similar to Schneider & Currim (1991) active and passive types of deal-prone consumers accordingly. Created classification is also consistent with Kwon & Kwon (2013) that divide deal-prone consumers by the degree of usage of shopping capital. Interview results indicated that all selected groups of consumers have an intention to use personalized offers to some extent, confirming the results of the quantitative part. Interview results also indicated that deal-prone consumers often have an intention to use personalized offers, especially with lowered price. However, while deal prone consumers are willing to respond to personal price offers and promotions, they require a more significant condition than personalized price – matching of offered products to consumers' interests and preferences. In this case, personal price offer should increase the consumer's intention to use personalized offer.

Results of both methods revealed that privacy concerns of consumers turned out to be a characteristic that can diminish consumers' intention to use personalized offers and recommendations. Consumers who are not worried about the privacy of the data they provide to online stores have no barriers to using personalized offers and recommendations. They also ready to provide the necessary personal data to online stores in order to receive suitable and useful personalized offers and recommendations. Consumers with the high level of concerns about their personal data most often refuse to use personalized offers and recommendations. Type of personal data that are most often used to provide personal offers also play an important role: according to interview participants opinion, providing personalized offers require such data as a name, date of birth, contact information, and data about user's activity and shopping behavior. The majority of consumers is ready to provide such types of personal data to online stores and, thus, they are ready to use personalized offers and rely on them. As participants of interview indicated, when it comes to more sensitive personal data such as phone number, passport data, and payment data, their readiness to disclose this data is less even though they demonstrate a generally low level of privacy concerns. But this does not have any impact on their intention to use personalized offers and recommendations because respondents understand that online stores do not need to have these types of data to provide personalized offers to consumers. In addition, the majority of respondents indicated that the main reason of their privacy concerns the likelihood of leakage or illegal transfer of their personal information to third parties (fraudsters, in particular) which consistent with Cloarec (2020) results.

Comparing the results of quantitative and qualitative methods in this study makes it clear that psychological reactance of consumers does not affect their intention to use personalized offers and recommendations. While results of testing proposed hypotheses showed statistically significant positive influence of reactance on intention to use personalization, analysis of interview

results showed that reactance of consumers does not cause decreasing of their personalization usage intention. Qualitative study revealed that personalized offers in online stores do not deprive consumers of a sense of freedom of action. As the results showed, consumers with a high degree of reactance can be divided into two groups in relation to personalized offers. First group of consumers do not perceive personalized offers and recommendations in online stores as a clear advice for action; they view these offers as a help and support in making online purchases. Second group of consumers can perceive personalized offers as advice for action but have either neutral attitude to them or treat them as help in decision-making in the process of online shopping. Consumers from both groups are ready to use personalized offers and rely on them but their decision whether to pay attention to such offers or just ignore them depends on the degree of conformity of offered products and current consumers' preferences and interests. The discrepancy between the results of both research methods for reactance can be explained by inadequate convergent validity of this construct in quantitative part (AVE is less than 0.5). It can be concluded that scale for reactance should be revised and updated to get an adequate convergent validity of this construct, and the hypothesis about negative relationship between reactance and intention to use personalized offers should be tested again.

This research, on the one hand, contributes to the marketing literature on such consumer characteristics as shopping orientation, deal proneness, privacy concerns, and reactance by deepening and expanding existing knowledge about them and their dimensions; on the other hand, present research contributes to marketing literature on personalization in online retail environment and consumer behavior connected to this by identifying relationships between aforementioned characteristics of consumers and their intention to use personalized offers and recommendations.

## 3.2. Managerial implications

Based on provided discussion, several important managerial implications of the study for online retailers could be highlighted.

This study shows that consumers consider personalized offers and recommendations in online stores as a support in searching for necessary products. Moreover, as the results of the study demonstrated, consumers are willing to provide the necessary personal data to online stores in order to get suitable and useful recommendations and offers. Thus, it is important to ensure the correct functioning of recommendation algorithms to provide personalized offers with precise matching to consumers' preferences and interests in order to increase their intention to use personalized offers and enhance their overall online shopping experience.

In addition, online stores should offer more personalized price promotions to deal-prone consumers by tracking their behavioral data online or loyalty cards data. At the same time, one important condition should be fulfilled: products offered to consumers should match their current preferences and interests. Precise product personalization together with personal price offer or discount will increase consumers' intention to use such personalized offers, thus increasing click-through rates and average online receipt value.

## 3.3. Limitations of the study and suggestions for future research

This paragraph is devoted to limitations of the present study and suggestions of possible ways of future research.

As for limitations of the study, there are several points that can be highlighted:

1) Geography of interview respondents.

In the qualitative part of the study, participants of interviews represent only three federal districts of the Russian Federation. It would be possible to see a more complete picture if the participants represented all federal districts of the Russian Federation, and the distribution of participants by federal districts would be more uniform. In addition, the scope of the study is the Russian market. It would be interesting to collect data in another countries and continents, study different cultural contexts, and compare the results.

2) The absence of clear results of testing the hypothesis about positive effect of utilitarian shopping orientation on intention to use personalized recommendations and offers.

In the quantitative part, there are no results on testing the hypothesis about positive effect of utilitarian shopping orientation on the intention to use personalized recommendations and offers. One possible reason for that is the quality of scale for hedonic shopping orientation construct; this scale can be revised in further research.

3) The lack of qualitative data from consumers who have a hedonic shopping orientation.

There are few of interview respondents who have a hedonic dimension of shopping orientation, so that there is a little amount of qualitative data obtained for analysis of connection between hedonic shopping orientation and intention to use personalized offers and recommendations.

4) Potential problems with the statistical results of testing the effect of reactance on the intention to use personalization.

The scale for reactance construct could be revised and updated for improving its convergent validity. Then, the relationship between reactance and intention to use personalized offers and recommendations could be tested again to get more statistically valid results.

Below, suggestions for future research are provided. All of them stem from indicated limitations of the study:

- 1) Conduct interviews with a larger number of respondents who are hedonic shoppingoriented;
- 2) Expand the scope of the study to foreign markets (e.g., Chinese, European, and U.S.);
- 3) The scale for utilitarian shopping orientation could be updated, and then the hypothesis about the positive effect of utilitarian shopping orientation on the intention to use personalization in online stores could be tested, since the results of the interview in present paper showed that consumers are ready to use personalized recommendations and offers in online stores if these offers exactly match their current preferences and interests:
- 4) The effect of consumer's reactance on intention to use personalized recommendations and offers in online stores could be tested statistically with the updated scale for reactance.

## **Conclusion**

Online retailers constantly adapt to modern consumer trends and try to provide personalized services to their customers by utilizing developing technologies. Personalized recommendation algorithms allow online retailers to provide a better customer experience and enhance customer engagement. In this instance, it is important and necessary to study consumer characteristics and behavior in relation to personalization, as well as consumer perception of personalization to improve company's current and future business opportunities.

This study aimed at investigation of how characteristics of consumers (shopping orientation, deal proneness, privacy concerns and reactance) influence consumers' intention to use personalized offers and recommendations in online retailing context. Using sequential mixed methods research design allowed to get a comprehensive view on the relationships between all these consumers' characteristics and personalized offers usage intention. The results showed that both dimensions of shopping orientation (hedonic and utilitarian) of consumers lead to increased intention to use personalized offers. Consumers see personal offers in online stores as help and support in finding the necessary goods or considering different alternatives and choosing the best option among them. Deal proneness of consumers also positively affect their intention to use and rely on personalized offers and recommendations. As it was hypothesized, deal prone consumers tend to respond to personalized price offers and promotions but only if these personal offers correctly match their current preferences.

Privacy concerns of consumers, in contrast, diminish their intention to use personalized offers. Consumers who have low level of concern about privacy of their personal data are ready to provide the required personal data to online stores in order to receive suitable and useful personalized offers. Moreover, if these consumers concern about more sensitive types of data (mobile phone number, passport data, and banking card information), they are less willing to provide such data but their intention to use personalized offers does not decrease since consumers understand that such types of data should not be used by online stores for providing personalized offers. Comparison and analysis of results of both quantitative and qualitative methods led to the conclusion that psychological reactance of consumers have no influence on their intention to use personalized offers since consumers do not perceive them as something that contradicts their freedom. They perceive personalized offers and recommendations just as support in the process of online shopping.

The present study also has practical value for online retailers. The results allow to make suggestions for online retailers in the implementation of personalization strategies with the use of

personalized recommendation algorithms: personalized offers should clearly match current consumers' preferences and contain personalized price promotions and discounts.

# References

- 2. Aguirre E., Mahr D., Grewal D., de Ruyter K., Wetzel M. 2015. Unravelling the personalization paradox: The effect of information collection and trust-building strategies on online advertisement effectiveness. Journal of Retailing, 91(1): 34–49. <a href="https://doi.org/10.1016/j.jretai.2014.09.005">https://doi.org/10.1016/j.jretai.2014.09.005</a>
- 3. Aguirre, E., Roggeveen, A. L., Grewal, D. & Wetzels, M., 2016. The personalization-privacy paradox: Implications for new media. Journal of Consumer Marketing, 33(2): 98–110. http://dx.doi.org/10.1108/JCM-06-2015-1458
- 4. Ajzen I, 1991. The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2): 179–211. <a href="https://doi.org/10.1016/0749-5978(91)90020-T">https://doi.org/10.1016/0749-5978(91)90020-T</a>
- 5. Alford, B. L., & Biswas, A. (2002). The effects of discount level, price consciousness and sale proneness on consumers' price perception and behavioral intention. Journal of Business Research, 55(9): 775–783. https://doi.org/10.1016/S0148-2963(00)00214-9
- Alkis, A., & Kose, T., 2022. Privacy concerns in consumer E-commerce activities and response to social media advertising: Empirical evidence from Europe. Computers in Human Behavior, 137, 107412. <a href="https://doi.org/10.1016/j.chb.2022.107412">https://doi.org/10.1016/j.chb.2022.107412</a>
- 7. Amarnath, D. D., Jaidev, U. P., 2020. Toward an integrated model of consumer reactance: a literature analysis. Management Review Quarterly. https://doi.org/10.1007/s11301-020-00180-y
- 8. Basu, S., 2021. Personalized product recommendations and firm performance. Electronic Commerce Research and Applications, 48, 101074. <a href="https://doi.org/10.1016/j.elerap.2021.101074">https://doi.org/10.1016/j.elerap.2021.101074</a>
- Ben Mimoun, M.S., Lancelot Miltgen, C., Slama, B., 2021. Is the shopper always the king/queen? Study of omnichannel retail technology use and shopping orientations.
   Journal of Retailing Consumer Services, 65, 102844. https://doi.org/10.1016/j.jretconser.2021.102844.
- 10. Biraglia, A., Bowen, K. T., Gerrath, M. H., & Musarra, G., 2022. How need for closure and deal proneness shape consumers' freemium versus premium price choices. Journal of Business Research, 143: 157–170. <a href="https://doi.org/10.1016/j.jbusres.2022.01.064">https://doi.org/10.1016/j.jbusres.2022.01.064</a>

- 11. Bleier, A., & Eisenbeiss, M. (2015). The importance of trust for personalized online advertising. Journal of Retailing, 91(3): 390–409. https://doi.org/10.1016/j.jretai.2015.04.001
- 12. Cervellon, M.C., Sylvie, J., Ngobo, P.V., 2015. Shopping orientations as antecedents to channel choice in the French grocery multichannel landscape. Journal of Retailing Consumer Services, 27: 31–51. <a href="https://doi.org/10.1016/j.jretconser.2015.06.008">https://doi.org/10.1016/j.jretconser.2015.06.008</a>.
- 13. Chinchanachokchai S., Thontirawong P., Chinchanachokchai P., 2021. A tale of two recommender systems: the moderating role of consumer expertise on artificial intelligence based product recommendations, Journal of Retailing and Consumer Services. 61, 102528, <a href="https://doi.org/10.1016/j.jretconser.2021.102528">https://doi.org/10.1016/j.jretconser.2021.102528</a>.
- 14. Cloarec, J., 2020. The personalization-privacy paradox in the attention economy. Technological Forecasting and Social Change. 161, 120299 <a href="https://doi.org/10.1016/j.techfore.2020.120299">https://doi.org/10.1016/j.techfore.2020.120299</a>
- 15. E-commerce Personalization Benchmark Report, Netcore Cloud, 2021. URL: <a href="https://netcorecloud.com/ebook/ecommerce-personalization-benchmark-report-2021/">https://netcorecloud.com/ebook/ecommerce-personalization-benchmark-report-2021/</a> (accessed 23.04.2023)
- 16. Edwards, S. M., Li, H., & Lee, J.-H. (2002). Forced Exposure and Psychological Reactance: Antecedents and Consequences of the Perceived Intrusiveness of Pop-up Ads. Journal of Advertising, 31(3): 83–95. <a href="http://www.jstor.org/stable/4189228">http://www.jstor.org/stable/4189228</a>
- 17. Edwards, S. M., Li, H., & Lee, J.-H., 2002. Forced exposure and psychological reactance: Antecedents and consequences of the perceived intrusiveness of pop-up ads. Journal of Advertising, 31(3): 83–95. <a href="http://dx.doi.org/10.1080/00913367.2002.10673678">http://dx.doi.org/10.1080/00913367.2002.10673678</a>
- 18. Fan, H. & Poole, M. S., 2006. What Is Personalization? Perspectives on the Design and Implementation of Personalization in Information Systems. Journal of Organizational Computing and Electronic Commerce, 16(3-4): 179-202. <a href="http://dx.doi.org/10.1207/s15327744joce1603&4\_2">http://dx.doi.org/10.1207/s15327744joce1603&4\_2</a>
- Fishman, J., Lushin, V., & Mandell, D. S., 2020. Predicting implementation: Comparing validated measures of intention and assessing the role of motivation when designing behavioral interventions. Implementation Science Communications, 81(1): 1-10. https://doi.org/10.1186/s43058-020-00050-4
- Fitzsimons, G. J., & Lehmann, D. R., 2004. Reactance to recommendations: when unsolicited advice yields contrary responses. Marketing Science, 23(1): 82–94. <a href="https://doi.org/10.1287/mksc.1030.0033">https://doi.org/10.1287/mksc.1030.0033</a>

- 21. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1): 39–50. <a href="https://doi.org/10.2307/3151312">https://doi.org/10.2307/3151312</a>
- 22. Gázquez-Abad, J. C. & Sánchez-Pérez, M., 2009. Characterising the deal-proneness of consumers by analysis of price sensitivity and brand loyalty: An analysis in the retail environment," The International Review of Retail, Distribution and Consumer Research, 19(1): 1–28. http://dx.doi.org/10.1080/09593960902780922
- 23. Gogua M. M., Smirnova M. M. 2020. Revisiting personalization through customer experience journey. Vestnik of Saint Petersburg University. Management, 19(4): 430–460. <a href="https://doi.org/10.21638/11701/spbu08.2020.402">https://doi.org/10.21638/11701/spbu08.2020.402</a>
- 24. Gouthier, M. H., Nennstiel, C., Kern, N., & Wendel, L., 2022. The more the better? Data disclosure between the conflicting priorities of privacy concerns, information sensitivity and personalization in e-commerce. Journal of Business Research, 148: 174–189. https://doi.org/10.1016/j.jbusres.2022.04.034
- 25. Grewal, D., Roggeveen, A.L., Nordf alt, J., 2017. The future of retailing. Journal of Retailing, 93(1): 1–6. <a href="https://doi.org/10.1016/j.jretai.2016.12.008">https://doi.org/10.1016/j.jretai.2016.12.008</a>
- 26. Hallikainen, H., Luongo, M., Dhir, A., Laukkanen, T., 2022. Consequences of personalized product recommendations and price promotions in online grocery shopping. Journal of Retailing and Consumer Services, 69, 103088. <a href="https://doi.org/10.1016/j.jretconser.2022.103088">https://doi.org/10.1016/j.jretconser.2022.103088</a>.
- 27. Hong, S.-M., & Faedda, S., 1996. Refinement of the Hong Psychological Reactance Scale. Educational and Psychological Measurement, 56(1): 173–182. <a href="https://doi.org/10.1177/0013164496056001014">https://doi.org/10.1177/0013164496056001014</a>
- 28. Huang, J., & Zhou, L. (2018). Timing of web personalization in mobile shopping: A perspective from Uses and Gratifications Theory. Computers in Human Behavior, 88: 103–113. <a href="https://doi.org/10.1016/j.chb.2018.06.035">https://doi.org/10.1016/j.chb.2018.06.035</a>
- 29. Jialiang Huang, Liyun Zhou, 2018. Timing of web personalization in mobile shopping: A perspective from Uses and Gratifications Theory, Computers in Human Behavior, 88: 103-113. https://doi.org/10.1016/j.chb.2018.06.035.
- 30. Kwon, Kyoung-Nan & Kwon, Yoon, 2013. Heterogeneity of deal proneness: value-mining, price mining, and encounters. Journal of Retailing and Consumer Services, 20: 182–188. <a href="https://doi.org/10.1016/j.jretconser.2012.11.006">https://doi.org/10.1016/j.jretconser.2012.11.006</a>
- 31. Lambillotte, L., Magrofuoco, N., Poncin, I., Vanderdonckt, J., 2022. Enhancing playful customer experience with personalization. Journal of Retailing and Consumer Services, 68, 103017. https://doi.org/10.1016/j.jretconser.2022.103088

- 32. Lee, G.; Lee, W.J. 2009. Psychological reactance to online recommendation services. Information & Management, 46(8): 448-452. https://doi.org/10.1016/j.im.2009.07.005
- 33. Lei, S.S.I., Chan, I.C.C., Tang, J., Ye, S., 2022. Will tourists take mobile travel advice? Examining the personalization-privacy paradox. Journal of Hospitality and Tourism Management, 50: 288–297. <a href="https://doi.org/10.1016/j.jhtm.2022.02.007">https://doi.org/10.1016/j.jhtm.2022.02.007</a>
- 34. Lemon K. N., Verhoef, P. C., 2016. Understanding customer experience throughout the customer journey. Journal of Marketing, 80(6), 69–96. https://doi.org/10.1509/jm.15.0420
- 35. Li, L., Chen, J., Raghunathan, S., 2018. Recommender system rethink: implications for an electronic marketplace with competing manufacturers. Information Systems Research, 29: 1003–1023. <a href="http://dx.doi.org/10.1287/isre.2017.0765">http://dx.doi.org/10.1287/isre.2017.0765</a>
- 36. Lichtenstein, D.R., Netemeyer, R.G., Burton, S., 1990. Distinguishing coupon proneness from value consciousness: an acquisition-transaction utility theory perspective. Journal of Marketing, 54(3): 54–67. <a href="https://doi.org/10.2307/1251816">https://doi.org/10.2307/1251816</a>
- 37. Linda K. Anglin, J. Kathleen Stuenkel, and Lawrence R. Lepisto, 1994. The Effect of Stress on Price Sensitivity and Comparison Shopping. Advances in Consumer Research. Association for Consumer Research, 21: 126-131. http://dx.doi.org/10.1509/jmr.15.0319
- 38. Malhotra, N. K., Kim, S. S., & Agarwal, J., 2004. Internet Users' Information Privacy Concerns (IUIPC): The Construct, the Scale, and a Causal Model. Information Systems Research, 15(4): 336–355. <a href="http://www.jstor.org/stable/23015787">http://www.jstor.org/stable/23015787</a>
- 39. Marketing personalization worldwide statistics and facts. 2018. Statista. URL: <a href="https://www.statista.com/topics/4481/personalized-marketing/">https://www.statista.com/topics/4481/personalized-marketing/</a> (accessed 23.04.2023)
- 40. Martin K. D., Borah A., Palmatier R. W. 2017. Data privacy: Effects on customer and firm performance. Journal of Marketing, 81(1): 36–58. <a href="http://dx.doi.org/10.1509/jm.15.0497">http://dx.doi.org/10.1509/jm.15.0497</a>
- 41. Martin, K. D., & Murphy, P. E., 2017. The role of data privacy in marketing. Journal of the Academy of Marketing Science, 45(2): 135–155. http://dx.doi.org/10.1007/s11747-016-0495-4
- 42. Montgomery, A.L., Smith, M.D., 2009. Prospects for Personalization on the Internet.

  Journal of Interactive Marketing, 23(2): 130–137.

  https://doi.org/10.1016/j.intmar.2009.02.001
- 43. Mpinganjira, M., Maduku, D.K., 2019. Ethics of mobile behavioral advertising: Antecedents and outcomes of perceived ethical value of advertised brands. Journal of Business Research, 95: 464-478. <a href="https://doi.org/10.1016/j.jbusres.2018.07.037">https://doi.org/10.1016/j.jbusres.2018.07.037</a>

- 44. Oliver B. Büttner, Arnd Florack, and Anja S. Göritz. 2014. Shopping orientation as a stable consumer disposition and its influence on consumers' evaluations of retailer communication. European Journal of Marketing. <a href="http://dx.doi.org/10.1108/EJM-04-2012-0210">http://dx.doi.org/10.1108/EJM-04-2012-0210</a>
- 45. Ricci, F., Rokach, L., Shapira, B. (2011). Introduction to Recommender Systems Handbook. In: Ricci, F., Rokach, L., Shapira, B., Kantor, P. (eds) Recommender Systems Handbook. Springer, Boston, MA. <a href="https://doi.org/10.1007/978-0-387-85820-3">https://doi.org/10.1007/978-0-387-85820-3</a> 1
- 46. Riecken, D., 2000. Personalized views of personalization. Communications of the ACM, 43(8): 26-26. <a href="https://doi.org/10.1145/345124.345133">https://doi.org/10.1145/345124.345133</a>
- 47. Scarpi, D. (2020). Hedonism, utilitarianism, and consumer behavior: Exploring the consequences of customer orientation. Springer Nature. <a href="http://dx.doi.org/10.1007/978-3-030-43876-0">http://dx.doi.org/10.1007/978-3-030-43876-0</a>
- 48. Scarpi, D., Pizzi, G., & Visentin, M. (2014). Shopping for fun or shopping to buy: Is it different online and offline? Journal of Retailing and Consumer Services, 21(3): 258–267. <a href="https://doi.org/10.1016/j.jretconser.2014.02.007">https://doi.org/10.1016/j.jretconser.2014.02.007</a>
- 49. Schneider, L. G., & Currim, I. S. (1991). Consumer purchase behaviors associated with active and passive deal-proneness. International Journal of Research in Marketing, 8(3): 205–222. <a href="https://doi.org/10.1016/0167-8116(91)90012-V">https://doi.org/10.1016/0167-8116(91)90012-V</a>
- 50. Tam K. Y., Ho S. Y. 2006. Understanding the impact of web personalization on user information processing and decision outcomes. MIS Quarterly 30 (4): 865–890. https://doi.org/10.2307/25148757
- 51. Tran, T.P., 2017. Personalized ads on Facebook: An effective marketing tool for online marketers. Journal of Retailing and Consumer Services, 39: 230-242. https://doi.org/10.1016/j.jretconser.2017.06.010
- 52. Treiblmaier, H., & Pollach, I., 2007. Users' perceptions of benefits and costs of personalization. ICIS 2007 Proceedings. 141. <a href="https://aisel.aisnet.org/icis2007/141">https://aisel.aisnet.org/icis2007/141</a>
- 53. Tucker, C. E., 2014. Social networks, personalized advertising, and privacy controls. Journal of Marketing Research, 51(5): 546–562. <a href="https://doi.org/10.1509/jmr.10.0355">https://doi.org/10.1509/jmr.10.0355</a>
- 54. Venkatesh, V., Hoehle, H., Aloysius, J.A., Nikkhah, H., 2021. Being at the cutting edge of online shopping: ROLE of recommendations and discounts on privacy perceptions. Computers in Human Behavior, 106785. <a href="https://doi.org/10.1016/j.chb.2021.106785">https://doi.org/10.1016/j.chb.2021.106785</a>
- 55. Wedel M., Kannan P. K, 2016. Marketing analytics for data-rich environments. Journal of Marketing, 80(6): 97–121. https://doi.org/10.1509/jm.15.0413

- 56. White, T. B., Zahay, D. L., Thorbjørnsen, H., Shavitt, S., 2008. Getting too personal: reactance to highly personalized email solicitations. Mark Lett, 19(1): 39–50. http://dx.doi.org/10.1007/s11002-007-9027-9
- 57. Xie, L., & Lei, S., 2022. The nonlinear effect of service robot anthropomorphism on customers' usage intention: A privacy calculus perspective. International Journal of Hospitality Management, 107, 103312. <a href="https://doi.org/10.1016/j.ijhm.2022.103312">https://doi.org/10.1016/j.ijhm.2022.103312</a>
- 58. Zeng F., Ye Q., Li J., Yang Z., 2021. Does self-disclosure matter? A dynamic two-stage perspective for the personalization-privacy paradox. Journal of Business Research, 124: 667–675. <a href="https://doi.org/10.1016/j.jbusres.2020.02.006">https://doi.org/10.1016/j.jbusres.2020.02.006</a>

# Appendix A. Interview Guide

Filter questions for respondents selection:

- 1) Have you made purchases of goods or services in online stores over the past month? Where exactly did you make such purchases? What exactly did you buy?
- 2) Are you familiar with the personalized offers that online stores provide to their customers?

A detailed guide for conducting an interview is provided below (interviewer's speech and questions are used directly during the interview).

**Interviewer**: "Good afternoon, (*respondent's name*)! I am Nikita Yatin, a 2nd year master's degree student of "Master in Management" program of Graduate School of Management at St. Petersburg State University. I am conducting research for my master thesis which is related to consumers' perception of personalized offers in online stores. In this interview, I will ask you questions that will require a detailed answer. Please be honest while answering each question, do not be afraid to express all your feelings, thoughts and experiences. All your answers will be used exclusively for scientific purposes in my master thesis. Participation in the study is anonymous".

#### Permission for audio recording of the interview.

**Interviewer**: "Before starting the interview, I need to ask you for permission to make an audio recording of our meeting. The audio recording is necessary for a faster conduct of our interview, as well as for a more convenient processing of the information received from you by the researcher; the audio recording will be used only for master thesis and will subsequently be deleted. (If the respondent refuses, audio recording is not performed, the interview moderator takes notes on all respondent's answers manually during the meeting)".

Introductory questions:

- 1) Give an example of personalized offers in online stores
- 2) Which of these, in your opinion, is a great example/examples of personalization (examples with pictures)?

Introductory questions were not recorded, as they were aimed at finding out how familiar the respondent is with personal offers and recommendations in online stores, whether he understands their distinctive features or not. Then the interviewer asks the respondent questions in the specified order; the respondent gives detailed answers to the questions. If necessary, the interviewer clarifies the wording of the questions without losing the original meaning and purpose of the interview questions. The list of questions that are asked to the respondent (in the required sequence) is provided below.

#### Block 1 – Shopping orientation and Deal proneness.

- 1) How do you feel about shopping in online stores in general? How often and for what purpose do you make purchases in online stores?
- 2) When you make purchases in online stores, what emotions do you experience?
- 3) Give examples of purchases you have made in online stores that can best describe your attitude to online shopping.
- 4) How often do you look for various advantageous offers, coupons and discount promo codes for the purchase of goods or services in the process of online shopping? Give personal examples of the use of such offers.
- 5) What tools do you use to find the most advantageous offers for the purchase of goods or services? Do you use special websites and mobile applications that contain information about discounts and favorable offers or allow you to compare prices and characteristics of goods and services?
- 6) Do you think that personal recommendations and offers in online stores can be useful for you in the process of online shopping? What values do they provide you with? Are you ready to use and rely on such personalized offers and why?

#### **Additionally for deal-prone respondents:**

- 7) Do you think that personal recommendations and suggestions can be useful to you for making profitable purchases and why?
- 8) If the respondent indicated that he is deal-prone consumer, ask the question: describe which personal offers you are most likely to use (give examples of price recommendations) and why?

The last question is aimed at finding out how actively deal-prone consumers will accept personalized offers with a favorable price or discount, compared to the usual personalized product recommendations. Picture 1 from the list below displays such a personalized price offer.

#### Block 2 – Privacy concerns and Reactance.

Online stores use their customers' personal data and track their activity and behavior (e.g., purchase history and search for goods and services) in order to provide personalized offers and recommendations to them.

- 9) Describe how you feel about disclosing personal information on the Internet. Are you ready to provide your personal data to online stores? If not, why? What exactly bothers you when you need to provide your personal data to an online store website?
- 10) What do you think can improve the security of the use of personal data on the Internet? Give examples of such actions (which you know about, which you use), or tell me about your own ideas for improving the security of personal data on the Internet (which could reduce your concern about the personal data provided to the online store).
- 11) How ready are you to use personalized offers from online stores, knowing that your personal data is being used, and why? What, in your opinion, could reduce the level of concern about the confidentiality of your personal data when using personal offers and recommendations?
- 12) Describe your feelings and the most likely reaction when someone tries to influence you or forces you to do something.
- 13) How do you prefer to behave when you are given advice or recommendations?
- 14) Can you characterize personal offers and recommendations in online stores as advice for action? If you receive a lot of recommendations and offers in online stores that are based on your purchase history or search, and also tailored to your interests and preferences, what emotions do they cause you in the first place? What is your initial reaction to them?
- 15) What is your degree of readiness to use such personalized offers from online stores (from previous question) and why?

#### End of the interview.

**Interviewer**: "Thank you for your time and effort, as well as for your contribution to my scientific research! If you are interested in the results of my scientific work, write to my email – <a href="mailto:st061896@student.sbpu.ru">st061896@student.sbpu.ru</a>, I will be happy to share with you the text of the finished work from July 1, 2023. Have a nice day and good luck!"

# **Appendix B. Example Excerpts from Interview Transcripts**

1) Respondent: Alexey, 23 years old.

Nikita: How do you feel about shopping in online stores in general? How often and for what purpose do you make purchases in online stores?

**Alexey**: I treat online shopping as positively as possible; I think this is a good opportunity to save money, get the goods you need, that is, to find what is available 100%, and delivery is usually very convenient.

I'm buying enough... Infrequently, but, let's say, regularly, as needed. I buy some non-food products, clothes, and appliances in online stores all the time, because it's cheaper there. But at the same time, I also regularly buy groceries, if there is any offer that is convenient for me; therefore, in general, I regularly make purchases.

## Nikita: When you make purchases in online stores, what emotions do you experience?

Alexey: The spectrum is different. I remember that I often feel, or rather experience feelings... In general, I'm looking forward to it; sometimes it's very difficult to wait for your order, especially when it's something very interesting to you, something very expensive. Very often, a purchase in an online store is accompanied by this feeling of irresistible, some kind of expectation, so very exciting, and in general, there is often not enough patience to wait. Plus, sometimes you worry about whether a good product will come to you. And when it turns out that you get some very profitable offer, you feel some kind of satisfaction, because it's very pleasant. I really like to save money, to get something for free. If such an opportunity presents itself, I feel some pleasure even from the purchase, and at the time of payment. If we talk about the online shopping process, then... Usually there is some kind of small excitement. Not even excitement, but rather tension, concern about this process... That is, if you buy products in 5 minutes, then there are almost no emotions, and when you are purposefully looking for something, analyzing offers on different sites, then, probably, that is, you are concentrated, because of this, you experience even a little stress, because of the fact that, trying to find something for yourself, the most profitable... and it is sometimes difficult, sometimes it is difficult to choose. What are the emotions in general? Well, I don't know, either some kind of excitement and concentration, or none.

# Nikita: Give examples of purchases you have made in online stores that can best describe your attitude to online shopping.

Alexey: Well, for example, Yandex Market; I bought an Xbox game console for myself last fall. Among the offers on the market, Yandex Market had the lowest price. In addition, I

applied a promo code from Yandex Market there for 500 rubles and received the cashback from Tinkoff Bank as a separate personal offer, that is, I collectively received a price below the market for a new console. In general, this is the mechanism, the algorithm by which I usually act when shopping online.

Nikita: How often do you look for various advantageous offers, coupons and discount promo codes for the purchase of goods or services in the process of online shopping? Give personal examples of the use of such offers.

**Alexey**: Almost constantly, it's just based on the experience that I have, I came to the conclusion that it almost always makes sense. For example, you want to buy airline tickets, even to some popular destination, for example, in Sochi, and you can find some random promo code for a discount of 3 percent on the purchase of tickets, which... it seems like it's just 3 percent, but it's still some extra 700-1000 rubles, why this can't be done in 5 minutes.

Last year I bought body care products such as shower gels and shampoos several times in different stores with some very profitable offers; for example, in the Golden Apple it was possible to get a thousand loyalty points at registration, that is, a thousand rubles, and when buying products which cost two thousand rubles, it was possible to get a discount of half the purchase price. It turned out that the price of all goods decreased 2 times, which was more profitable than anywhere else, even than in Fix Price.

Nikita: What tools do you use to find the most advantageous offers for the purchase of goods or services? Do you use special websites and mobile applications that contain information about discounts and favorable offers or allow you to compare prices and characteristics of goods and services?

**Alexey**: Among those sites that I use frequently, I can highlight Pepper.ru. This is the website where users add offers that they consider profitable, and others can give these offers a rating, raise it or lower it, put plus or minus. And usually there are the most profitable offers in the top, which is moderated by the masses. That is, it is a collective filtering of the most profitable and most interesting offers.

As for comparing prices between different websites and portals, I do not use this, because most often it is very difficult. There are no such services that can compare prices. This is very inconvenient, and there are no examples of convenient services. Most of the time it is easier just to look for the best deals on a particular product and that's it.

Nikita: Do you think that personal recommendations and offers in online stores can be useful for you in the process of online shopping? What values do they provide you with? Are you ready to use and rely on such personalized offers and why?

Alexey: For example, some online clothing stores such as ASOS offer you related products based on your shopping cart, based on the goods you bought, on your clothes. And usually, these suggestions seemed to me even very good, to the point that it could make up some kind of image, some set of several items of clothing; probably this is the most useful thing I can remember. Perhaps there is something similar on Lamoda, where, based on what you bought, you are offered a related product: let's say you bought some trousers, and they offer you a belt that people usually buy with this product. Here, probably, regarding clothes and the choice of clothes, this is the most convenient thing I could remember for myself.

As for values... Recommendations make it easier to find some kind of image in clothes. I'm ready to rely on it, because it's hard to choose clothes for myself, and sometimes even such simple recommendation can help me with this. For example, you may be recommended shoes for pants you bought. In this case, I'm ready, and in other cases, I just can't remember examples when I could still use recommendations for myself, usually they are not very useful.

Nikita: Do you think that personal recommendations and suggestions can be useful to you for making profitable purchases and why?

**Alexey**: From what I have never used, but what, it seems to me, can be useful for profitable purchases is a situation when you are offered to find a product in another store, and if the price is lower there, then they will lower the price for this difference. Yes, if this situation is considered suitable for this example, then it is just a direct benefit and it is very useful, I think. In other cases, recommendations rather help you find the product you need, as well as interest you, motivate you to buy, or increase your average check there, but you won't get any benefits.

Nikita: Describe how you feel about disclosing personal information on the Internet. Are you ready to provide your personal data to online stores? If not, why? What exactly bothers you when you need to provide your personal data to an online store website?

**Alexey**: In general, I'm neutral to this, and I'm ready to provide my personal information. But usually, you don't disclose anything more than your full name, date of birth, email address and your delivery address. If we talk about this information, well, I think there is nothing secret in it, since if you order a delivery to your address, you can probably provide the address.

About activity and behavior... Well, yes, in general, I am ready, because it does not include any confidential information. The address of my delivery, what I purchased... well, I don't see anything wrong with that. However, I still have some concerns, because some information such as the address and phone number may leak. For example, I ordered something from the SberMegaMarket to a separate address, not to my own. I ordered the goods, and after a while the scammers called me; I got into a verbal altercation with them, and they started threatening me with physical violence because they knew my address. That's probably not very pleasant. It was exactly the SberMegaMarket. Of course, I understand that this is not so dangerous, but there are constant leaks. For example, in the Delivery Club there were leaks. In fact, I personally became a victim of this leak or sale of this data. There are some big concerns about this situation. That's what worries me.

Nikita: What do you think can improve the security of the use of personal data on the Internet? Give examples of such actions (which you know about, which you use), or tell me about your own ideas for improving the security of personal data on the Internet (which could reduce your concern about the personal data provided to the online store).

Alexey: For example, you can just not use the delivery of goods to your home at all and use pickup. Then your address won't leak anywhere. In addition, if there is such an opportunity in the service, you can, for example, place orders not to your phone number, but to a temporary phone number, then your personal phone number will not leak. You can receive an order by QR code, or just by some kind of code, without SMS confirmation. I personally did not use this; I was not very worried about my data. What else could be improved... You need to try disclosing less data of this type, that's all. I can't give you any more examples. Anyway, you have to provide some data in online stores.

Nikita: How ready are you to use personalized offers from online stores, knowing that your personal data is being used, and why? What, in your opinion, could reduce the level of concern about the confidentiality of your personal data when using personal offers and recommendations?

Alexey: Yes, I am ready, because usually personal offers do not pose any threat to you. Nothing terrible will happen if you are offered to go to a store that is located next to your house and buy something there based on your geolocation. Only data leaks are scary. Personal offers do not affect this fear. That is, I am ready to make the most of them, why not? On the contrary, I think it's very good. The problem is not in personal offers, but in data security. Anyway, the data is

stored, and they are used for personal offers or for something else - this is already a secondary matter.

Nikita: Describe your feelings and the most likely reaction when someone tries to influence you or forces you to do something.

**Alexey**: In general, I feel indignation, I feel internal resistance. I find it very difficult to perceive criticism, or influence from other people, if it is not supported by anything. I perceive anything with hostility very often, almost always. It is difficult for me to accept the opinion of another person, and if it is some kind of advertising or something like that, then it even causes dislike.

## Nikita: How do you prefer to behave when you are given advice or recommendations?

**Alexey**: I very often do not accept advice or recommendations from other people, or I perceive them with great difficulty. And usually my first reaction is disagreement, rejection, and an attempt to convince myself that my opinion is more correct. I try to control it, but most of the time, unfortunately, it happens that way.

Nikita: Can you characterize personal offers and recommendations in online stores as advice for action? If you receive a lot of recommendations and offers in online stores that are based on your purchase history or search, and also tailored to your interests and preferences, what emotions do they cause you in the first place? What is your initial reaction to them?

**Alexey**: To some extent, I can characterize personal offers as advice for action. Although they are not as explicit as the advice of another person, but they can be considered as advise for action partly. After all, they create an information background, an environment for us; our attention is somehow concentrated on some goods or... there may be some motivational inscriptions, some banners, this motivation may be implicit. This is definitely an implicit advice to action.

If I get a lot of recommendations and suggestions... they don't cause any special emotions. I specifically noticed for myself that if I am looking for some product, for example, a mobile phone, as long as I have not bought it, I will go to look at it from time to time, compare it with others and constantly look for it. When I go back to the online store, I will see the same phone in my offers, and this will motivate me to go to the page of this product again, look at it again, compare it with others and think about buying it. I react like this. For products that I haven't bought yet, personal offers encourage me to buy them. And for all other goods... if I bought cat food, and

they offer me to buy a leash for it... if I need it, then I will be interested, if not, then it will be perceived as a simple informational noise and it will not cause any special reaction.

But as for groceries in online stores, yes, I most likely switch to the lowest prices. And here you are more interested in this; every banner that you see is a product that you want, a product that you like, which is cheaper than usual. You take it most often. That is, I have almost any product that I bought before, and if it has a lower price, I will take it right away.

Nikita: What is your degree of readiness to use such personalized offers from online stores (from previous question) and why?

**Alexey**: If such offers relate specifically to groceries, then I will use them constantly. If they relate to a product that I haven't bought yet, but I want to buy, I will always click on them. And if I don't really need the goods, I'll just ignore them.

2) Respondent: Natalia, 46 years old.

Nikita: How do you feel about shopping in online stores in general? How often and for what purpose do you make purchases in online stores?

**Natalia**: I have a very positive attitude to shopping in online stores, because I make purchases in stores almost daily. It saves my time, I can do it from home, I don't have to go somewhere. In the online store, I can compare some products, read reviews about the products right there. I can choose for myself what I am interested in, make an order. It's very convenient when all this happens online. For what purpose do I make purchases... if I need something, then I go to an online store and buy.

Nikita: When you make purchases in online stores, what emotions do you experience?

**Natalia**: I like doing it. I basically like to shop. And the online shopping is no exception. If I have found what I need, then I feel a sense of satisfaction that I have done the necessary, important thing.

Nikita: Give examples of purchases you have made in online stores that can best describe your attitude to online shopping.

**Natalia**: I used to buy fabrics for sewing ball gowns in online stores. What I like when I buy fabric? I can buy all the components for this in the same store: zipper, accessories, regiline, threads and so on. I like the fact that I can buy everything at once, everything I need in one online

store. I used Ozon online store to buy fertilizers and preparations for treating the garden from pests and diseases. The same thing: I'm looking for what I need, and I order in bulk in one store, that is, I don't need to run around some specialized stores, look for all this; I can buy everything at once in one online store.

Nikita: How often do you look for various advantageous offers, coupons and discount promo codes for the purchase of goods or services in the process of online shopping? Give personal examples of the use of such offers.

**Natalia**: So, I often use discounts on Aliexpress. I put the goods in the shopping cart, wait for either a decrease in the exchange rate, or when they provide discounts, and then I buy it. I use coupons and promo codes very rarely. For example, I used various birthday discounts when ordering pizza through a mobile app. But I don't use it very often. But still, I use discounts. For example, if I look at the same fungicides on Ozon, then, of course, I will choose from those sellers who sell it at the most favorable price.

Nikita: What tools do you use to find the most advantageous offers for the purchase of goods or services? Do you use special websites and mobile applications that contain information about discounts and favorable offers or allow you to compare prices and characteristics of goods and services?

**Natalia**: I don't use any special resources to search for profitable offers, I just look at the prices. If the price is more favorable, then I buy this particular product. Special websites, mobile applications — no, I don't know about them, I haven't heard of them. Well, to compare prices and product characteristics, I can, for example, use the websites of such online stores as M.Video and Eldorado. I used it, yes.

Nikita: Do you think that personal recommendations and offers in online stores can be useful for you in the process of online shopping? What values do they provide you with? Are you ready to use and rely on such personalized offers and why?

**Natalia**: Basically, on sites such as Ozon, Wildberries, where personalization is offered, I do not use it. I use it only on Aliexpress. When I'm offered similar products from other sellers, then I can look at these offers, I'm interested in it there, but only on Aliexpress. What values they carry... Well, it's convenient sometimes. For example, as for Aliexpress, it is very difficult to find what you need there, a good quality product. And sometimes such necessary things can appear in such personal offers. That is, you can accidentally run into something that you are interested in.

I am ready to rely on personal offers and use them, because sometimes I am offered practical things that I need, so I definitely pay attention to this.

Nikita: Describe how you feel about disclosing personal information on the Internet. Are you ready to provide your personal data to online stores? If not, why? What exactly bothers you when you need to provide your personal data to an online store website?

**Natalia**: I have a sense of peace about providing my personal data, because personal data is a phone number and email. Most often, I even have passport data and a bank card tied to Aliexpress website, and I react quite calmly to this. As for activity and behavior on the Internet, I am also OK with it. Everything suits me.

Nikita: What do you think can improve the security of the use of personal data on the Internet? Give examples of such actions (which you know about, which you use), or tell me about your own ideas for improving the security of personal data on the Internet (which could reduce your concern about the personal data provided to the online store).

**Natalia**: Honestly speaking, nothing really bothers me. I didn't have any bad things related specifically to buying in an online store; there were no situations when I provided my email or phone number, and they were somehow misused. That is, if I agree to receive some information, then it comes to me, but if I'm tired of it and I don't need it, then I just unsubscribe, and everything works fine.

Nikita: How ready are you to use personalized offers from online stores, knowing that your personal data is being used, and why? What, in your opinion, could reduce the level of concern about the confidentiality of your personal data when using personal offers and recommendations?

**Natalia**: Well, since I am absolutely satisfied with everything in terms of the confidentiality of personal data in online stores, I can't add anything here. I am 100% ready to use personal offers, absolutely nothing bothers me here.

Nikita: Describe your feelings and the most likely reaction when someone tries to influence you or forces you to do something.

**Natalia**: The reaction is sharply negative. When someone tries to force me to do something, my reaction is to do the opposite; I basically won't do what someone wants me to do, that is, I want to choose myself what I should do and what I shouldn't. That is, if they offer me something, advise me, I should always have a choice to consider, and if I want, then I do, if I don't want, then I don't, and if they start forcing me, then I will basically do the opposite.

Nikita: How do you prefer to behave when you are given advice or recommendations?

Natalia: Well, that's practically the same thing I said. If they give advice and

recommendations, I will definitely consider both advice and recommendations, and if I need it,

then I will use it, if not, then, accordingly, I will not use it.

Nikita: Can you characterize personal offers and recommendations in online stores

as advice for action? If you receive a lot of recommendations and offers in online stores that

are based on your purchase history or search, and also tailored to your interests and

preferences, what emotions do they cause you in the first place? What is your initial reaction

to them?

Natalia: I do not perceive personal offers and recommendations as advice for action. I take

it simply as an advice to look, to consider. That is, I am considering, and if I am interested, I buy.

If it's not interesting, then I don't buy it. In general, I perceive them only as advice for

consideration. Personal offers definitely do not cause negative emotions. I am calm about this; I

can either have a look at these offers or not. I am not stressed, and such personal offers do not

cause me negativity.

Nikita: What is your degree of readiness to use such personalized offers from online

stores (from previous question) and why?

Natalia: I am ready to use them, I have no barriers to this.

64