

Saint Petersburg State University
Graduate School of Management

PLIATINSKII Artem Vladislavovich

Master Thesis

«Personalization effects in online retail: Case of the Russian market»

38.04.02 Менеджмент

Master in Management - MIM

Academic advisor:

Senior Lecturer of Marketing Department,

Candidate of Economic Sciences

Alkanova Olga Nikolaevna

Reviewer:

Head of Marketing Department, Doctor of

Economics

Uldasheva Oksana Urniakovna

Saint-Petersburg

2022

ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

Я, Плятинский Артем Владиславович, студент второго курса магистратуры направления «Менеджмент», заявляю, что в моей магистерской диссертации на тему «**Эффекты персонализации в онлайн ритейле: кейс российского рынка**», 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 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)».

Плятинский А. В.

(Подпись студента)

01.06.2022

(Дата)

STATEMENT ABOUT THE INDEPENDENT CHARACTER OF THE MASTER THESIS

I, Pliatinskii Artem Vladislavovich, second year master student, program «Master in Management», state that my master thesis on the topic «**Personalization effects in online retail: Case of the Russian market**», 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 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)».

Pliatinskii A. V.

(Student's signature)

01.06.2022

(Date)

АННОТАЦИЯ

Автор	Плятинский Артем Владиславович
Название ВКР	Эффекты персонализации в онлайн ритейле: кейс российского рынка
Образовательная программа	Менеджмент (Master in Management – MiM)
Год	2020–2022
Научный руководитель	Алканова Ольга Николаевна, Кандидат экономических наук
Описание цели, задач и основных результатов	<p>Цель: исследовательская работа направлена на классификацию техник персонализации и определение влияния характеристик покупателя и канала покупки на восприятие эффектов персонализации.</p> <p>Задачи:</p> <ol style="list-style-type: none"> 1. Проанализировать роль персонализации в омниканальном ритейле. 2. Разработать клиентский путь и определить точки соприкосновения, которые могут быть персонализированы. 3. Определить факторы, которые влияют на восприятие эффектов персонализации покупателем. 4. Выделить опциональные техники персонализации и те, которые воспринимаются как должное. <p>Результаты:</p> <ol style="list-style-type: none"> 1. Определены важные и опциональные для покупателей техники персонализации. 2. Проанализировано влияние цифровой грамотности, поведения покупателей и канала покупки на восприятие положительных и негативных эффектов персонализации. 3. Выяснено, что данные факторы не играют основной роли в восприятии покупателем эффектов персонализации, построена альтернативная модель. 4. Представлен практический и теоретический вклад исследования.
Ключевые слова	Персонализация, методы персонализации, эффекты персонализации, цифровая грамотность, каналы покупки, поведение покупателей

ABSTRACT

Author	Pliatinskii Artem Vladislavovich
Title	Personalization effects in online retail: Case of the Russian market
Educational Program	Master in Management
Year	2020–2022
Academic Advisor	Alkanova Olga Nikolaevna, Candidate of Economic Sciences
Description of the goal, tasks, and main results	<p>Goal: the research aims to classify the personalization techniques as optional and those that are taken for granted, define the influence of consumer-related characteristics and purchase channel on the perception of personalization effects.</p> <p>Tasks:</p> <ol style="list-style-type: none"> 1. To investigate the role of personalization in the omnichannel retail. 2. To define the customer journey in online retail and identify the touchpoints that can be personalized. 3. To identify the factors that influence the perception of personalization effects by consumers. 4. To define the basic types of personalization and optional ones. <p>Results:</p> <ol style="list-style-type: none"> 1. The classification of personalization techniques is conducted, and optional and critically important techniques are identified. 2. The influence of digital literacy, hedonic vs rational shopping behavior and purchase channel on the perception of personalization effects is examined and an alternative model is constructed. 3. It has been identified that these factors do not play the deciding role in the perception of personalization effects. 4. The practical and theoretical contributions of the research are presented with further recommendations.
Keywords	Personalization, personalization techniques, personalization effects, digital literacy, purchase channels, shopping behavior

CONTENTS

<i>INTRODUCTION</i>	6
<i>CHAPTER 1. MODERN RETAIL WITH FOCUS ON RETAIL CHANNELS</i>	10
Overview of approaches to a retail channel definition	10
Choosing the combination of channels	11
Operational issues related to becoming a multichannel retailer	12
<i>CHAPTER 2. PERSONALIZATION IN MODERN RETAIL</i>	14
Customer experience and personalization	14
Conceptualizing personalization.....	17
<i>CHAPTER 3. HYPOTHESES DEVELOPMENT</i>	21
Hypotheses derivation.....	21
Model to test the hypotheses.....	31
Classification of the personalization techniques.....	33
<i>CHAPTER 4. METHODOLOGY AND METHODS</i>	34
Variables	34
Questionnaire development and sample description.....	34
Methods of analysis	36
<i>CHAPTER 5. DATA ANALYSIS AND DISCUSSION</i>	38
Obtained sample description.....	38
Research model and hypotheses testing.....	39
Discussion of the results	57
<i>CONCLUSION</i>	61
<i>REFERENCES</i>	62
Scientific articles.....	62
Reports and statistics.....	68
News	69
<i>APPENDICES</i>	70
Appendix 1. Questionnaire	70
Appendix 2. Translation and sources of scales.....	83

INTRODUCTION

E-commerce has already become an indispensable part of every consumer's day-to-day life. It has changed the buying patterns and expectations of consumers, with Covid-19 accelerating the shift to online platforms. Brick-and-mortar retailers cannot keep pace with the competition without new technologies applications, which is illustrated by the closure of offline retail stores (Green & Harney, 2017). Nevertheless, online shopping gaining popularity quickly is also accompanied by the 'revitalization' of offline channels through new technologies implementation such as VR, AR, data analytics, and robots. McKinsey (2021) shares the insights into the future of retailing, emphasizing the importance of personalization in omnichannel retail. The company describes the retailing experience of the future as 'phygital', highlighting the vital role of the seamless interconnection of different retail channels. Though understanding the importance of omnichannel personalized customer experience, many retailers fail to provide unified experience (Hossain, Akter, and Yanamandram, 2020). More than that, customers expect a personalized approach in most touchpoints with companies, which puts additional pressure on the company's marketing strategies. These factors underline the importance of the research in the area and allow to receive practically beneficial results.

As it can be seen, retailers are presented with the task to provide a personalized experience to the customers throughout the omnichannel customer journey. There is a complication with the provision of seamless customer experience, but the issue is complicated even more by the personalization-related problems. Though it might sound as if the more personalized the offer, the better for the company and consumers, it is not always the case. On the one hand, personalization enables retailers to provide an experience tailored to the needs of customers, which is the desired outcome as Martin & Palmatier (2020) highlight that 70% of consumers are dissatisfied with impersonalized customer experience. On the other hand, more than 70% of consumers are concerned about how companies use the data they collect (Auxier et al. 2019). This is one of the most popular paradoxes that complicates the personalization process, but it is the only one out of many. As more and more retailers switch to the omnichannel model, it has become an important issue to understand how personalization methods and customer experience differ depending on the channel and the stage of the customer journey. Since a company's resources are limited and should be utilized efficiently, it is crucial to understand which personalization techniques are valued the most by the customers and at which stages. This will potentially allow retailers to concentrate their efforts and resources where customers expect them to provide personalization and know what personalization techniques are taken for granted by the customers.

Summing up the abovementioned information, it is necessary to emphasize that several factors underline **the relevance of the study**. First of all, the complexity of the technology used in retail is increasing, opening up opportunities for personalization. With the increasing variability of

personalization techniques, it has become critical to understand which ones are taken for granted by the customers and which allow a retailer to differentiate. This makes it possible to capitalize on personalization and use it as a competitive advantage for a retailer, which shows the importance of the topic. Nevertheless, there are certain limitations and misunderstandings when it comes to implementing personalization right. The personalization paradoxes complicate the use of personalization, especially in the omnichannel context. Retailers are highly likely to implement omnichannel model, which provides several touch points with the customer and increases the likelihood of a purchase if personalization is done correctly. In this case it is vital to understand how personalization should be done efficiently without exposing sensitive data. The situation is exacerbated by the increasing amount of data collected by the retailers, which puts additional burden on them.

Speaking about **the research gap**, it is necessary to stress that two areas of research intersect in this study: personalization and customer experience. The author touches upon the problem of personalization throughout the customer journey in online retail. In the field of research on retail channels such areas as the impact of going multichannel, operational problems and customer experience with little regard to personalization are covered by the existing research. Large amount of research is focused on cannibalization and complementarity effects when adding retail channels. An example of such research is the article by Luo, Zhang, et al. (2020). Though there are some articles that consider customer experience in omnichannel retail, they are mainly focused on customer preference in terms of channels and categories of goods. Other articles such as Bilgihan, et al. (2016) investigate the unified customer experience based on literature investigation. As for the research in personalization field, there are articles that study personalization paradoxes and how to overcome them (Kaaniche, Laurent and Belguith, 2020), customer attitude towards personalized ads depending on different variables (Bleier, Eisenbeiss M, 2015), trust-building strategies (Aguirre, Mahr, et al., 2015) and the use of recommendations (Dellaert, Häubl, 2012). The article that is closely connected with this research is the work by Riegger, Klein, et al. (2021), which focuses on technology-enabled personalization in retail stores. Their research relies on 25 qualitative interviews and the authors point out, ‘Subsequent quantitative studies could offer more objective assessments of the effects of different drivers and barriers on TEP success’ (p.152).

To sum up, the research gap lies within the area where personalization and customer experience intersect because little attention has been paid to value received by the customer from personalization in different stages of omnichannel retail. This research focuses on distinguishing between personalization that is taken for granted by the customers and personalization techniques that can be regarded as optional.

By investigating the issue, **practical and theoretical contributions** are expected to be delivered. From the theoretical point of view, the work is supposed to fill the research gap by integrating the customer experience and customer journey and personalization. Though these areas are interrelated, their combination is tended to be overlooked in the current research. The study will provide an insight on how customers regard personalization techniques and how they affect customer experience depending on the CJM stage and interplay of mitigating factors. From the practical point of view, the retailers are to benefit from the research by understanding which personalization techniques they should provide by any means, and which can act as differentiation and give additional value to the customers. More than that, the research gives an understanding of which particular personalization techniques provide more value to the customers at each stage of the CJM. The research proposes that some personalization techniques are seen by customers as the “threshold” ones, which means that they do not bring additional value, but in case of their absences, a customer is highly likely to be unsatisfied with the company’s approach. The understanding of the personalization techniques classification helps to concentrate resources where they are expected to bring the largest impact, while not focusing on the issues that are not in the customers’ focus. Avoiding resource dispersion is especially vital amid unfavorable economic conditions, which might be the case due to economic sanctions against the Russian Federation.

There are **two main research questions** that addressed in this study. The first one is to define which types of personalization are taken for granted and which are considered optional in the customer journey in the context of online retail. Secondly, the research strives to identify the interconnection between the mitigating effects such as purchase channel and the value from personalization and privacy concern. Thus, the aim of the research is to investigate the influence of customer characteristics and purchase channels on the perception of personalization effects and to classify the personalization techniques. To achieve the aim several tasks are proposed:

1. To investigate the role of personalization in the omnichannel retail through the literature analysis.
2. To define the customer journey in online retail and identify the touchpoints that can be personalized.
3. To identify the factors that influence the perception of personalization effects by consumers.
4. To analyze the influence of identified factors on the perception of personalization effects.
5. To define the basic types of personalization and optional ones.

Speaking about **the structure of the work**, it consists of 6 chapters. The first chapter is devoted to the analysis of the modern retail characteristics, and the literature review on the issues of omnichannel retail and personalization role in it is conducted. In the second chapter the author conceptualizes the notion of personalization, defines the existing classification, describes the

personalization paradoxes and ways to mitigate them. In the third chapter the hypotheses are derived based on the previous literature analysis and the operationalization of the hypotheses is described. In the fourth chapter the methodology and methods are presented. In the fifth chapter the author shows and analyzes the results of the hypotheses' testing. At the end of the work, conclusions are presented.

CHAPTER 1. MODERN RETAIL WITH FOCUS ON RETAIL CHANNELS

Overview of approaches to a retail channel definition

The necessity to look at the characteristics of the modern retail with regard to retail channels is justified by the fact that innovative solutions such as personalization are particularly important for omnichannel retailers, which have access to large amounts of data and can make consumers focus attention on relevant content. (Grewal, Roggeveen, & Nordfalt, 2017). More than that, the more touchpoint there are on the customers journey, the more opportunities for personalization.

In the beginning, there were just offline stores that lured customers with experiential factors, afterwards online retailers tried to beat the competition by providing the best prices and a variety of goods. Modern retailers usually combine several channels to reach more customers and deliver an outstanding customer experience. This tendency has given the rise to multichannel retail. The customer is usually in the center of these developments with the widespread use of technologies allowing retailers to give a customer an opportunity to choose a preferred channel. More than that, modern customers tend to switch between channels in the buying process either to compare prices or experience the products in an offline store.

Neslin et al. (2006, p. 96) define multichannel customer management as ‘the design, deployment, coordination, and evaluation of channels to enhance customer value through effective customer acquisition, retention, and development’. This highlights that a channel represents a medium between customer and retail or a touchpoint, giving an opportunity to consider social networks a medium. Possible purchase channels usually include offline stores, online web retail, m-commerce, catalogs, call-centers, social networks. In some works, multichannel retail is defined as ‘the set of activities involved in selling merchandise or services to consumers through more than one channel’ (Zhang, et al., 2010, p. 2). This definition highlights that a retail channel is not equal to a marketing channel, which may leave social networks aside. With the fast development of social networks, people are more prone to buy through them rather than on the website. According to Forbes (2021), ‘some 35% of consumers overall – and almost half of GenZ and Millennials’ prefer to buy from the brand social media rather than switching to a website. This illustrates an important role that social media can play as a retail channel. Though there are different retail channels the current research is focused on the intersection and interrelation between online and offline channels.

Bearing this in mind, it is also necessary to emphasize that the authors (Verhoef, P. C., Kannan, et al., 2015) believe that retailers are switching from multi-channel retail to an omnichannel one, which underpins the importance of seamless customer experience between channels. The omnichannel approach differs from the multichannel one since it stresses that all channels are interrelated and can act as the touchpoints within the customer journey. Customer experience reflects

all communications and encounters with a particular company (Gentile et al., 2007). Striving to achieve a better customer experience and, of course, increase profits, encourage retailers to consider which channels are more efficient to use and how many of them to use. Many researchers considered the issues of the decision to add channels and the impact of channels additions, complementarity, and cannibalization effects between channels.

Choosing the combination of channels

The prior research focused on two main types of channel addition. First type is when an offline retailer added an online channel, which is a more typical case. Second type is when an online retailer added an offline channel, which is a more novel phenomenon. Luo, et. al (2020) emphasize that the researchers in this field are concerned with the return on investment when opening a new channel. In this case, the two most common effects are studied in the literature: cannibalization and complementarity effects. The researchers focus on defining whether channel addition will result in sales increase, marketing benefits for the company or lead to cannibalization effect between channels.

The addition of an online channel, which is the most often case, gives customers flexibility while allowing a retailer to maximize the revenue through cross-channel promotions and increased availability of the products. Huang (2016) indicates that with the addition of a channel an ability to reach more customers is enhanced, which is commonly referred to as the ‘availability effect’. More than that, the author highlights that consumers are able to decide through which channel they prefer to complete a purchase, making them more likely to complete it. This behavior pattern is named ‘goodness of fit between multiple service channels’. Another advantage of a channel addition is the wider brand awareness of the consumers. Fornari, et al. (2016) emphasize that in the short term the offline store opening may reduce the revenue of the online retailer but increase it in the future through indirect impact on the brand awareness in the particular area.

Though the addition of a new channel might sound as a good idea, it is not always so due to the cannibalization effect. Researchers emphasize that online channel addition may decrease the overall profits (Ansari et al., 2008). Less experiential goods are bought online and in case they are bought, the likelihood of returns increases, which may result in increasing the sales simultaneously with the returns of goods. More than that, the online channel may expose a retailer to even more harsh competition as customers are more likely to browse through different propositions online and can find a better offer. Some researchers stress that the negative migration effect is likely to be just after the channel is added, while in the long run synergies between channels are expected to bring revenue. The empirical studies conducted to analyze the result of a channel addition also demonstrate that though there are negative factors, the synergies exceed the cannibalization effect, increasing the buying frequency (Huang et al., 2016).

Whether the new channel will bring additional value to the company also depends on stores' characteristics such as location and proximity to a consumer, variety of goods provided, and the quality of promotions. For example, customers who live nearby an offline store are likely to decrease the number of purchases made there with the addition of an online channel. In another study, researchers tried to incentivize customers to change the preferred channel through coupon promotions (HBR, 2016). According to the study, there is little sense to incentivize offline customers to shop online, while encouraging online customers to visit offline stores might be a good idea due to the seductive environment of a physical store. In an online channel a customer is less likely to make impulsive purchases because of the larger amount of time and information available to make a decision and fewer environmental factors that might influence the decision.

The two-sided consequences of going multichannel make companies think about the final decision and scholars to research into the issue of motivations and constraints of applying the multichannel model. The area of research is focused on this issue, highlighting such motivators as competitive advantage creation, profit increase, access to new markets, increase in brand loyalty and awareness. Among constraints costs of going multichannel and operational difficulties are cited (Zhang, et al., 2010). Therefore, another stream of research analyzes the operational factors that multichannel or omnichannel retailers should take into account.

Summing up the section, it is vital to point out that though omnichannel and multichannel retailers have their potential drawbacks and difficulties, it is the common approaches nowadays and without implementing some of the practices it is hard to compete on the market. If ten years before companies struggled with the addition of online channels, now the focus has changed to the organization of seamless omnichannel experience.

Operational issues related to becoming a multichannel retailer

When retailers decide to add a channel or create an omnichannel experience, several operational problems might emerge. Usually, it all starts with the question about how to organize the management of an additional channel. Should different channels be governed independently? How to coordinate efforts to achieve a stronger synergetic effect? Overall, the authors demonstrate that there could be two main approaches: centralization, standardization and decentralization (Zhang, et al., 2010). The choice between the two models will influence how the channels are interrelated. Other important issues that should be considered with channel addition include data integration, infrastructure issues, marketing, customer analytics and KPI, assortment and inventory and pricing.

One of the biggest dilemmas in this area is whether the approach to operational problems should be homogenous or heterogenous depending on the channel. Since the costs structure, targeted audiences may vary with the channel the pricing policies and promotions should be of a different

kind. More than that, competitive advantage can be achieved through efficient management of the channels' strong and weak sides. The basic example of this is inventory management in online and offline channels. In many cases, it will be more efficient to keep a larger set of SKUs online to save on the inventory expenses.

The researchers also considered the problem of promotions, especially cross-promotions between channels. Zhang, & Wedel (2009) pointed out that promotions that increase customer loyalty are more successful in the online channels, while competitive promotions bring better results online. This also shows that different channels should be approached differently in terms of promotions.

To sum this part up, there are certain operational issues when deciding on going multichannel, though when managed appropriately a combination of channels can bring higher revenue and better customers experience. Before diving into the interrelation of personalization and omnichannel retail, it would be useful to summarize the existing research in this field in a table.

Table 1 *Overview of the literature on multichannel retail* (Created by the author)

Main research area	Authors	Key topics
Impact of decision of going multichannel	Bilgihan, A., Luo, X., Zhang, Y., Zeng, F., Qu, Z. Verhoef, P. C., Kannan, P. K., & Inman, J. J., Fornari, E., Fornari, D., Grandi, S., Menegatti, M., & Hofacker, C. F.	<ul style="list-style-type: none"> • Cannibalization and complementarity effects • Motivations and constraints of going multichannel • Challenges with multichannel approach • From multichannel to omnichannel retailing
Customers experience in multichannel retailing	Acquila-Natale, E., & Iglesias-Pradas, S., Raphaeli, O., Goldstein, A., & Fink, L., Singh, S., & Srivastava, S., Barta, S., Flavian, C., & Gurra, R., Fang, J., Liu, H., Li, Y., & Cai, Z.	<ul style="list-style-type: none"> • Channel preferences • Behavior on different platforms • Analysis of product categories in the context of different channels • Analysis of different customers categories in terms of channel preferences
Operational side of multichannel retail	Huang, L., Lu, X., & Ba, S., Zhang, J., & Wedel, M., Acquila-Natale, E., & Iglesias-Pradas, S. Neslin, S. A., Jerath, K., Bodapati, A., Bradlow, E. T., Deighton, J., Gensler, S., ... & Zhang, Z. J.	<ul style="list-style-type: none"> • Value creation in multichannel marketing • Pricing, promotion, inventory management, returns • Homogeneous vs heterogeneous experience in multichannel retailing • Environmental factors in deciding on business-models • Relation between brand and channel choice

CHAPTER 2. PERSONALIZATION IN MODERN RETAIL

Customer experience and personalization

Customer experience and preferences is another substantive area of research in retail field. The issue of the measurement of customer experience is discussed extensively in the paper by Klaus & Maklan (2013). They highlight that customer experience is a comprehensive phenomenon, which is not restricted to customer service and customer satisfaction but includes the perception of a brand, emotional experiences with a company. The authors include such dimensions that form customer experience as product experience, outcome focus, moments of truth, and peace of mind. Outcome focus is referred to the reduction of transactional costs, moments of truth involve a company's flexibility and service recovery, while peace-of-mind describes the customer's assessment of all the interactions with the service provider before, during, and after the purchase of the service (Klaus & Maklan, 2013, p. 231).

The researchers on the customer experience in the omnichannel retail field are mainly involved in exploring the preferences between different channels and goods purchased through them. One of the clear examples in this area is the perceived tendency to purchase experiential products through offline channels since online ones are not able to transmit all the characteristics of a good. The authors also examine how customers behave during the pre-purchase and purchase processes, in many cases overlooking the post-purchase stage. One of the streams of this research is presented in the work of Verhoef et al. (2007), where the authors defined the phenomenon of the 'research shopper'. Such type of behavior implies researching a product in one channel, which is more suitable for this aim while buying it in another. Neslin and Shankar (2009) enriched the classification by adding the criteria of whether the channels are of the same retailer or a competitive one. Thus, the authors define two types of buyers: the competitive research shoppers and the loyal ones. Another interesting classification of customers behavior in omnichannel context is provided by Herhausen, et. al (2019). In the study aimed to research the loyalty formation the authors identify 5 segments—store-focused shoppers, pragmatic online shoppers, extensive online shoppers, multiple touchpoint shoppers, and online-to-offline shoppers.

Personalization in its turn is an effective tool that can be used to improve customer experience in all channels and increase customer loyalty. This is the point where personalization and customer experiences in omnichannel retail intersect. Omnichannel retailers strive to provide a seamless experience within existing channels, which involves personalizing steps on the customer journey. Verhoef et al. (2015, p. 176) stated that omnichannel retail is "the synergetic management of the numerous available channels and customer touchpoints, in such a way that the customer experience across channels and the performance over channels is optimized". One of the most efficient ways to

optimize experience is through the personalization of touchpoints. McKinsey (2020) stresses that omnichannel personalization is the next competitive advantage in retail, which gives an opportunity to increase revenue by 5% to 15% across a full customer base. The authors of the report also emphasize that digital personalization is studied and implemented thoroughly, while there is still a huge room for improvement in in-store personalization. Luckily, new technologies allow to personalize the in-store experience by integrating information from different channels. Such stores as 'Amazon Go' is an example of integrating several channels to provide a superior customer experience. With the advances in technologies, this kind of stores seems to be only the beginning of the revolution in customer experience. The researchers study how technologies can transform the shopping experience. As an example of such a study, Wu, J., et al. (2021) research the impact that 3D virtual stores can make on the customer experience. The interviewee in the study pointed out that it is possible to give a short questionnaire to a customer before entering the store for the purpose of a personalized experience. This is only one example of technology-enabled personalization, which might be implemented through the entire customer journey.

This paper also relies on the research in the customer journey area since the stages of the customer journey map are applied in organizing personalization techniques. The research in this area is focused on the way it is necessary to construct CJM (Kuehnl, et.al, 2019), identification of steps on CJM (Towers, A., & Towers, N., 2021) and industry and company-specific cases (Hu, Tracogna, 2020). In broader research topics the authors use a three-step customer journey map with such stages as pre-purchase, purchase, and post-purchase. Apart from that, there is an investigation of differences between brand-owned, partner-owned touchpoints and those, which are outside of brand or partners' control. In this research, the customer journey concept will be used to classify the personalization techniques that can be applied in different stages. During each step of the customer journey personalization methods can be applied and it is vital to explore how they influence the purchase decision. The preliminary and simplified outlook of the customer journey and used technologies is provided below. The table 2 shows which touchpoints between customer and company can be personalized and in what way. In future research, it is crucial to analyze the relation between such actions and their influence on the resulting variable at each stage of the journey.

Table 2 *Personalizing touchpoints in customer journey* (based on McKinsey, 2020)

Customer journey	Mobile app	Social media	Interactive screens	Digital displays	Tech-enabled associates	Point of sale
Pre-visit	<ul style="list-style-type: none"> • Personalized offers • Personalized notifications • Ability to indicate preferences 	<ul style="list-style-type: none"> • Personalized advertising • Personalized communication on social media 		<ul style="list-style-type: none"> • Personalized context-specific ads 		
During visit	<ul style="list-style-type: none"> • In-store guidance with use of AR • In-store recommendations • Complementary products at check-out • Ability to choose personal discounts 		<ul style="list-style-type: none"> • Virtual try-on, AR • Browsing catalogs with personal recommendations • Add-on options based on the browsing patterns and suggestions of the bundles of items 	<ul style="list-style-type: none"> • Smart shelves and dynamic displays 	<ul style="list-style-type: none"> • Guided browsing and product recommendations • Suggestions of complementary product based on purchase history 	<ul style="list-style-type: none"> • Restock of past purchase • Add-on options based on past purchase
Post visit	<ul style="list-style-type: none"> • Reminders and sales notifications based on the history of purchase 	<ul style="list-style-type: none"> • Reminders and personal suggestions 		<ul style="list-style-type: none"> • Personalized context-specific ads 		<ul style="list-style-type: none"> • Personalize future orders

Conceptualizing personalization

To start with, there is no definition of personalization that is accepted by the whole research community (Vesänen, 2007). Though usually it is referred to as a targeted, individual-level marketing action or strategy (Tam & Ho, 2006), which implies that a consumer is passive, while all personalization efforts are done by the company. It is also highlighted that one of the key characteristics of personalization is the delivery of the right content to the right person, which maximizes value both for a company and a client. According to Lee and Cranage (2011) ‘in e-business, personalization refers to tailoring and recommending products and services according to specific consumer characteristics before a customer begins a search’. Personalization provides such benefits for the consumer as efficiency, convenience, individualization, and hospitality (Chellappa & Sin, 2005). Historically, personalization was attributed to the services due to interpersonal character in contrast to goods. Nevertheless, with the advent of technology, personalization has become a feature embedded in the websites that is no longer for services only (Gogua & Smirnova, 2020). In its current form personalization can be described as embedded communications points, instant communication with an e-store (Song, Zinkhan, 2008).

There are several classifications of personalization techniques. To begin with, personalization can be characterized based on a consumer engagement in communication, which allows to define several personalization types: pull personalization (when a customer explicitly requests personalization), passive personalization (still requires customer’s action, but is more reliant on the company), push personalization (company provides personalization service directly to a customer without request from him/her) (Wedel, Kannan, 2016). Apart from that, authors suggest that personalization techniques can be divided into those establishing the feeling of personal communication (achieved through anthropomorphization) and those creating the sense of belongingness to the group and awareness of a customer preferences (achieved through recommendation systems) (Gogua & Smirnova, 2020). Anthropomorphization refers to such tools as chatbots, intelligent agents and conversation agents, while recommendation systems involve displaying the offers to a customer based on his previous searching history, actions of similar customers or the average preferences of a similar group (Gogua & Smirnova, 2020).

Nowadays there are a lot of recommendations and content from different companies, especially on the Internet, and personalization plays the role of facilitator ensuring that a customer receives what he/she needs. The customers are targeted by companies’ personalized campaigns based on several criteria, among which the most popular are campaign source (48%), clicks (40%), products purchased (39%), e-mail clickthroughs (37%), pages and/or content viewed (36%), location (35%) e-mail opens (35%), demographics (35%), previous visits behavior (34%) and

stage of the customer journey (33%) (Leading criteria used for..., 2020). Despite helping customers to gain value from companies faster and improving customer experience, personalization requires the use of personal data, which might lead to misunderstanding and rejection of ads, for example, by the consumers. The additional value delivered by personalization and the constraints related to it are the two factors that underline the necessity of research in the field. Personalization is one of the key instruments to provide value to the customer in the fastest manner. That is why the research also relies on the concept of the value and experiential value, which according to Mathwick et al. (2001, p. 41) is manifested in 4 dimensions: playfulness, aesthetics, service excellence and consumer return on investment (CROI).

Personalization can be implemented with the help of different tools and in various contexts. Examples of personalization may vary from a primitive name addition in marketing materials to customer-specific recommendations with the application of AI. Some of these techniques are already regarded by the consumers as ‘must-haves’ and those which help to distinguish a retailer from the others. Though ‘must-haves’ do not add value to the consumers, if those methods are not in place, the retailer is sure to lose points in the eyes of customers. As for the personalization techniques that are considered in this study, the list is formulated through literature analysis and the 16 most common and relevant techniques are chosen for the prioritization in accordance with the prior research (8th International GSOM Emerging Markets Conference..., 2021). Among the considered personalization techniques are recommendations based on search history, similar products recommendations, chatbots, purchase basket, mobile app and personalization based on geolocation. As for the mobile apps, it is important to consider them due to the fast development of m-commerce. For example, in the USA m-commerce is expected to grow by 13% CAGR, reaching \$ 710 billion by 2025 (Mobile retail e-commerce sales..., 2022).

Previous and current research in the field of personalization can be divided into several broad directions: the effect of personalization on customer experience, privacy-related dilemmas, technologies used in personalization and the ways to mediate negative personalization-related impact. The proposed study will mainly focus on customer experience with the integration of privacy-related problems to understand what factors impact the perception of personalization throughout different touchpoints on the customer journey. Martin, & Palmatier (2020) suggest that future research is concentrated on how data privacy issues arise on the entire journey. This is an important aspect since several articles state that the way personalization is perceived varies depending on the channel (Tyrväinen, et al. 2020). Furthermore, research into how personalization effects differ between online channels can help to fill a knowledge gap since previously many papers focused on the personalization in the context of a specific channel. For example, the social media channel is a distinctive touchpoint, and one of the future research questions may investigate

whether people are more relaxed with data privacy there. As for instore personalization, there is an interesting study about how people react to the personalization in public, which is sure to add different variables to the resulting perception of personalization (Hess, et al., 2020). In the omnichannel context the concept of technology-enabled personalization is important. It is defined as ‘the integration of physical and digital personalization dimensions at the point of sale to provide individual customers with relevant, context-specific information, according to historic and real-time data in combination’ (Riegger, et al., 2021, p.142). The concept emphasizes an ability to provide personalization in omnichannel retail based on the available data on the customer. Though it might sound as a desired result, there are some factors that complicate the personalization process.

There are several personalization paradoxes that show how complicated the issue is. The most studied in the literature are personalization-privacy and humanization-dehumanization paradoxes, but the authors (Riegger, et al., 2021) pointed out that there some other issues that require analysis. Those issues include staff presence – absence, personal – retailer device and exploitation – limitation, which implies the desire to explore on the one hand and the fear of being restricted in choice on the other. The digital literacy is also a complicating factor since without understanding of technology application any personalization techniques make no sense. In the current research the problem of personalization vs privacy is more explicitly reflected in the literature on targeted advertisements and recommendations.

Speaking about the privacy concern, in the literature there are several definitions and the factors that it arises from. Concern about privacy is conceptualized in the work by Smith, Milberg and Burke (1996). The authors initially identify several dimensions of the concern about privacy, including collection, unauthorized secondary use of data, improper access, errors, reduced judgement and combining data (Smith, et al., 1996). Featherman and Pavlou (2003) highlight that ‘privacy concerns refer to the potential loss of control over personal information when released to a firm’. Inman (2017) points out that consumers’ privacy concerns usually result from the ‘three distinct dimensions: collection of personal data, control over the use of personal information by firms, and awareness of privacy practices and how personal data are used’. For this research the variables as privacy concern, which represents collection of personal data and concern about its safety, and vulnerability as fear of loss of control over the personal data are used, while the third dimension, awareness of privacy practices is out of the scope of the research due to resource limitations and different focus. As for the vulnerability, authors state that it arises when there is lack of a sense of control over personal data, which might result in a consumer feeling exposed and powerless (Aguirre, et al., 2015).

On the other hand, a consumer is likely to receive value from personalization. The value is constructed of utilitarian and hedonic components. Two main utilitarian components include decrease in time and effort, better product fit. Authors also point out that “the value of online personalization to a user primarily stems from the fit that a product or service provides, and the convenience of having it delivered in a proactive fashion” (Chellappa & Sin, 2005, p.4), which confirms the constructed dimensions of the value from personalization. As for the hedonic value, it is related to the positive emotional value from personalization, which can be presented in the form of inspiration, intrinsic satisfaction, pleasure at getting discounts, or the shopping experience (Riegger, et al., 2021, p.144), which is comprised of the feeling of uniqueness and better communications. Whether the customers will receive the value from the personalization will depend heavily on how the data on the customers was collected, whether customers were notified about the use of their personal data and where and when the advertisement was shown. It is highlighted that being unaware of data collection and receiving personalized offers and advertising a customer is likely to be exposed to a higher degree of vulnerability (Aguirre, et al., 2015). That is why inefficient management of these aspects may result in a customer being taking advantage of because of the inappropriate use of personal data.

There are certain techniques that allow to manage negative consequences of personalization. Most of them are related with establishing trustworthy relationships between a company and a consumer. For example, trust-commitment model (Ameen, et al., 2020) and technology acceptance model (Davis, 1989) are useful when it is necessary to understand how to build trust with the consumers and how technology can be accepted by the users. Before mitigating the negative sides of personalization, it is necessary to understand whether customers are even aware of the use of personal data. After that a trust-building techniques are applied to decrease the negativity while preserving the positive sides of personalization. Trust is important for two main reasons: it allows to conduct the commercial transaction with a company in the first place and, secondly, makes customers understand that their personal data won't be misused by a company. Important factors that build trust between customers and companies are familiarity with the company and past experiences with it (Chellappa & Sin, 2005, p.9).

Summing everything said up, it is necessary to highlight that though researchers have analyzed the personalization issue, there are still certain gaps in knowledge. This paper aims to explore the value side of personalization through the conceptualization of basic personalizing methods and those that add value and should go at a premium. The research is distinguished in a way that it provides the analysis in the omnichannel contexts, taking into account touchpoints, the methods to personalize the interaction and social and behavioral characteristics of participants.

CHAPTER 3. HYPOTHESES DEVELOPMENT

Hypotheses derivation

Before proceeding into hypothesis description, it is necessary to highlight that for the study a CJM has been designed. To portrait the holistic customer journey, a more comprehensive customer journey map has been designed. The CJM stages are consistent with the overall research on the topic (Lemon, Verhoef, 2016), in which three CJM stages are highlighted: pre-purchase, purchase and post-purchase. The proposed CJM highlights the touchpoint both on the offline and online customer journeys, emphasizing such online channels as website, messengers (WhatsApp, Telegram, etc.), social media (Instagram, VK, etc.) and e-commerce apps. At the each CJM stage a customer engages in a certain type of behavior with a focus on different outcomes. At the pre-purchase stage a customer just sees the brand or product, wants to gather more information to decide on the purchase, at the purchase stage the customer completes the purchase, while at the post-purchase stage consumption happens. After the consumption a customer either receives joy from the product, stays neutral or experiences dissatisfaction, which might result in advocating for the brand or contacting the company's support and writing a bad review. At the same time a company aims to make a search for a particular product and information easier at pre-purchase stage, provides convenient means to make order at the purchase stage and offers more personalized service at the post-purchase stage. The whole CJM is presented on the next page.

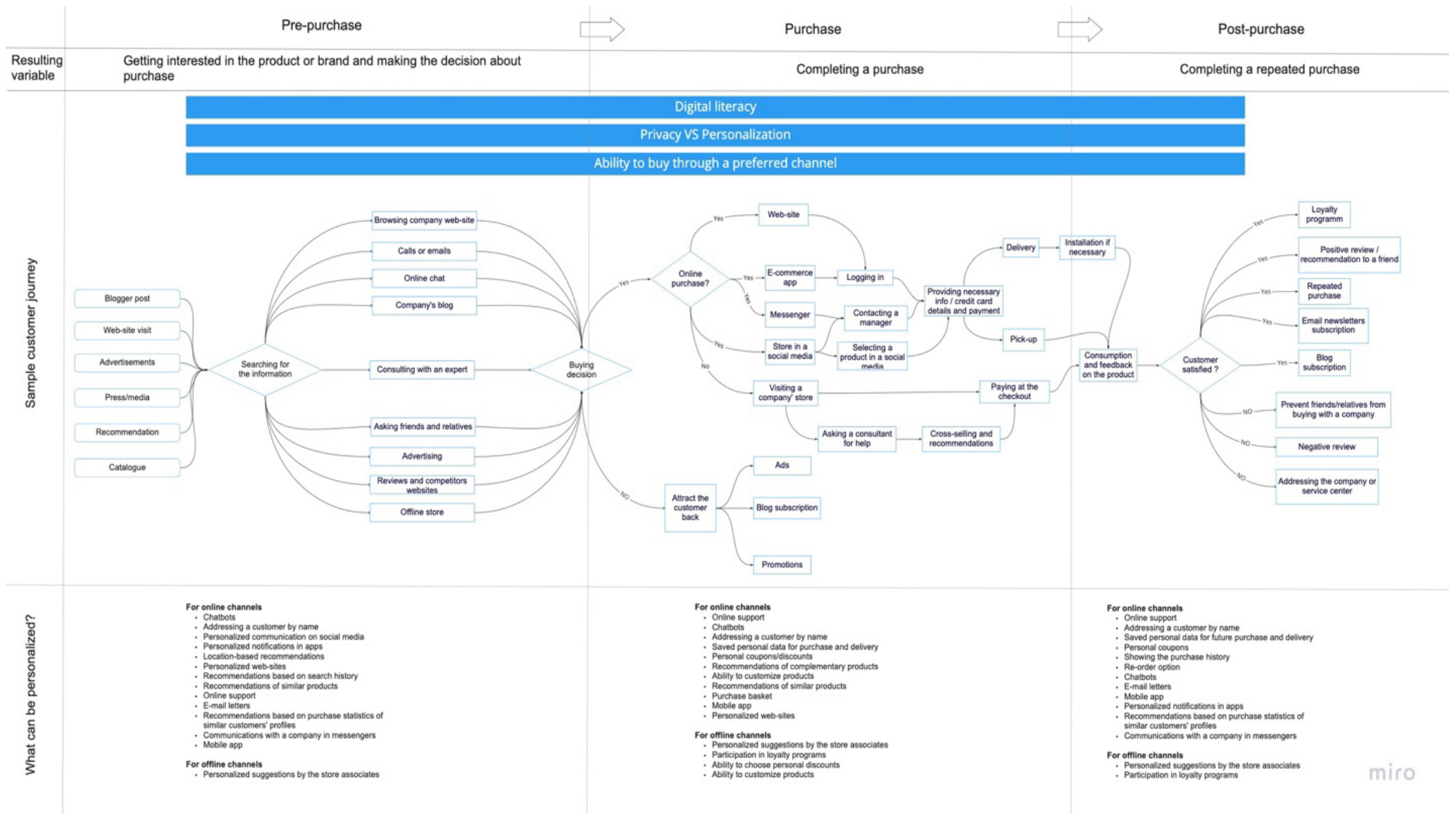
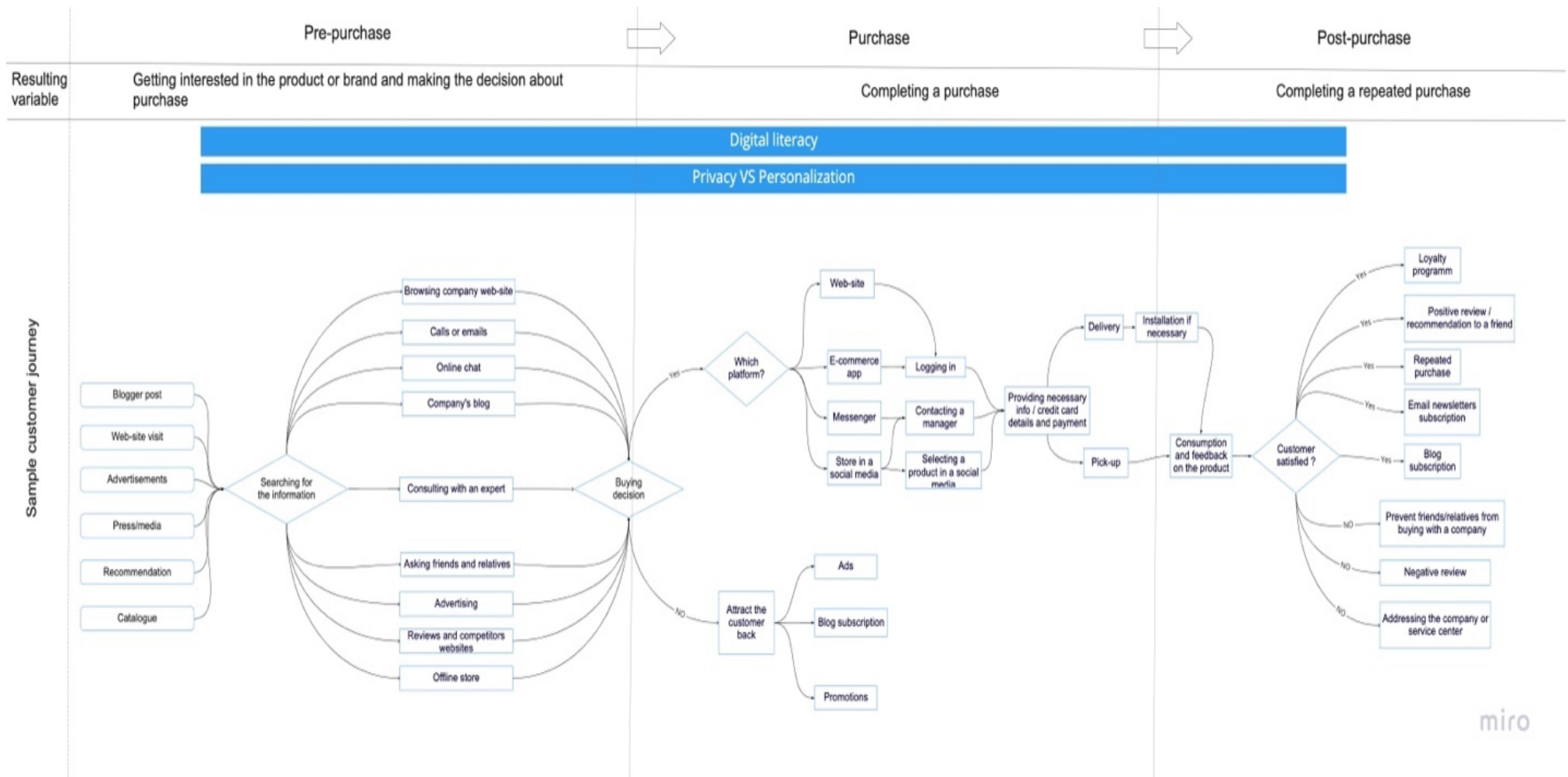


Figure 1 *The broad CJM* (created by the author)

Nevertheless, although the combination of the different channels is a modern reality, it is reasonable to limit the scope of the research by focusing only on online retail due to the limited resources of the research. That is why a less comprehensive CJM has also been constructed to illustrate the scope of the research. However, the research will investigate the difference between the perception of personalization by consumers while making the purchase at such channels as online website and social media. It is believed that social media is a distinctive channel that cannot be combined with messengers. More than that, online stores in social media are prioritized overall messengers in the research due to their more rapid development. For example, in 2018 the turnover in messengers, bulletin boards and social media reached 591 billion rubles in Russia, while VK accounted for around 44% of all users that make purchases in such channels (Sales via social media, 2019). The research scope does not include an offline side of the customer journey, the ability of a customer to choose between offline and online channels, and several touchpoints that are impossible to personalize or touchpoints that are not company-owned. This version of the CJM will be used for the hypothesis development and the prioritization of personalization techniques at each stage defined at this CJM. The version of CJM used in the research is presented on the next page.



miro

Figure 2 The CJM for the study (Created by the author)

Several hypotheses have been highlighted for the examination in the research. Most of them are related to the analysis of personalization in the context of different online purchase channels, including social media and websites, and influence of different factors on the personalization effects. The description of hypotheses and their operationalization is provided below.

To begin with, it is necessary to operationalize such variables as negative effects of personalization and value from it. The theory on negative effects of personalization is studied and two main factors such as privacy concern and vulnerability are derived. The analysis of the hypotheses is based on the theory provided by Chen, et al. (2019), who designed the model according to which a consumer perceives reactance to the online personalized ads. The authors highlight rational factors such as perceived costs of non-personalization, privacy concerns, and opportunity costs in line with affective factors such as ownership and vulnerability. Speaking about the rational factors, it is important to emphasize that perceived costs of non-personalization are referred to the situation when non-personalization will result in increased effort and time costs for the consumers, which means that the negative reactance to personalization will decrease in this case. On the other hand, privacy concerns and opportunity costs positively influence negative reactance to personalization since privacy concern implies that a consumer loses control of personal information. Opportunity costs, in this case, mean that a consumer has limited access to the information due to the personalization techniques, which filter the incoming information. As for the affective factors, ownership is experienced by the consumers when they interact with personalized offers or other personalization techniques such as web-sites modification and start to feel that they have control over the target. Apart from that, the authors analyze such a factor as vulnerability, which is postulated in the fact that people perceive themselves as being exploited due to the inability to control their personal information. For the research such constructs as vulnerability and privacy concern will be utilized since other factors are out of scope of the research due to the focus on privacy-personalization paradox. Based on the literature analysis, the privacy concern is in its turn divided into personal data security issues, possibility of data misuse by the company and the possibility of personal data transfer to the 3rd parties. The model proposed by the authors looks as follows.

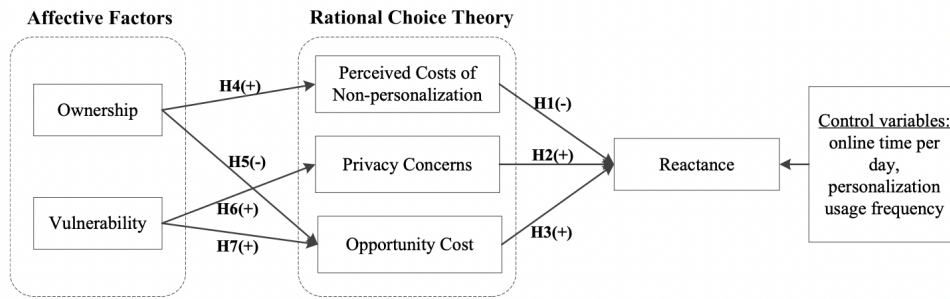


Figure 3 *The conceptual model of reactance to the personalization* (Chen, et al., 2019)

After looking at how the negative effects of personalization are operationalized, it is worth exploring how the value from personalization can be operationalized. The main values from the personalization are providing products and services that fit a consumer and the convenience of product delivery in the proactive form (Chellappa & Sin, 2005). Another interesting and relevant concept is ‘searching in choice mode’, which implies that personalized recommendations help to compare the utility of similar products and make a stopping decision even with the increased product variability (Dellaert, Häubl, 2012). Vesanen J. (2007) highlights that the benefits from the personalization for a customer include better preference match, better products and services, better communication, and experience. From the analysis of the literature, it can be seen that the value from personalization is formed by the decrease in time and efforts needed for the consumer to find the desired product, better product match, improved customer experience, and communication. This classification reflects both utilitarian and hedonic benefits as it is noted in the literature (Chen, et al., 2019).

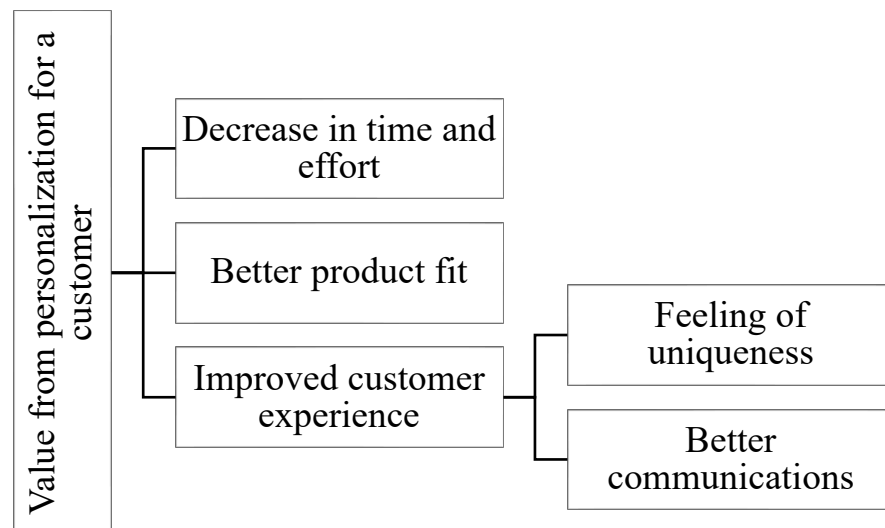


Figure 4 *The conceptual model of value to a customer from personalization* (Based on Vesanen, 2007; Chellappa, 2005; Dellaert, 2012)

Having operationalized the key variables for the research, it is possible to switch to the hypothesis's description. The first assumption on which the first hypothesis is based is the suggestions that the perception of personalization varies depending on different circumstances. Personalization is sure to bring benefits for the company and customers, and most customers are expecting personalized experiences from firms. Despite being widely accepted as a prominent technique, personalization is a complicated issue, which can negatively influence customer experience due to data privacy issues. This means that what outcome personalization brings is highly dependent on the circumstances and how it is implemented. This can be seen judging by the example of personalized ads. The outcome, that is how a person reacts to a personalization depends on the timing, placement, and credibility of a website (Bleier & Eisenbeiss, 2015).

That is why it is interesting to look at how the perception of personalization differs with respect to the platform, on which a customer is interacting with a company. Such a direction should provide some valuable business insights since, on the one hand, more and more brands are starting to care about their image on social platforms. More than that, a lot of businesses use social platforms as a part of their marketing campaigns and for ads placement. On the other hand, social platforms themselves are willing to motivate users to buy products via them. There are many cases when a consumer sees a product or a brand in a social network and completes a purchase later through a different selling channel (Martínez-López, et al., 2021, p.71). That is why brands and especially social networks such as Facebook and Instagram are considering and implementing an opportunity to buy directly through a social platform. This trend can be illustrated by the addition of business accounts and monetization through ads. One of the recent examples in this sphere is the Tiktok announcement about a partnership with Shopify, according to which Shopify merchants who have a TikTok for Business account are able to add a shopping tab to the profiles (Wells, 2021). With these trends in mind, it seems to be reasonable to dive deeper into the question about how consumers perceive personalization in social platforms when compared to retailers' websites. It is becoming evident that more and more people are ready to buy products through social networks. Apart from that, social networks already assume a certain degree of personal data exposure. For these reasons, it is hypothesized that customers care about privacy issues less when encountering personalization on social networks.

H1: *A consumer experiences fewer negative effects from personalization when encountering personalization on social media than on other retailers' websites.*

H1.1: *Purchase on the social media decreases vulnerability experienced by a consumer.*

H1.2: *Purchase on the social media decreases privacy concern experienced by a consumer.*

To operationalize the hypothesis the concept of negative effects from the personalization will be used. In case of purchases on different platforms the concept of trust is relevant. Furthermore, in this case, the authors usually consider the multidimensional issue of trust when buying through social platforms. It includes the trust to a social platform itself and a selling company (Martínez-López, et al., 2021). Some people do not see a social platform as a selling platform, which requires specific technology and regulations. Nevertheless, to simplify the research and data gathering procedures the trust to the platform will be omitted in this case, while the author will focus on privacy concern and vulnerability. Summing the operationalization part up, it is necessary to point out that to analyze the hypothesis, the concepts of privacy concern and vulnerability will be used with regard to the platform.

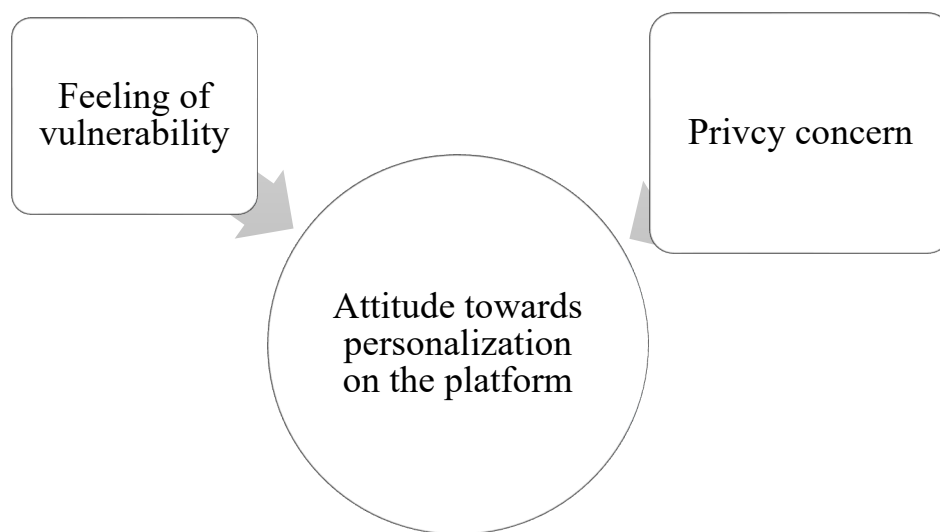


Figure 5 *Factors influencing personalization on the social platforms* (Created by the author)

Apart from that, digital literacy is analyzed as a positive factor that decreases the influence of vulnerability and privacy concerns. Digital illiteracy prevents a consumer from utilizing the benefits of personalization since he/she experiences increasing discomfort when confronted with digital solutions. Consumers are unlikely to use the functions or settings that are perceived complicated even if they improve customer experience (Burke, 2002). In the context of the study the impact of the level of digital literacy on the vulnerability and privacy concerns experienced by a consumer when encountering personalization techniques. EY (2021) reported that an increasing number of people are willing to share personal data amid the Covid pandemic. It has been found out that when a consumer feels that he/she is in control of the data, he/she is more likely to share personal data. It is then hypothesized that when a certain person has a higher level of digital literacy, one is more likely to be better equipped for understanding how the data is protected and which data can be shared. This means that a person has control over data and is less likely to

experience vulnerability. That is why it is supposed that there is a negative correlation between the level of digital literacy and the level of stress and vulnerability experienced when encountering personalization.

H2: *There is a negative correlation between the level of digital literacy and negative effects from personalization experienced by a consumer when faced with personalization.*

H2.1: *Digital literacy is negatively correlated with vulnerability experienced by a consumer.*

H2.2: *Digital literacy is negatively correlated with privacy concern experienced by a consumer.*

To test the hypothesis, it is necessary to operationalize the concept of digital literacy, while the concept of negative effects from personalization has been described earlier. Speaking about the ways to measure digital literacy, it is worth stating that there are several ways to do that. UNESCO, as an example, measures seven areas of competencies: devices and software operations, information and data literacy, communication and collaboration, digital content creation, safety, problem-solving and career-related opportunities (UNESCO, 2018). The organization presents a broad skills analysis, which might be complicated for this study. Livingstone, professor of social psychology, studies the differences in digital literacy between people of different ages (Livingstone & Helsper, 2007). The authors analyze digital literacy according to six indicators: opportunity scale, skills scale, years of use, self-efficacy, frequency of use, and average time per day online. An opportunities scale is concerned with the number of activities that each person does online, while a skills scale measures the online activities that a person is good at. The other scales are understandable and indicate the perception of personal skills and the frequency and experience of the use of digital devices.

Nevertheless, in case of this research due to certain constraints it is more appropriate to measure digital literacy based on the skills proficiency of the respondents on the 7-point Likert scales. The skills set that is going to be measured is taken from the work of Labazanov R.S. (2020), who developed the Digital Competence Research (DCR) model. The model resembles the Digital Literacy Global Framework (DLGF), developed by UNESCO's Institute for Statistics and Digital Competence Framework for Citizens (Dig Comp), developed by European Commission's Joint Research Centre. The author combined two models by adding the "Devices and software operations" competences from the DLGF framework to the Dig Comp model.

Summing the paragraph up, to test the hypothesis, it is necessary to measure the digital literacy of respondents according to the presented scales and conduct regression analysis with the negative effects from personalization experienced by a consumer.

Thirdly, in the literature there is an understanding that the level of trust to a retailer can moderate negative effects from personalization. The authors (Bleier, et al., 2015) studied how click-through rate differs between ads with various depth and width of personalization in case of two different retailers with different levels of trust. It has been found out that although the trust is a strong mitigating factor, it is not the only requirements for successful personalization. More than that, the authors explore mitigating role of trust based on experiment with different ads, while they encourage broader study of the influence of trust and other characteristics of consumers on the perception of personalization. Thus, the authors point out the necessity to research more thoroughly the mitigating role of trust in the perception of personalization in broader context and the situational characteristics of consumers such as shopping habits. In this study the influence of trust to online retailers on the negative and positive effects of personalization is studied.

H3: *Trust to online retailers decreases the negative effects from personalization.*

H3.1: *Trust to online retailers decreases vulnerability experienced by a consumer.*

H3.2: *Trust to online retailers decreases privacy concern experienced by a consumer.*

The negative effects from personalization have been previously operationalized, while it is necessary to describe how the variables ‘Trust to online retailers’ is constructed. Based on the previous research, the trust variable is constructed as the ability to trust a retailer and the perception of the online retailers as trustworthy and reliable.

Moreover, the authors highlight the importance of shopping behavior in defining how personalization techniques are perceived as in the example of personalized ads perception (Bleier, et al., 2015). Hedonic and utilitarian values of shopping have been discussed in the literature as the driving motives of shopping behavior (Childers, et al., 2001). That is why such concepts are introduced in the study to check how these motives influence the perception of personalization and positive effects from personalization in particular. This allows to see which shopping motives are more consistent with the benefits from personalization and what type of consumer is more likely to feel the benefits.

Apart from that, the researchers study the interrelation of emotions and personalization techniques (Pappas, et al, 2014), highlighting that personalization tends to invoke positive emotions, while positive emotions encourage the shopping intention. Thus, one of the further directions of research is to analyze whether hedonic shoppers experience more value from personalization.

H4: *Hedonic shopping influences the value from personalization.*

Based on the previous studies the hedonic shopping variables are constructed. The ‘hedonic shopping’ is conceptualized using the following dimensions: joy during shopping, ability to enjoy shopping for its own sake, experiential element of escaping from problems. The value from personalization is conceptualized in the paragraphs above.

Model to test the hypotheses

A model to test the hypotheses presented above has been created. There is one model since all hypotheses are concerned with the value and drawbacks of personalization. The four hypotheses are focused on the influence that different factors have on two sides of personalization: value and negative effects from it. Afterwards, the overall model is decomposed into the hypotheses and sub-hypotheses. The model is presented on the next page.

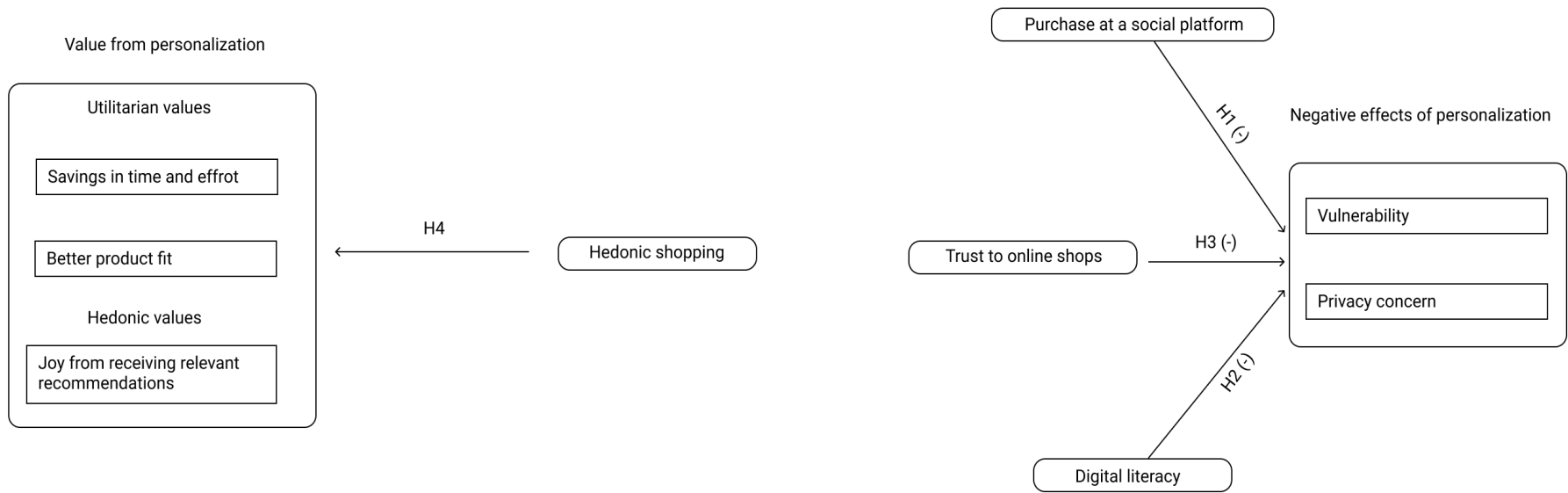


Figure 6 Overall model for hypotheses №1-4 (Created by the author)

Classification of the personalization techniques

To achieve another aim of the research, which is to identify which personalization techniques are taken by customers for granted and which are seen as value-added ones, the classification of the possible techniques will be made. It is believed that such a classification exists in the eyes of the consumers and companies do need to understand which methods are attributed to which group. As an example of such a classification, it is possible to look at such a widely used personalization technique as addressing a customer by name. It has become such a standard approach that most consumers take it for granted and do not see it as something unusual. However, it is supposed that if this technique is not in place, it will negatively affect a consumer's customer experience.

Taking the abovementioned argument into consideration, it is hypothesized that some personalization techniques are seen by customers as the "threshold" ones, which means that in case of their absences, a customer is highly likely to be unsatisfied with the company's approach. At the same time there are such methods that in case they are not in place the company will not lose points in the eyes of a consumer, though if they are implemented, a customer is likely to receive additional value. These propositions are also confirmed by Kano's model of customer satisfaction, which is a product-related model that concerns product requirements. It is stated that there are must-be requirements, the fulfillment of which will help to keep the customer "not dissatisfied", one-dimensional requirements, which are explicitly required by customers and attractive requirements, which are not stated explicitly and fulfillment of which leads to more than proportionate satisfaction (Sauerwein, et al., 1996). This study in a certain way replicates the approach of Kano's model on the personalization techniques but simplifies it to two-dimensions, required ones and those, which bring additional value.

The necessity of the classification and further analysis is justified by the fact that companies can evaluate whether they already implemented "threshold" techniques and whether they are willing to invest in personalization methods that add value to a consumer and give a competitive advantage to a company.

CHAPTER 4. METHODOLOGY AND METHODS

Variables

To start with, it is necessary to define the variables used in the research. The variables are measured on an interval scale. There are several groups of variables used in the research, including such groups as effects from personalization, social and demographic characteristics, other personal characteristics related either to digital literacy or shopping patterns and mitigating factors. The first group of variables regarding personalization effects include such variables as privacy concern, vulnerability, value from personalization. The mitigating factor is only one - the purchase channel, which is either traditional online shop as the website or online shop in social media. Other variables are presented on the Figure 7.

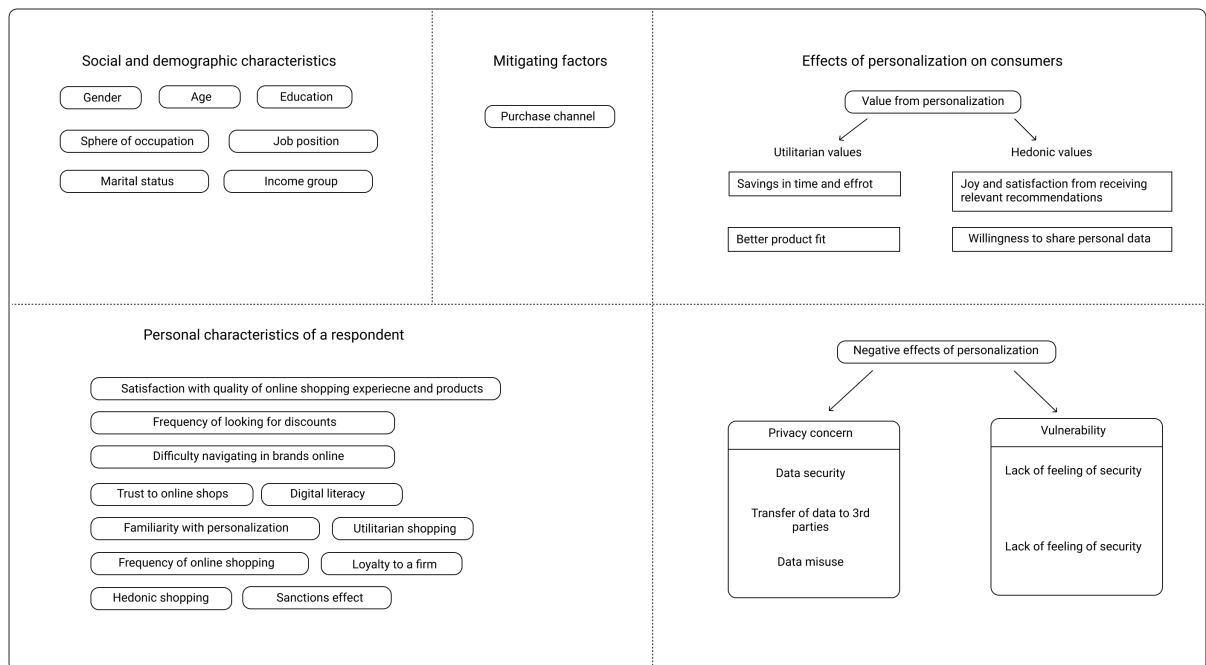


Figure 7 Variables used in the research (Created by the author)

Questionnaire development and sample description

The data is gathered through the questionnaire. For most of the questions five-point Likert scales are applied, which is a common methodology in personalization-related studies (e.g. Aguirre, et al., 2015, Chellappa & Sin, 2005). The questionnaire consists of five parts: general information about the buying patterns, the awareness of personalization techniques, personalization in the purchase process, individual characteristics of a respondent, and social and demographic profile of a respondent.

The first part of the questionnaire is devoted to buying patterns and aims to assess such qualities of a respondent as frequency of purchases, loyalty to a firm, frequency of looking for discounts, satisfaction with online shopping experience and goods, trust to online shops, ease of navigation between different brands online and familiarity with personalization techniques. This part's main aim is to involve a respondent into the purchase context and understand what shopping patterns he/she is accustomed to.

Afterwards, there is a small part of questionnaire about the familiarity with personalization overall. The respondents are asked whether they are familiar with personalization and asked to give examples of personalization techniques. The part allows to grasp the understanding of and familiarity with the personalization concept to analyze the results through these lenses later.

The next part, personalization in the purchase context, is the main part of the questionnaire. It consists of two scenarios – purchase at online shop on the website and purchase at online shop at the social media, while the respondents are allocated between the scenarios randomly. In the scenarios the respondents are asked to imagine a shopping experience in case of clothes purchase to make it more close to the reality. Each scenario is comprised of two components – personalization techniques prioritization at pre-purchase, purchase and post-purchase stages and effects of personalization measurement. The prioritization of personalization techniques is devoted to the identification of “threshold” personalization methods and ones that brings additional value to a customer. For this purpose, a ranking of the personalization methods will be created, asking the respondents to rank the methods, which according to their opinion are not important at all, somehow important, nice to have, or critically important (taken for granted). This part of the questionnaire will allow to gather statistical data on the perception of methods and conduct frequency analysis.

The individual characteristic of a respondent includes the questions on digital literacy, hedonic and utilitarian types of shopping behavior. The digital literacy assessment consists of several questions about the digital skills, which allows to understand a respondents' digital skills level and construct digital literacy variable based on skills assessment.

The last part is focused on gathering data about the social and demographic profiles of respondents, including age, gender, education, marital status and income group, sphere of occupation and job position. This is necessary to understand the profile of the respondents and ensure that the sample for the survey stays representative.

As for the sampling methods and representativeness, it is vital to point out that the general population of the research are Russian citizens aged above 18 since this category is likely to be

able to make purchases online, which is the most important factor for the survey. Apart from that, according to the research by Yandex Market and GFK Rus, the most frequent online shoppers are people of the following age groups: 15-24 (54% of this age group have made online purchases), 25-34 (58%), 35-44 (56%). This indicates that particular attention should be paid to people of ages from 15 to 44. More than that, this category of citizens is believed to be the most active users of digital devices. Therefore, for the sample, it is reasonable to control the representativeness of the sample by monitoring such characteristics as age and gender since it is difficult to control income and education levels due to resource limits. The quotas are set for the gender and age groups with the size of quotas of min. 30 respondents for age groups 18-29, 30-39, 40-49 and of min. 10 respondents for the age group 50 and above. This means that quotas are not equal, and the sample is not aimed at replication of the demographic structure since the most frequent users of online shopping are identified above. The quotas for the age groups in the range between 18-49 are higher since they are prioritized in the research due to the prevalence in the statistics on the frequency of online shopping.

Table 3 *Minimal quotas for groups* (Created by the author)

Age	Gender		
	Male	Female	Total
18-29	30	30	60
30-39	30	30	60
40-49	30	30	60
50 and above	10	10	20
Total	100	100	200

Consequently, the expected size of the sample is at least 200 respondents. More than that, since there are two scenarios embedded into the questionnaire it is necessary to ensure that each scenario receives at least 100 responses. The respondents are divided between the scenarios randomly by selecting the number they like in the questionnaire. The respondents are expected to be recruited through convenience and snowball methods.

Methods of analysis

First of all, the factor analysis is used to decrease the dimensionality of the variables and construct the needed factors. In order to analyze the 1st hypothesis independent t-test is applied.

In the study regarding the effectiveness of the advertisement depending on the personalization effects mean comparisons are also applied, which indicates the appropriateness of the methods for the research in personalization field (Aguirre, et al., 2015). To test the 2nd hypothesis regression analysis is applied. The regression analysis helps to identify the causality between variables and is widely applied in studies on personalization (Stevenson and Pasek, 2015). To test the 3rd hypothesis regression analysis is also applied. To test the 4th hypothesis independent t-test is applied. The respondents are divided into two groups based on the value of the 'Hedonic shopping' variable. The first group is the respondents who have negative attitude towards hedonic shopping (102 respondents), while the second group is positively or neutrally attuned to hedonic shopping or shopping for its own sake (98 respondents). The difference in purchase platform scenarios is not made in this case to obtain the large enough sample. It is possible to do so since the statistical tests does not show significant difference between the scenarios. As for the classification of personalization methods, frequency analysis of the answers is used to conduct the classification.

CHAPTER 5. DATA ANALYSIS AND DISCUSSION

The chapter is devoted to the presentation of data analysis results and the description of the findings and their discussion. Firstly, the collected sample is described, then the statistical testing of the hypothesis is presented, and the results are discussed at the end of the chapter with practical and theoretical implication highlighted.

Obtained sample description

To begin with, 231 answers from the respondents have been collected. The quotas were not met properly due to the prevalence of the respondents aged 18-24, which indicates that the respondents from this group should be chosen randomly within the stated quotas. That is why 60 respondents from the age group 18-24 were chosen randomly to meet the established quotas. As for the other groups, the number of respondents is within the needed quotas. Since there are two scenarios in the research, it is necessary to point out that there are 99 answers in the first scenario (purchase at the website) and 101 answers to the second scenario (purchase at social media), which indicates that the quotas for the scenarios are properly met, and the distribution is almost equal. The sample was checked for the uninvolved answers when a respondent answers in the same way to all the questions and it has been found out that there are no such respondents in a sample. Apart from that, the answers were checked for contradictory answers and several respondents were excluded.

Describing the characteristics of the respondents in the sample, it is vital to emphasize that the majority of the respondents (around 70%) hold either bachelor or master's degree, which is not a crucial criterion to this research, but might cause some deviations if the same test is conducted for the people with other education backgrounds. As for the spheres of occupation, the most frequent answers are education and service sector, but all categories of occupation identified for the research are present in the sample.

Moving to the shopping behavior patterns and the familiarity with the personalization, it is necessary to point out that most frequent products purchased online include apparel (63,2% of the respondents), airplane/railroad tickets (59,3%), prepared food (57,6%), electronics (55,8%), tickets to theater/movies etc. (51,1%). Most of the respondents have purchased goods online in Russian internet shops (87,9%), 31,6% have completed purchases in foreign online shops, while 20,3% have purchased in social media and only 9,5% in messengers. This indicates that although purchase in social media and messengers is gaining popularity, the traditional websites are still the most popular means for purchase.

It is also interesting that 67,4% of the respondents are familiar with the term 'personalization', which might be explained by the education level of the sample. The personalization techniques that are most frequently encountered by the respondents include mobile app (67,5%), shopping basket (67,1%), recommendations of similar products (63,2%), e-mail letters with recommendations and discounts (58,9%) and recommendations based on search history (55,4%). When asked to give the examples of personalization, most of the respondents refer to recommendations based on search history and complementarity of products. Apart from that, the relatively frequent answer is the ability to change the product based on the desires of the buyer, i.e., customization. Apart from that, the frequency analysis of the answers regarding the associations that come to mind when people hear the word 'personalization' has been conducted. The most common words include 'my', 'interests', 'preferences', 'individual', 'approach', 'recommendations', 'data', 'loyalty'. It can be seen that the respondents highlight several dimensions related to personalization: the individual approach to each customer according to preferences, instruments used in personalization and the use of data.

Having described the sample, it is necessary to ensure that the data is valid and can be statistically analyzed. Firstly, there are no missing values in the dataset. As for the outliers, they are not an issue in this research since the answers are ranked on a Likert scale. Speaking about the normality of the dataset, the Kolmogorov – Smirnov test indicates that the distribution is not normal for most of the variables. However, since there are more than 30 observations, the central limit theorem allows not to worry much about the normality. Apart from that, the skewness and kurtosis do not exceed the value of -2 and 2 for all variables in the research, which is regarded as acceptable. Apart from that the new variable 'scenario' is added to divide the respondents between two scenarios.

Research model and hypotheses testing

To start with, the classification of the personalization techniques is produced based on the answers and further the comparison between two scenarios is run. The frequency analysis of answers is conducted to classify the techniques at different stages of the CJM both in purchases on websites and at social media. Firstly, the classification of personalization techniques is provided for each CJM stage at website purchase, then the personalization techniques during the purchase at social media is discussed and after that the results for two platforms are compared.

In the questionnaire the respondents were asked to assess the importance of the personalization methods at each stage of the CJM. There are 4 categories in which they can place the considered personalization methods: not important at all, nice to have, somewhat important

and critically important. In this classification critically important personalization techniques are believed to be the threshold ones, while nice to have techniques are not required by consumers but are appreciated if they are in place. The classification for the purchase both at website and social media is provided below.

The purchase at website.

As for the pre-purchase stage, it can be seen that the technique required by many respondents is mobile application, followed by the ability to consult with a manager and messengers to communicate with managers and recommendations based on search history, while the fact that company’s employees address customers by name is not considered to be an important aspect as well as chatbots. This can be explained by the fact that m-commerce is gaining popularity in online shopping, while the ability to consult with managers allows to get the information as soon as possible. As for the value-adding, optional techniques it is necessary to point out push notification and advertising based on location.

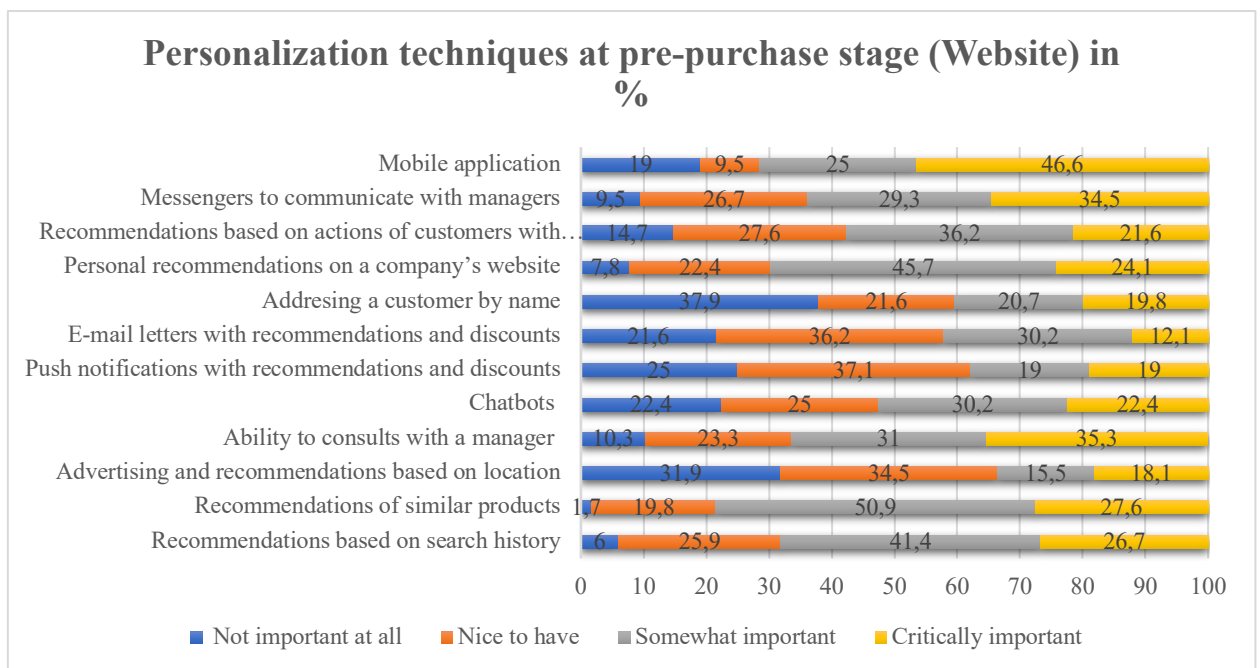


Figure 8 *Personalization techniques at pre-purchase stage in website purchase* (Created by the author)

Table 4 *Classification at pre-purchase stage in website purchase* (Created by the author)

Category	Personalization techniques
Not important at all	<ul style="list-style-type: none"> Addressing a customer by name
Nice to have	<ul style="list-style-type: none"> Advertising based on location Push notifications

	<ul style="list-style-type: none"> • E-mails
Somewhat important	<ul style="list-style-type: none"> • Recommendations of similar products • Recommendations based on search history • Chatbots • Personal recommendations on a website • Recommendations based on actions of customers with similar profile
Critically important	<ul style="list-style-type: none"> • Ability to consult with a manager • Messengers to communicate with managers • Mobile application

Moving to the purchase stage, it is necessary to emphasize that overall, the importance of personalization techniques increases at this stage, which might be explained by the importance of the smoothness of the process to the customer. It can be seen that the shopping basket and personalization of payment and delivery methods are an absolute ‘must’, followed by an ability to customize product and mobile application. It is possible to say that at the purchase stage the requirement from the customers increases with particular attention to personal approach. Another conclusion that can be made from this data is that consumers value functional techniques that are sure to make the purchase process easier (shopping basket, personalization of payment and delivery methods) or to customize the product.

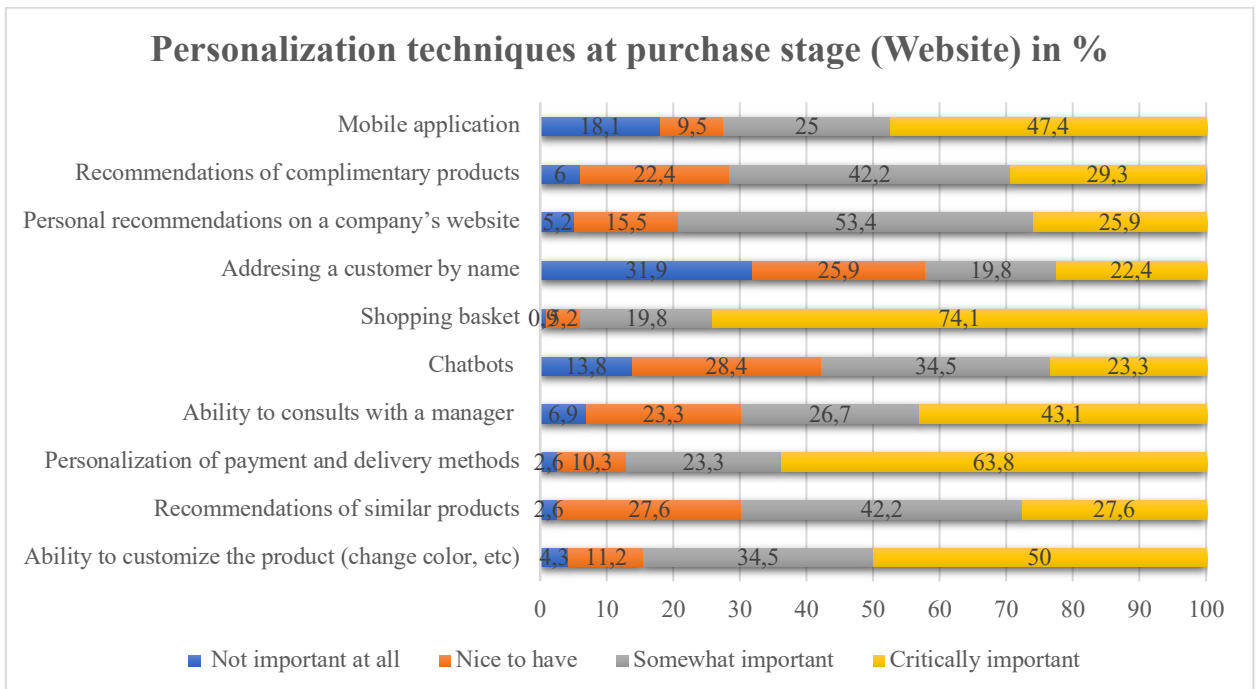


Figure 9 Personalization techniques at purchase stage in website purchase (Created by the author)

Table 5 Classification at purchase stage in website purchase (Created by the author)

Category	Personalization techniques
Not important at all	<ul style="list-style-type: none"> Addressing a customer by name
Nice to have	
Somewhat important	<ul style="list-style-type: none"> Recommendations of similar products Chatbots Personal recommendations on a website Recommendations of complimentary products
Critically important	<ul style="list-style-type: none"> Ability to consults with a manager Mobile application Ability to customize the product (change color, etc) Personalization of payment and delivery methods Shopping basket

Speaking of the post-purchase stage, it is evident that mobile application is again the feature that customers are waiting for the most, followed by messengers to communicate with managers and recommendations based on search history. Compared to the pre-purchase stage the importance of e-mail letters, messengers to communicate with managers and even addressing a customer by name increase, which can be explained by the fact that after the purchase the client might have questions about the products and requires more personalized approach.

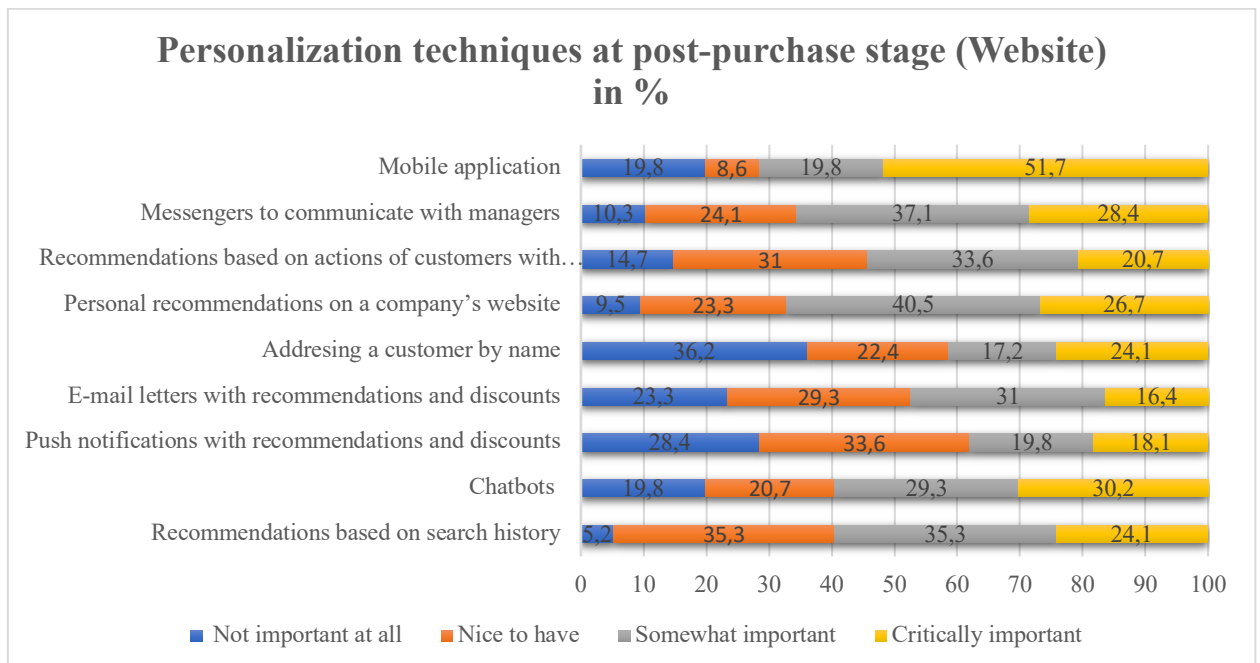


Figure 10 Personalization techniques at post - purchase stage in website purchase (Created by the author)

Table 6 *Classification at post-purchase stage in website purchase* (Created by the author)

Category	Personalization techniques
Not important at all	<ul style="list-style-type: none"> • Addressing a customer by name
Nice to have	<ul style="list-style-type: none"> • Push notifications
Somewhat important	<ul style="list-style-type: none"> • Recommendations of similar products • Recommendations based on search history • Personal recommendations on a website • Recommendations based on actions of customers with similar profile • E-mails • Messengers to communicate with managers
Critically important	<ul style="list-style-type: none"> • Mobile application • Chatbots

Concluding the paragraph about the personalization techniques classification at website purchase channel, it can be highlighted that the most importance in terms of personalization techniques is attributed to the purchase stage. The methods that are highly important and taken for granted are mobile app, recommendations based on search history, shopping basket, personalization of delivery and payment methods, ability to customize the product and the ability to consult with a manger. The value-adding, optional methods include push-notifications, e-mails, chatbots and location-based ads. It is also crucial to point out that in some cases there is a relatively large proportion of people, who see the methods as not important at all in case of addressing a customer by name, e-mails, push-notifications, chatbots and location-based ads.

The purchase in social media.

To start with, it is necessary to point out that in case of purchase via a shop at social media, the number of respondents, who consider the described personalization techniques important decreases. Probably, it can be the cause of lower trust to the social media or the inability to see a social media as a selling platform or the perceived ability of a respondent to navigate in social media without any additional help.

The personalization techniques at pre-purchase stage are considered at the social media purchase channel. In this case the most important personalization technique is an ability to consult with managers, followed by recommendations of similar products and chatbots. The value-adding, optional techniques in this case are push notifications, messages with recommendations and discounts. Apart from that, large percentages of the respondents see addressing a customer by name, location-based ads and recommendations based on actions in social media as unimportant.

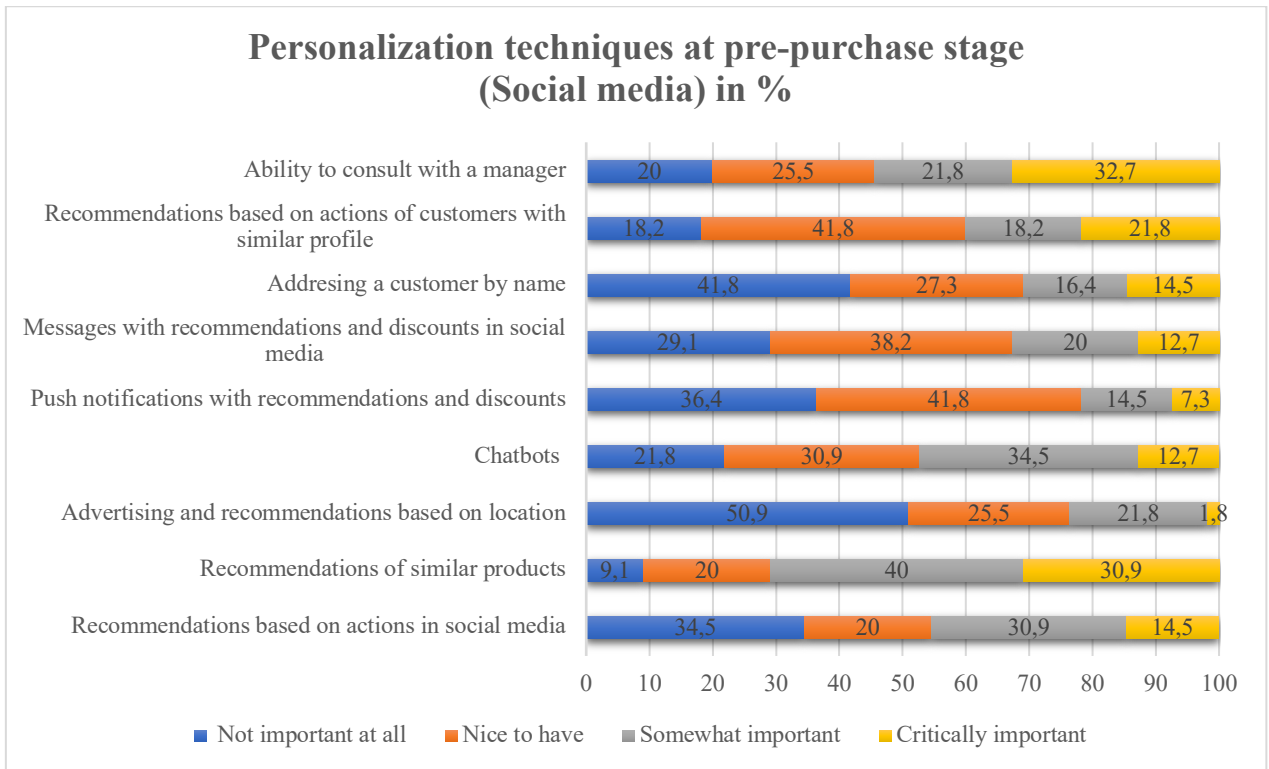


Figure 11 *Personalization techniques at pre-purchase stage in social media purchase* (Created by the author)

Table 7 *Classification at pre-purchase stage in social media purchase* (Created by the author)

Category	Personalization techniques
Not important at all	<ul style="list-style-type: none"> Addressing a customer by name Advertising based on location
Nice to have	<ul style="list-style-type: none"> Push notifications Recommendations based on actions in social media Messages with recommendations and discounts in social media
Somewhat important	<ul style="list-style-type: none"> Recommendations of similar products Recommendations based on actions of customers with similar profile Chatbots
Critically important	<ul style="list-style-type: none"> Ability to consult with a manager

Moving to the purchase stage, it is vital to emphasize that the importance of personalization techniques increases at this stage as well as at purchase stage in website purchase. The tendency is almost similar to the purchase in website channel as the shopping basket, personalization of payment and delivery methods and an ability to customize the product are the most important personalization techniques. These methods are followed by recommendations of similar products, an ability to consult with a manager and recommendations of complimentary products. At this

point it is difficult to tell which techniques are not essentials with the exception of chatbots. Addressing a customer by name is considered not important at all again.

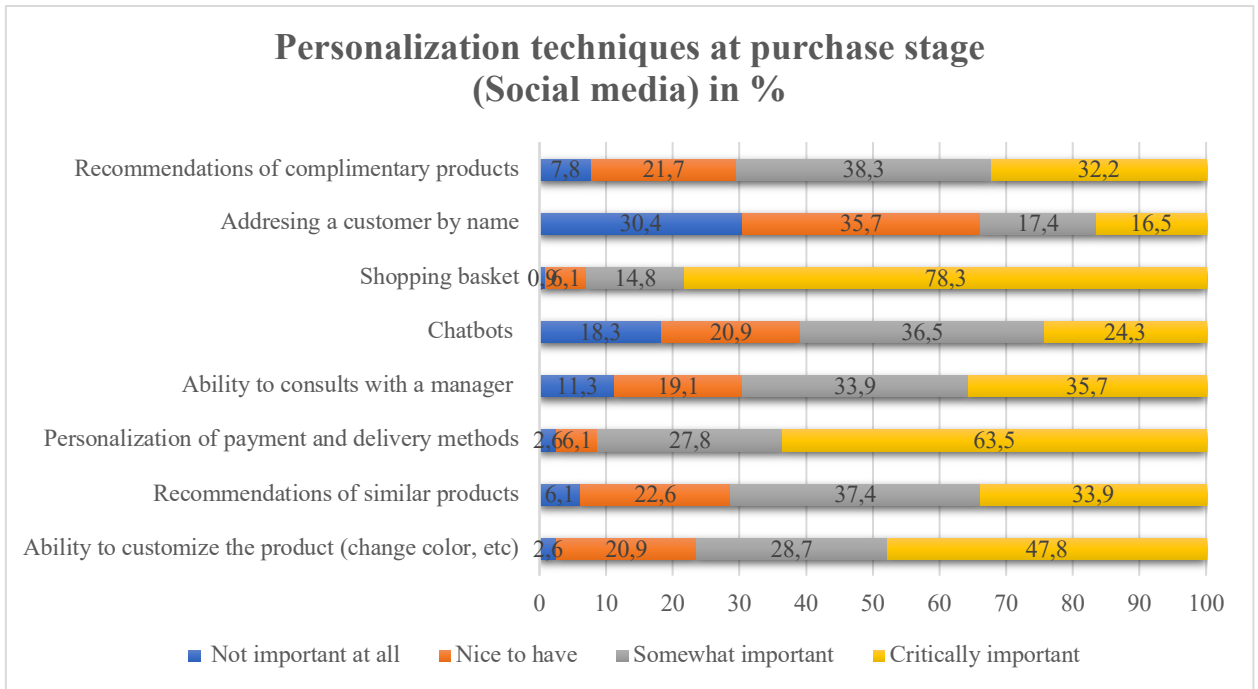


Figure 12 *Personalization techniques at purchase stage in social media purchase* (Created by the author)

Table 8 *Classification at purchase stage in social media purchase* (Created by the author)

Category	Personalization techniques
Not important at all	
Nice to have	<ul style="list-style-type: none"> Addressing a customer by name
Somewhat important	<ul style="list-style-type: none"> Recommendations of similar products Chatbots Recommendations of complimentary products
Critically important	<ul style="list-style-type: none"> Ability to consult with a manager Ability to customize the product (change color, etc) Personalization of payment and delivery methods Shopping basket

Lastly, the personalization techniques at post-purchase stage are considered. It can be seen that the importance of personalization techniques decreases even more compared to the pre-purchase stage. It might indicate that consumers at social media are not willing to communicate with shops out of the purchase stage. After making a purchase consumers are even less likely than at the pre-purchase stage to see personalization techniques as important, which also might be explained by the fact that social pages are private places to communicate with friend, relatives,

etc., but not with brands. The most important techniques in this case are an ability to consult with a manager and recommendations based on actions of customers with similar profiles, one of which is the method which is in line with the main function of social media, communication, and which allow to solve the issues after the purchase. In this case it is interesting that four methods (location-based ads, push notifications, addressing a customer by name, messages with recommendations) can be left aside since large percentages of the respondents consider them not important at all.

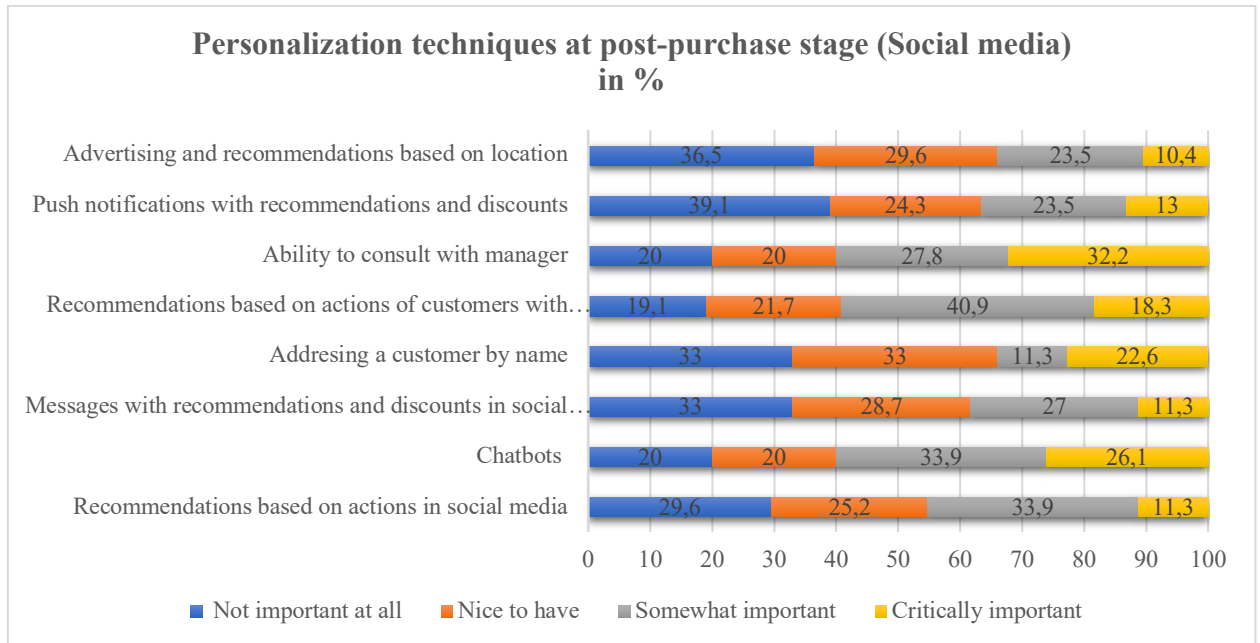


Figure 13 *Personalization techniques at post - purchase stage in social media purchase* (Created by the author)

Table 9 *Classification at post-purchase stage in social media purchase* (Created by the author)

Category	Personalization techniques
Not important at all	<ul style="list-style-type: none"> Addressing a customer by name Advertising based on location Messages with recommendations and discounts in social media Push notifications
Nice to have	
Somewhat important	<ul style="list-style-type: none"> Recommendations based on actions of customers with similar profile Chatbots Recommendations based on actions in social media
Critically important	<ul style="list-style-type: none"> Ability to consult with a manager

The comparison of results between two purchase scenarios.

All in all, it should be noted that the perception of importance of personalization techniques is higher in the case of website purchase. Apart from that, in both cases personalization techniques gain higher importance at the purchase stage. For the website purchase the presence of mobile app is a critically important techniques at all stages, while an ability to consult with managers is the critically important techniques throughout the whole CJM at both purchase channels. At the purchase stage in both cases the most required techniques are shopping basket, personalization of delivery and payment methods and an ability to customize the product.

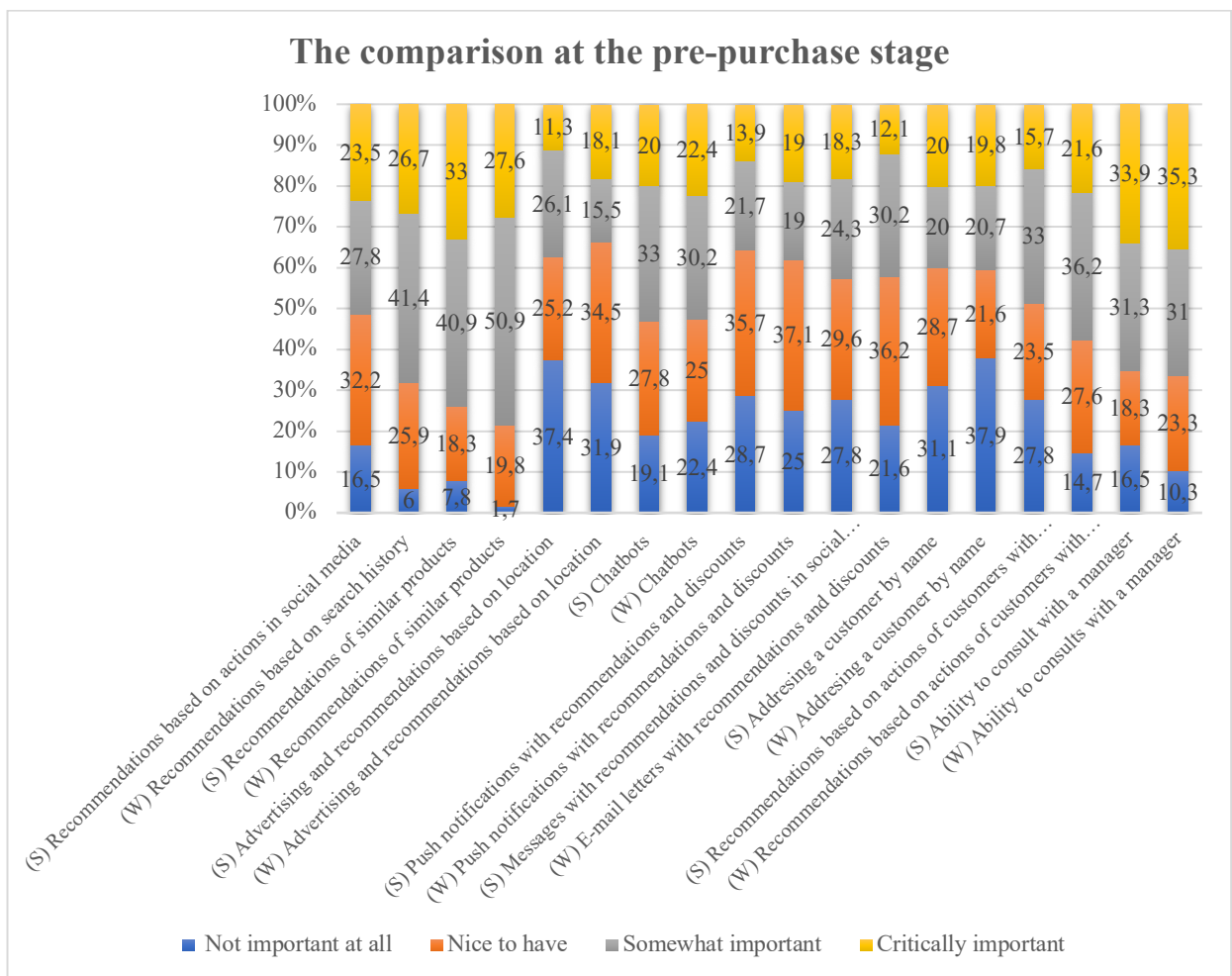


Figure 14 Comparison of personalization techniques importance at pre-purchase stage (Created by the author)

The insights that can be drawn from the analysis of the graph at the pre-purchase stage include:

1. The recommendations of similar products are ranked almost similarly in terms of importance;
2. The recommendations based on location are among the least important techniques in both scenarios;

3. Chatbots are less required in case of website purchase;
4. Push notifications are considered a ‘nice to have’ technique in both cases;
5. An ability to consult with managers has almost equal distributions of answers.

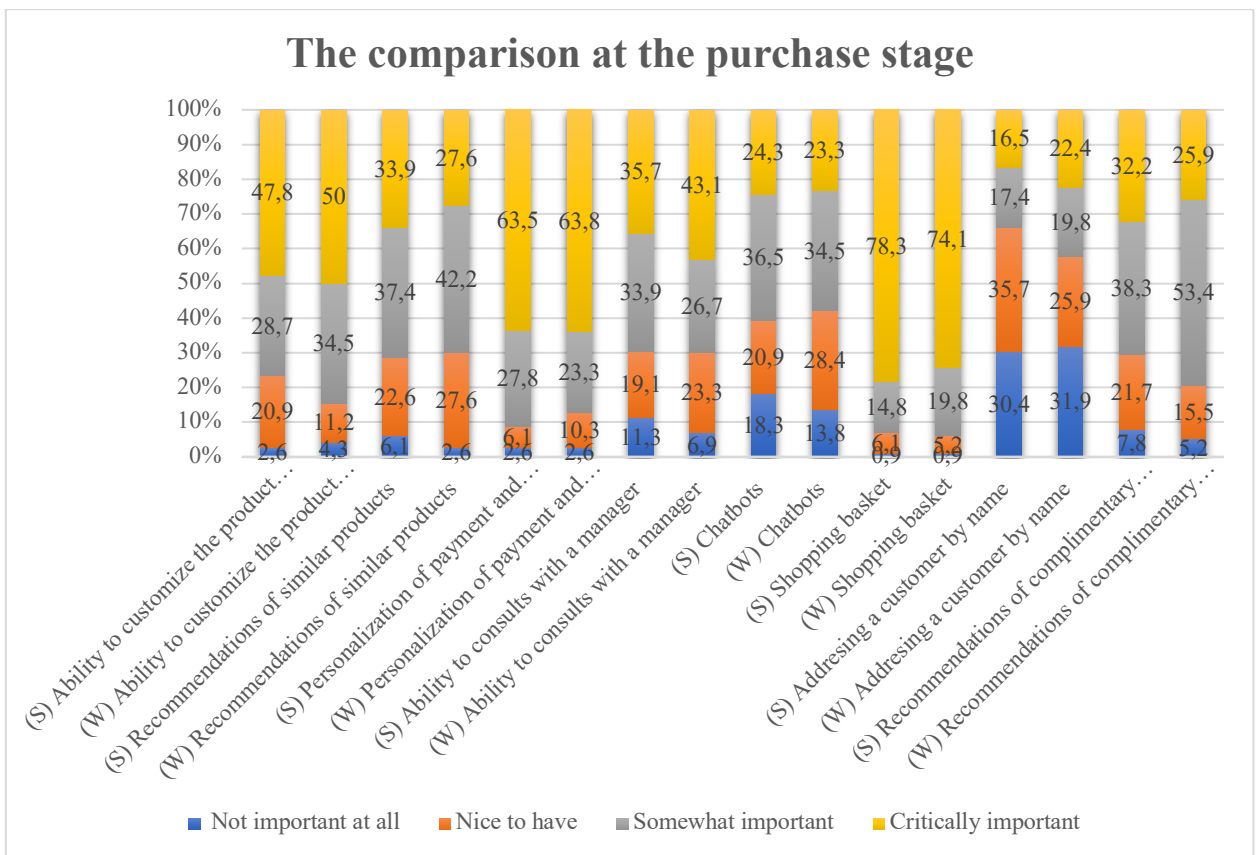


Figure 15 Comparison of personalization techniques importance at purchase stage (Created by the author)

The insights that can be generated from the analysis of the graph at the purchase stage include:

1. The ability to customize the product is a required technique in both scenarios;
2. Recommendations of similar products are almost equally important;
3. Ability to consult with a manager is more important in case of purchase at a website.

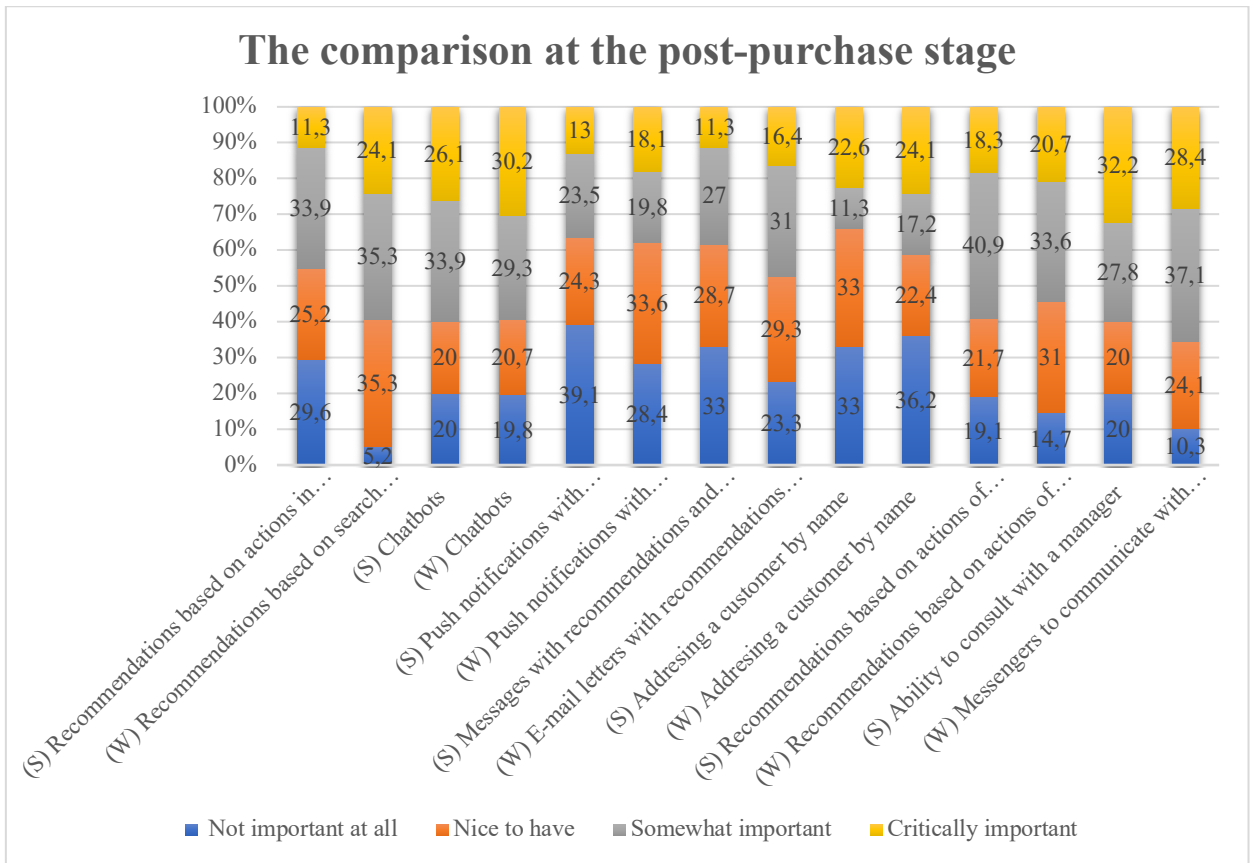


Figure 16 Comparison of personalization techniques importance at post-purchase stage (Created by the author)

The insights that can be found out from the analysis of the graph at the post-purchase stage include:

1. Recommendations based on actions in social media is a technique that is not that important, while the recommendations based on search history is a ‘must’ in case of website purchase;
2. E-mail letters, messengers and push-notifications are considered not important at all by large percentage of respondents in both cases;
3. Recommendations based on actions of customers with similar profile are considered relatively important and have relatively small percentage of respondents who consider them as not important at all in both cases.

Conclusion for the personalization techniques prioritization

Table 10 Critically important and somewhat important personalization techniques in purchase on a website (Created by the author)

	Pre-purchase	Purchase	Post-purchase
Critically important	<ul style="list-style-type: none"> • Ability to consults with a manager • Messengers to communicate with managers 	<ul style="list-style-type: none"> • Ability to consults with a manager • Mobile application • Ability to customize the product (change color, etc) 	<ul style="list-style-type: none"> • Mobile application • Chatbots

	<ul style="list-style-type: none"> • Mobile application 	<ul style="list-style-type: none"> • Personalization of payment and delivery methods • Shopping basket • 	
Somewhat important	<ul style="list-style-type: none"> • Recommendations of similar products • Recommendations based on search history • Chatbots • Personal recommendations on a website • Recommendations based on actions of customers with similar profile 	<ul style="list-style-type: none"> • Recommendations of similar products • Chatbots • Personal recommendations on a website • Recommendations of complimentary products 	<ul style="list-style-type: none"> • Recommendations of similar products • Recommendations based on search history • Personal recommendations on a website • Recommendations based on actions of customers with similar profile • E-mails • Messengers to communicate with managers

As for the critically important techniques in case of the purchase on a website, it is necessary to emphasize that mobile application and an ability to consult with a manager are the two most frequently met critically important techniques (3 stages out of 3 for mobile application and 2/3 for an ability to consult with a manager). The ‘Somewhat important’ techniques that are most frequently met in CJM stages include recommendations of similar products, personal recommendations on a website and recommendations based on actions of customers with similar profile.

Table 11 *Critically important and somewhat important personalization techniques in purchase in social media* (Created by the author)

	Pre-purchase	Purchase	Post-purchase
Critically important	Ability to consult with a manager	<ul style="list-style-type: none"> • Ability to consults with a manager • Ability to customize the product (change color, etc) • Personalization of payment and delivery methods • Shopping basket 	Ability to consult with a manager
Somewhat important	<ul style="list-style-type: none"> • Recommendations of similar products • Recommendations based on actions of 	<ul style="list-style-type: none"> • Recommendations of similar products • Chatbots • Recommendations of complimentary products 	<ul style="list-style-type: none"> • Recommendations based on actions of customers with similar profile • Chatbots

	customers with similar profile • Chatbots		• Recommendations based on actions in social media
--	--	--	--

As for the critically important techniques in case of the purchase in social media, it is necessary to emphasize that an ability to consult with a manager is the most frequently met critically important techniques (3 stages out of 3). The ‘Somewhat important’ techniques that are most frequently met in CJM stages include recommendations of similar products, personal recommendations on a website and recommendations based on actions of customers with similar profile.

Factor analysis

Moving to the analysis of the hypothesis, it is necessary to emphasize that the factor analysis is conducted to reduce dimensionality of the set and create the variables for further testing. First of all, the descriptive analysis of data has been conducted beforehand, then the correlations are checked. It has been found out that there are no multicollinearity issues in this case since there are no correlations greater than 0.9. KMO is 0.777, which is greater than 0,5 and, according to the Bartlett’s test the matrix is not an identity one. The principal axis factoring is applied with varimax rotation with the use of Kaiser’s criterion. As a result, 12 factors are identified, but judging by the analysis of variables it is reasonable to extract 11 factors. The determinant is less than 0.001, which indicates that the data is valid. All the values at the diagonal on the anti-image matrix are greater than 0.5, off-diagonal elements are relatively small, which is good, but the largest one is 0.424. In reproduced correlation matrix there are only 8% of residuals that are greater than 0.05, which indicates that the model from factor analysis is adequate. The resulting factors are presented below.

Table 12 *Factor analysis results* (Created by the author)

№	Factor name	% of variance explained after rotation	Cronbach’s alpha
1	Hedonic shopping	10,759	0,921
2	Digital literacy	7,791	0,858
3	Value from personalization	5,920	0,857
4	Trust to online shops	5,024	0,822
5	Quality of products and online shopping experience	4,708	0,811

6	Privacy concern	4,082	0,812
7	Sanctions effect	3,634	0,765
8	Utilitarian shopping	3,588	0,684
9	Loyalty to a shop	3,385	0,734
10	Vulnerability	3,082	0,851
11	Difficulty navigating in brands online	2,941	0,672

By examining the Cronbach's alpha, it can be seen that all scales are reliable.

Hypotheses testing

H1: *A consumer experiences fewer negative effects from personalization when encountering personalization on social media than on other retailers' websites. - Rejected*

H1.1: *Purchase on the social media decreases vulnerability experienced by a consumer. - Rejected*

H1.2: *Purchase on the social media decreases privacy concern experienced by a consumer. - Rejected*

Having conducted the factor analysis, it is possible to switch to the hypotheses testing. For the testing of the first hypothesis independent t-test is applied. The test is applied to the variable 'negative effects of personalization' that is generated as the result of factor analysis. The central limit theorem allows to assume the normality of the sample. As for the equality of variances, the Levene's test shows that the variances are equal.

Table 13 *The results of independent t-test – H1.1 privacy concern* (Created by the author)

	Scenario	Mean	T	P value	F statistics
Privacy concern	Website purchase	0,075240	1,176	0,241	0,139
	Social media purchase	-0,073750	1,177		

Table 14 *The results of independent t-test – H1.2 vulnerability* (Created by the author)

	Scenario	Mean	T	P value	F statistics
Vulnerability	Website purchase	,0830784	1,308	0,193	0,736
	Social media purchase	-0,081433	1,308		

Judging by the statistics, it is possible to conclude that although the means are different, the difference cannot be considered statistically significant.

H2: *There is a negative correlation between the level of digital literacy and negative effects from personalization experienced by a consumer when faced with personalization. - Rejected*

H2.1: *Digital literacy is negatively correlated with vulnerability experienced by a consumer. - Rejected*

H2.2: *Digital literacy is negatively correlated with privacy concern experienced by a consumer. - Rejected*

As for the testing of the second hypothesis, the regression analysis is applied to test the causality between the variables ‘negative effects of personalization’ and ‘digital literacy’. First of all, the variables are checked for normality once again, which results in ‘negative effects of personalization’ and ‘digital literacy’ being normally distributed. There are no missing values and outliers for all observations. The standardized residuals and predicted values do not exceed the threshold values of -3/+3 and Cook’s distance is not larger than 1. The residuals are normally distributed since the result of Kolmogorov – Smirnov test is higher than 0,05. The homoscedasticity of residuals is followed.

Table 15 *The results of regression analysis - H2.1 – privacy concern* (Created by the author)

Dependent variable – Privacy concern	R	R ²	P value	F statistics
Independent variable - Digital literacy	0,009	0,000	0,901	0,015

Table 16 *The results of regression analysis - H2.2 – vulnerability* (Created by the author)

Dependent variable – Vulnerability	R	R ²	P value	F statistics
Independent variable - Digital literacy	0,004	0,000	0,958	0,003

The linear regression model with negative effects of personalization as a dependent variable and digital literacy as an independent one does not produce any statistically significant results. This shows that the digital literacy variable is not the most important one in determination of privacy concern and vulnerability, which leaves the room for potential exploration of determining factors. The digital literacy is likely to be an important factor in combination with other variables or can act as the mitigating factor.

H3: *Trust to online retailers decreases the negative effects from personalization. - Rejected*

H3.1: *Trust to online retailers decreases vulnerability experienced by a consumer. - Rejected*

H3.2: *Trust to online retailers decreases privacy concern experienced by a consumer. - Rejected*

As for the test of the third hypothesis, regression analysis is run again. Before running the regression analysis, all requirements are checked and satisfied. The data is normally distributed according to Kolmogorov-Smirnov test, there are no missing values or outliers. The homoscedasticity of residuals is followed.

Table 17 *The results of regression analysis – H3.1 – privacy concern* (Created by the author)

Dependent variable – Privacy concern	R	R ²	P value	F statistics
Independent variable – Trust to online shops	0,013	0,000	0,857	0,033

Table 18 *The results of regression analysis – H3.2 – vulnerability* (Created by the author)

Dependent variable - Vulnerability	R	R ²	P value	F statistics
Independent variable - Trust to online shops	0,006	0,000	0,934	0,007

The linear regression model with negative effects of personalization as a dependent variable and trust to online shops as an independent one does not produce any statistically significant results. This shows that the trust to online shops variable is not the most important one in determination of privacy concern and vulnerability, which leaves the room for potential exploration of determining factors. The trust to online shops is likely to play an important role in mitigating effects with other factors being the main determinators.

H4: Hedonic shopping influences the value from personalization. – *Rejected*

For the 4th hypothesis the independent t-test has been run, which indicates that there is no statistically significant difference in value from personalization between people who love shopping for its own sake and those who do shopping only to buy products.

Table 19 *The results of independent t-test – H4* (Created by the author)

Value from personalization	Scenario	Mean	T	P value	F statistics
	Rational shoppers	-0,009259	-0,144	0,886	0,518
	Hedonic shoppers	0,009637	-0,144		

It can be seen that the shopping behavior in this case does not affect the value received from personalization. It means that consumers value personalization techniques in the same way. This fact might be further used in marketing studies and campaigns when segmenting the shoppers bases on their shopping patterns.

Summary of the hypotheses testing results

Table 20 *The results of hypotheses testing* (Created by the author)

No	Hypothesis	Result
1	A consumer experiences fewer negative effects from personalization when encountering personalization on social media than on other retailers' websites.	Rejected
2	There is a negative correlation between the level of digital literacy and negative effects from personalization experienced by a consumer when faced with personalization	Rejected
3	Trust to online retailers decreases the negative effects from personalization.	Rejected
4	Hedonic shopping influences the value from personalization.	Rejected

Summing up the results of the hypotheses testing, it is possible to say that all four hypotheses have been rejected, which in any case bring certain practical and theoretical implications.

Search for an alternative model

Since all the hypotheses have been rejected, which means that these factors on their own do not influence the privacy concern or vulnerability significantly, it has been decided to conduct further exploratory analysis and construct a model with several factors based on previous research. In this model the dependent variable is vulnerability since it is the emotional state of a consumer and privacy concern, which is a more rational characteristic, is likely to influence the emotional state. The independent variables in this model include utilitarian shopping, hedonic shopping, the scenario (website purchase or purchase in social media), digital literacy, trust to online shops, privacy concern and value from personalization. The value from personalization is included due to the previous conclusions about the fact that value from personalization can decrease the vulnerability because value will outweigh potential risks at some point.

Table 21 *The alternative model* (Created by the author)

Dependent variable - Vulnerability	R	R ²	P value	F statistics
Independent variables - Trust to online shops, Utilitarian shopping, Hedonic shopping, Scenario, Digital literacy, Trust to online shops, Privacy concern, Value from personalization	0,511	0,261	0,001	9,636

It can be seen that the model has a relatively good descriptive power. As for the significance of the predictors, trust, digital literacy and hedonic shopping and scenario are not significant ones, while utilitarian shopping, value from personalization and privacy concern are significant. It can be seen that the model confirms previous conclusions about the influence of privacy concern on vulnerability. Apart from that, utilitarian shopping, when a person wants to complete a purchase faster without enjoying shopping for its own sake, decreases the vulnerability. Moreover, the more value from personalization a customer receives, the less vulnerability he/she will experience. It can be explained by the fact that at some point the value outweighs all the potential risks and a person stops worrying about negative effects of personalization. At the same time, the purchase channel and digital literacy do not influence vulnerability.

Discussion of the results

To start with, it can be seen that although personalization techniques prioritization varies depending on the CJM stage and purchase channel, there are methods that are considered important by consumers and those that are seen as value-adding, optional. The importance of personalization techniques at different stages is described in the previous part, while the critically important personalization techniques throughout the whole CJM include an ability to communicate with managers either through messengers or other platforms, mobile application, recommendations based on search history and personal recommendations on a website (for website purchase scenario). Mobile application is considered the most important technique at pre-purchase and post-purchase stages in website shopping channel scenario, which confirms the trend to m-commerce. The value-adding, optional techniques, which can be implemented, but are not required by consumers include push notifications, e-mails, chatbots and in some cases recommendations based on location and addressing a customer by name. However, it is important to understand, which value-adding, optional techniques the company has resources to implement since they in many cases are considered not important at all by relatively large percentage of respondents.

As for the other insights, it has been found out that at the purchase stage consumers are more willing to accept personalization techniques. The shopping basket is an absolute 'must' for both scenarios, even though such functionality has not been implemented in case of the purchase at social media. This can be a potential improvement for social platforms as, for example, VK already has a function, which allows to add a product to a wish list. This can act as a replacement for shopping basket until it can be integrated directly, or it is appropriate to do so. Apart from that, at the purchase stage it can be seen that consumers tend to put higher importance to functional techniques that are sure to bring tangible benefits to them. For example, it is easier to see the value from personalization of delivery and purchase methods and an ability to customize products than from recommendations and ads.

Another conclusion that can be drawn from the research is that although the comparison of the perception of negative effects of personalization does not statistically vary between two scenarios, the respondents in the website purchase scenario tend to see personalization important in much many cases than their counterparts from the website purchase scenario. This might be explained by the fact that social media is not seen as a purchase channel by most customers, and they want the private social pages to be left aside of ads and shopping notifications.

As for the hypotheses testing, all four hypotheses are rejected. The difference in perception of privacy concern and vulnerability in website and social media purchase are not statistically significant. Given the fact that the level of privacy concern is relatively high according to the data, it can be explained that consumers feel privacy concern when encountered with personalization with no difference depending on the purchase channel. Secondly, the regression analysis suggests that digital literacy is not the most important predictor for the privacy concern and vulnerability, which sheds the light on this factor, but opens new prospect for factors identification. Thirdly, the trust to online shops on the whole does not directly decrease the negative effects from personalization, but it is likely to play a mitigating role in the model. It is also suggested that the attitude to a particular retailer is more important in this case, which means that much is dependent on the companies. Moreover, the perception of the value from personalization depending on the shopping behavior, rational vs hedonic shopping patterns in particular. It might suggest that such a segmentation in marketing and implementation of personalization techniques is not the most efficient and consumers of different shopping patterns (rational vs hedonic shopping) value personalization in similar way.

What is also interesting is that utilitarian shopping and value from personalization decrease vulnerability, which can be explained by the fact that rational shoppers value personalization techniques since they allow to buy a desired product faster and with no troubles. Apart from that,

there supposed to be a point at which value from personalization outweighs all the vulnerability and a consumer worry about data protection decreases.

The study has contributed both in practical and theoretical ways. The largest contribution lies within the prioritization of personalization techniques at different CJM stages in two different purchase channels, though the study also highlighted how several factors such as purchase channel, shopping behavior and trust influence the perception of personalization effects.

Theoretical contributions

As for the theoretical contribution, the study analyzes the yet not very research field of intersection of customer experience, customer journey and personalization. After the research, it is possible to tell whether CJM stage influences the perception of importance of personalization techniques. Furthermore, the interrelation of digital literacy and personalization is tested, and it has been found out that digital literacy is not the deciding factor when it comes to the perception of personalization effects. More than that, the influence of the shopping behavior, rational vs hedonic shopping in particular, and overall trust to online shops on personalization perception has been tested. The situation is similar to the influence of the digital literacy in both cases, which means that although these factors can be mitigating ones in a larger model, they are not the deciding ones. The findings allow to look at other factors that are more important for the perception of value and negative effects of personalization. Thirdly, the study contributes to the theoretical field by prioritizing personalization techniques at different CJM stages. Apart from that, the study sheds the light on the issues of the personalization perception in different purchase channels, which also contributes to the literature on the multichannel retail. The findings show that consumers perceive personalization effects equally on website and social media, which makes it possible to make no distinction for strategies in these platforms.

Practical contributions

The practical implications are also important for the business since they allow to decide which personalization techniques to use at all costs and which one can be omitted. This makes it possible to economize the needed resources without disappointing the consumers, which is important especially amid such turbulent times. More than that, the study indicates that consumers are less likely to perceive personalization techniques important in social media, which shows the importance to increase trust between shop and customers in social media. There is also a practical implication for social media platforms, which should provide such techniques as shopping basket or equivalent, which is already implemented in VK. It might be suggested that popularization of this technique can be beneficial.

As for the testing of the factors that influence the perception of personalization effects, it is necessary to say that there are several practical implications. First of all, the fact that consumers perceive negative effects from personalization similarly in purchases on the websites and in social media indicates that the companies can adapt marketing strategies related to personalization when changing purchase channels. Secondly, it has been found out that rational and hedonic shopping behavior do not influence the value from personalization, which highlights that when segmenting the market to conduct personalized campaigns it is possible to overlook such characteristics of the respondents. Thirdly, the overall trust to the online shops does not influence the perception of negative effects from personalization, which means that the perception depends on the particular retailer and not the group on the whole. This fact implies that consumers typically do not have biases when it comes to trust to online retailers and, apart from that, each retailer should conduct campaigns to increase trust to it. Moreover, vulnerability is decreased by providing more value from personalization, which means that if companies provide high-quality personalization mechanisms and consumers appreciate them, then there should be less issues with privacy and vulnerability. This fact in its turn will result in better customer experience, which is a desired outcome for a company.

Limitations and further research

There are several limitations and, thus, areas for further research. The first limitation is related to the characteristics of a sample. Although the research aimed to decrease the biases related to a sample, the respondents were collected via convenience and snowball methods and mostly include people with higher education. Apart from that, due to the resource limitations of the research it was impossible to conduct the study and classification of personalization techniques in the experimental, which can be a potential area to develop the research. Thirdly, the research is narrowed down to such online purchase channel as social media and traditional online retail, while it is possible to consider other channels and not only the online ones.

CONCLUSION

Concluding the research paper, it is worth highlighting that the analysis of the literature on the topics of channels in retail and personalization was conducted to identify the research gaps. The research gaps include the necessity to combine the channels, customer experience and personalization in one model, describe the difference in perception of personalization effects depending on the purchase channel and classify the personalization technique based in their importance at different stages of CJM.

The concepts of personalization, vulnerability, privacy concern, value from personalization and other personalization-related concepts were utilized in the research. The data sample was collected to conduct statistical tests such as frequency analysis, regression analysis and t-statistics. Based on the results of the statistical tests practical and theoretical implications were proposed.

As for the theoretical results, the research sheds the light on such topics as the interrelation between digital literacy, shopping behavior, trust to online shops and personalization, purchase channel and personalization perception and classification of personalization techniques based on CJM. The research highlights that digital literacy, purchase channel, hedonic shopping behavior and trust to online shops on the whole are not the deciding factors when it comes to the consumers' perception of negative effects from personalization and its value. This allows to proceed further with the identification of the factors that are important for the perception of personalization by consumers.

Speaking of the main practical contributions, the research allows companies to understand which personalization techniques are sure to be used and which can be neglected without the damage to customer experience. This allows to economize company's resources and keep the high level of customer satisfaction. Moreover, the research makes it possible for companies to understand on which factors the perception of negative and positive effects from personalization is not dependent. Moreover, an alternative model has been constructed, which shows that utilitarian shopping and value from personalization decrease the vulnerability. These findings are useful for improving customer experience.

Nevertheless, the research has certain limitations, which can become prospects for further research, such as sample biases, absence of experiential testing with respondents and consideration of such purchase channels as social media and tradition online retail only.

REFERENCES

Scientific articles

- Acquila-Natale, E., & Iglesias-Pradas, S. (2020). How to measure quality in multi-channel retailing and not die trying. *Journal of Business Research*, 109, 38-48.
- Acquila-Natale, E., & Iglesias-Pradas, S. (2021). A matter of value? Predicting channel preference and multichannel behaviors in retail. *Technological Forecasting and Social Change*, 162.
- Aguirre, E., Mahr, D., Grewal, D., de Ruyter, K., Wetzels, M. (2015). Unraveling the personalization paradox: The effect of information collection and trust-building strategies on online advertisement effectiveness. *Journal of Retailing*, 91 (1), pp. 34-49.
- Al-Nabhani, K., Wilson, A., & McLean, G. (2022). Examining consumers' continuous usage of multichannel retailers' mobile applications. *Psychology & Marketing*, 39(1), 168-195.
- Ameen, N., Tarhini, A., Shah, M., & Madichie, N. O. (2020). Going with the flow: smart shopping malls and omnichannel retailing. *Journal of Services Marketing*.
- Ansari, A., Mela, C. F., and Neslin, S. A. (2008). Customer Channel Migration. *Journal of Marketing Research* (45:1), pp. 60-76.
- Auxier, Brooke, Lee Rainie, Monica Anderson, et al. (2019), How Americans Think About Privacy and the Vulnerability of Their Personal Data, Pew Research Center, November 15. Retrieved from <https://www.pewresearch.org/internet/2019/11/15/how-americans-think-about-privacy-and-the-vulnerability-of-their-personal-data/> (accessed October 17, 2021).
- Barta, S., Flavian, C., & Gurrea, R. (2021). Managing consumer experience and online flow: Differences in handheld devices vs PCs. *Technology in Society*, 64, 101525.
- Berry, L. L., Carbone, L. P., & Haeckel, S. H. (2002). Managing the total customer experience. *MIT Sloan management review*, 43(3), 85-89.
- Bilgihan, A., Kandampully, J., & Zhang, T. C. (2016). Towards a unified customer experience in online shopping environments: Antecedents and outcomes. *International Journal of Quality and Service Sciences*.
- Bleier A., Eisenbeiss M. (2015). Personalized online advertising effectiveness: The interplay of what, when, and where. *Marketing Science* 34 (5): 669–688.
- Bleier, A., & Eisenbeiss, M. (2015). The importance of trust for personalized online advertising. *Journal of Retailing*, 91(3), 390-409.

- Burke, R. R. (2002). Technology and the customer interface: What consumers want in the physical and virtual store. *Journal of the Academy of Marketing Science*, 30(4), 411–432.
- Chellappa, R. K., & Sin, R. G. (2005). Personalization versus privacy: An empirical examination of the online consumer's dilemma. *Information technology and management*, 6(2), 181-202.
- Chen, Q., Feng, Y., Liu, L., & Tian, X. (2019). Understanding consumers' reactance of online personalized advertising: A new scheme of rational choice from a perspective of negative effects. *International Journal of Information Management*, 44, 53-64.
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of retailing*, 77(4), 511-535.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Dellaert B. G. C., Häubl G. (2012). Searching in choice mode: Consumer decision processes in product search with recommendations. *Journal of Marketing Research* 49 (2): 277–288.
- Fang, J., Liu, H., Li, Y., & Cai, Z. (2021). Retaining customers with in-store mobile usage experience in omni-channel retailing: The moderating effects of product information overload and alternative attractiveness. *Electronic Commerce Research and Applications*, 46, 101028.
- Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: a perceived risk facets perspective. *International journal of human-computer studies*, 59(4), 451-474.
- Fornari, E., Fornari, D., Grandi, S., Menegatti, M., & Hofacker, C. F. (2016). Adding store to web: migration and synergy effects in multi-channel retailing. *International Journal of Retail & Distribution Management*.
- Gentile, C., Spiller, N., & Noci, G. (2007). How to sustain the customer experience: An overview of experience components that co-create value with the customer. *European Management Journal*, 25(5), 395-410.
- Gogua, M. M., & Smirnova, M. M. (2020). Revisiting personalization through customer experience journey.
- Green, D., & Harney, M. (2017). More Than 8,000 Store Closures Were Announced in 2017—Here's the Full List. *Business Insider*.
- Grewal, D., Roggeveen, A. L., & Nordfalt, J. (2017). The future of retailing. *Journal of Retailing*, 93(1), 1–6.

- Herhausen, D., Kleinlercher, K., Verhoef, P. C., Emrich, O., & Rudolph, T. (2019). Loyalty formation for different customer journey segments. *Journal of Retailing*, 95(3), 9-29.
- Hess, N. J., Kelley, C. M., Scott, M. L., Mende, M., & Schumann, J. H. (2020). Getting personal in public!? How consumers respond to public personalized advertising in retail stores. *Journal of Retailing*, 96(3), 344-361.
- Hossain, M. A., Akter, S., & Yanamandram, V. (2020). Revisiting customer analytics capability for data-driven retailing. *Journal of Retailing and Consumer Services*, 56, 102187.
- Hu, T. I., & Tracogna, A. (2020). Multichannel customer journeys and their determinants: Evidence from motor insurance. *Journal of Retailing and Consumer Services*, 54, 102022.
- Huang, L., Lu, X., & Ba, S. (2016). An empirical study of the cross-channel effects between web and mobile shopping channels. *Information & Management*, 53(2), 265-278.
- Inman, J. J., & Nikolova, H. (2017). Shopper-facing retail technology: A retailer adoption decision framework incorporating shopper attitudes and privacy concerns. *Journal of retailing*, 93(1), 7-28.
- journey. *Journal of Marketing* 80 (6): 69–96.
- Kaaniche, N., Laurent, M., Belguith, S. (2020). Privacy enhancing technologies for solving the privacy-personalization paradox: Taxonomy and survey. *Journal of Network and Computer Applications*, 171.
- Klaus, P. P., & Maklan, S. (2013). Towards a better measure of customer experience. *International Journal of Market Research*, 55(2), 227-246.
- Kuehnl, C., Jozic, D., & Homburg, C. (2019). Effective customer journey design: consumers' conception, measurement, and consequences. *Journal of the Academy of Marketing Science*, 47(3), 551-568.
- Labazanov, R. S. (2020). The effect of user digital competence on smartphone perceived quality in the Russian market [Master Thesis]. Graduate School of Management.
- Lee, C. H., & Cranage, D. A. (2011). Personalisation–privacy paradox: The effects of personalisation and privacy assurance on customer responses to travel Web sites. *Tourism Management*, 32(5), 987-994.
- Lemon K. N., Verhoef P. C. 2016. Understanding customer experience throughout the customer
- Livingstone, S., & Helsper, E. (2007). Gradations in digital inclusion: Children, young people and the digital divide. *New media & society*, 9(4), 671-696.

- Luo, X., Zhang, Y., Zeng, F., & Qu, Z. (2020). Complementarity and Cannibalization of Offline-to-online Targeting: a Field Experiment on Omnichannel Commerce. *Mis Quarterly*, 44(2).
- Martin, K. D., & Palmatier, R. W. (2020). Data privacy in retail: Navigating tensions and directing future research.
- Martínez-López, F. J., Li, Y., Feng, C., & López-López, D. (2021). Buying Through Social Platforms: Perceived Risks and Trust. *Journal of Organizational and End User Computing (JOEUC)*, 33(4), 70-93.
- Mathwick, C., Malhotra, N. and Rigdon, E. (2001), “Experiential value: conceptualization, measurement and application in the catalog and internet shopping”, *Journal of Retailing*, Vol. 77 No. 1, pp. 39-56.
- Neslin, S. A., & Shankar, V. (2009). Key issues in multichannel customer management: current knowledge and future directions. *Journal of interactive marketing*, 23(1), 70-81.
- Neslin, S. A., Jerath, K., Bodapati, A., Bradlow, E. T., Deighton, J., Gensler, S., ... & Zhang, Z. J. (2014). The interrelationships between brand and channel choice. *Marketing Letters*, 25(3), 319-330.
- Neslin, Scott A., Dhruv Grewal, Robert Leghorn, Venkatesh Shankar, Marije L. Teerling, Jacquelyn S. Thomas and Peter C. Verhoef (2006), Challenges and opportunities in multichannel customer management. *Journal of Service Research*, 9 (2), 95–112.
- Okazaki, S., Eisend, M., Plangger, K., de Ruyter, K., & Grewal, D. (2020). Understanding the strategic consequences of customer privacy concerns: A meta-analytic review. *Journal of Retailing*, 96(4), 458-473.
- Pappas, I. O., Kourouthanassis, P. E., Giannakos, M. N., & Chrissikopoulos, V. (2014). Shiny happy people buying: the role of emotions on personalized e-shopping. *Electronic Markets*, 24(3), 193-206.
- Raphaeli, O., Goldstein, A., & Fink, L. (2017). Analyzing online consumer behavior in mobile and PC devices: A novel web usage mining approach. *Electronic commerce research and applications*, 26, 1-12.
- Riegger, A. S., Klein, J. F., Merfeld, K., & Henkel, S. (2021). Technology-enabled personalization in retail stores: Understanding drivers and barriers. *Journal of Business Research*, 123, 140-155.

- Sauerwein, E., Bailom, F., Matzler, K., & Hinterhuber, H. H. (1996). The Kano model: How to delight your customers. In *International working seminar on production economics* (Vol. 1, No. 4, pp. 313-327).
- Schreiner, T., Rese, A., & Baier, D. (2019). Multichannel personalization: Identifying consumer preferences for product recommendations in advertisements across different media channels. *Journal of Retailing and Consumer Services*, 48, 87-99.
- Singh, S., & Srivastava, S. (2019). Engaging consumers in multichannel online retail environment: A moderation study of platform type on interaction of e-commerce and m-commerce. *Journal of Modelling in Management*.
- Smith, H. J., Milberg, S. J., & Burke, S. J. (1996). Information privacy: Measuring individuals' concerns about organizational practices. *MIS quarterly*, 167-196.
- Song J. H., Zinkhan G. M. 2008. Determinants of perceived Web site interactivity. *Journal of Marketing* 72 (2): 99–113.
- Stevenson, D., & Pasek, J. (2015, March). Privacy concern, trust, and desire for content personalization. *TPRC*.
- Tam, K. Y., & Ho, S. Y. (2006). Understanding the impact of web personalization on user information processing and decision outcomes. *MIS quarterly*, 865-890.
- Towers, A., & Towers, N. (2021). Framing the customer journey: touch point categories and decision-making process stages. *International Journal of Retail & Distribution Management*.
- Tyrväinen, O., Karjaluoto, H., & Saarijärvi, H. (2020). Personalization and hedonic motivation in creating customer experiences and loyalty in omnichannel retail. *Journal of Retailing and Consumer Services*, 57, 102233.
- Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multi-channel retailing to omni-channel retailing: introduction to the special issue on multi-channel retailing. *Journal of retailing*, 91(2), 174-181.
- Verhoef, P. C., Neslin, S. A., & Vroomen, B. (2007). Multichannel customer management: Understanding the research-shopper phenomenon. *International journal of research in marketing*, 24(2), 129-148.
- Vesanen, J. (2007). What is personalization? A conceptual framework. *European Journal of Marketing*, 409-418.

Wagner, G., Schramm-Klein, H., & Steinmann, S. (2013). Effects of cross-channel synergies and complementarity in a multichannel e-commerce system—an investigation of the interrelation of e-commerce, m-commerce and IETV-commerce. *The international review of retail, distribution and consumer research*, 23(5), 571-581.

Wedel M., Kannan P. K. 2016. Marketing analytics for data-rich environments. *Journal of Marketing* 80 (6): 97–121.

Wu, J., Song, S., & Whang, C. H. (2021). Personalizing 3D virtual fashion stores: Exploring modularity with a typology of atmospherics based on user input. *Information & Management*, 58(4), 103461.

Zhang, J., & Wedel, M. (2009). The effectiveness of customized promotions in online and offline stores. *Journal of marketing research*, 46(2), 190-206.

Zhang, J., Farris, P. W., Irvin, J. W., Kushwaha, T., Steenburgh, T. J., & Weitz, B. A. (2010). Crafting integrated multichannel retailing strategies. *Journal of interactive marketing*, 24(2), 168-180.

Reports and statistics

8th International GSOM Emerging Markets Conference - 2021 (GSOM EMC 2021), St. Petersburg, October 4-5, 2021. Smirnova M. M., Alkanova O. N., Golovacheva K. S., Gogua M. M. Round table: Personalization in Marketing.

EY. 2021. How organizations can benefit from trusted data. EY, April 29. Retrieved from https://www.ey.com/en_gl/consulting/how-organizations-can-benefit-from-trusted-data (accessed 04.01.2022).

HBR. (2016). How to Make the Most of Omnichannel Retailing. HBR, August. Retrieved from <https://hbr.org/2016/07/how-to-make-the-most-of-omnichannel-retailing> (accessed 17.03.2022).

Leading criteria used for targeting website visitors or users to personalize experiences according to marketing professionals in the United States 2020. Statista. Retrieved from <https://www.statista.com/statistics/809019/personalization-data-usage-marketers-worldwide/> (accessed: 13.03.2022).

McKinsey. (2020). The end of shopping's boundaries: Omnichannel personalization. McKinsey, February 10. Retrieved from <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/the-end-of-shoppings-boundaries-omnichannel-personalization>

McKinsey. (2021). Omnichannel shopping in 2030. McKinsey, April 9. Retrieved from <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/omnichannel-shopping-in-2030> (accessed 12.03.2022).

Mobile retail e-commerce sales in the United States from 2019 to 2025. Statista. Retrieved from <https://www.statista.com/statistics/249855/mobile-retail-commerce-revenue-in-the-united-states/> (accessed: 13.03.2022).

Sales via social media. (2019) [In Russian] REES46. Retrieved from <https://rees46.com/blog/ecommerce-trends-2018-2019/> (accessed: 12.04.2022).

UNESCO. 2018. A Global Framework of Reference on Digital Literacy Skills for Indicator. UNESCO, June. <http://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf> (accessed 04.01.2022).

VC. (2021) [In Russian] The Russians buy clothes most frequently at the Internet shops. VC. December 1. Retrieved from <https://vc.ru/trade/327600-rossiyane-chashche-vsego-pokupayut-v-internete-odezhdu-lyubyat-besplatnuyu-dostavku-i-sami-zabirat-zakazy-issledovanie> (accessed: 18.04.2022).

News

Forbes (2021). Social Media Has Over-Promised, But Under-Delivered For Retailers. Here's The Fix. Forbes, May 23. Retrieved from <https://www.forbes.com/sites/pamdanziger/2021/05/23/social-media-has-over-promised-but-under-delivered-for-retailers-heres-the-fix/?sh=5f71f31f1168> (accessed 17.03.2022).

Wells L. 2021. How to use Tik Tok, Instagram and other social media to launch a business. CNBC. December 5. Retrieved from <https://www.cnbc.com/2021/12/05/how-to-use-tik-tok-instagram-and-other-social-media-to-launch-a-business.html> (accessed January 4, 2022).

APPENDICES

Appendix 1. Questionnaire

ИССЛЕДОВАНИЕ ОТНОШЕНИЯ ПОКУПАТЕЛЕЙ К ТЕХНИКАМ В ОНЛАЙН-РИТЕЙЛЕ

Благодарим Вас за согласие принять участие в исследовании. Исследование проводится в рамках написания магистерской диссертации.

Данный опрос посвящен изучению поведения потребителей во время покупок в интернете.

В данном опросе нет правильных или неправильных ответов, нас интересует Ваше искреннее мнение.

Заполнение анкеты займет примерно 15-20 минут.

Ваши ответы будут анонимными, а собранные данные будут использоваться исключительно в научных целях.

Мы благодарим Вас за сотрудничество!

Раздел 1. Общие вопросы про онлайн-покупки

Q1. Что из перечисленного Вы покупаете в интернете?

Укажите все подходящие варианты.

1	Одежду
2	Продукты питания
3	Готовую еду из кафе/ресторанов
4	Косметику
5	Технику и электронику
6	Товары для дома и ремонта (мебель, предметы интерьера)
7	Книги и канцелярию
8	Билеты (авиа, ж/д)
9	Билеты (театры, концерты)
10	Бронь гостиничного номера
11	Товары для животных (корм, игрушки, аксессуары)
12	Товары для детей и мам
13	Аксессуары (бижутерия, украшения)

14	Приложения (софт (например, Microsoft Office), игры)
15	Товары для машины, запчасти
16	Лекарства и медицинские препараты
98	Другое (уточните)

Q2. Где именно Вы совершали онлайн-покупки за последние 3 месяца?

Укажите все подходящие варианты.

1	В российских интернет-магазинах
2	В зарубежных интернет-магазинах (в том числе через сайты-посредники)
3	В «интернет-магазинах» в социальных сетях (например, Instagram, Facebook, Vkontakte и др.)
4	В «интернет-магазинах» в мессенджерах (например, WhatsApp, Telegram и др.)

Q3. Насколько Вы согласны со следующими утверждениями? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

	При совершении покупок в интернете...
1	... мне нравится быть постоянным клиентом одного и того же интернет-магазина
2	... я предпочитаю регулярно пользоваться услугами одного и того же интернет-магазина
3	... я готов(а) приложить дополнительные усилия, чтобы совершать операции в одном и том же интернет-магазине

Q4. Планируя купить что-либо, как часто Вы делаете следующее: (1-никогда, 5-постоянно)

1	Ищу в интернете выгодные предложения (например, купоны) и промокоды для покупки товаров и услуг
2	Просматриваю сайты, на которых агрегируется информация о скидках и специальных предложениях
3	Использую сайты и приложения, которые позволяют сравнивать цены и характеристики товаров и услуг

Q5. Насколько Вы согласны со следующими утверждениями? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

1	В онлайн-магазинах сейчас представлено так много брендов, что я иногда чувствую растерянность
2	Я не всегда могу точно разобраться, какие бренды выбрать в онлайн-магазинах
3	Из-за изобилия онлайн-магазинов порой становится сложно решить, где именно совершать покупки

Q6. Насколько Вы согласны со следующими утверждениями о качестве товаров и услуг, которые Вы приобретали в интернет-магазинах? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

1	Качество большинства товаров и услуг, которые я покупаю в интернете, соответствует моим ожиданиям.
2	Я удовлетворен(а) качеством большинства товаров и услуг, которые покупаю в интернете.

Q7. Насколько Вы согласны со следующими утверждениями? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

1	В целом я очень доволен(льна) опытом совершения покупок онлайн.
2	Опыт совершения покупок онлайн соответствует моим представлениям об идеальном обслуживании.
3	Опыт совершения покупок онлайн оправдывает мои ожидания.

Q8. Насколько Вы согласны со следующими утверждениями? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

1	Я доверяю большинству интернет-магазинов
2	Я могу положиться на большинство интернет-магазинов
3	Большинство интернет-магазинов ведут себя честно
4	Большинство интернет-магазинов надежны

Q9. С какими из перечисленных функций/технологий Вы сталкивались при совершении онлайн-покупок?

Укажите все подходящие варианты.

1	Рекомендации на основе истории поиска
2	Рекомендации похожих продуктов
3	Реклама и рекомендации продуктов на основе геолокации
4	Возможность проконсультироваться с менеджером перед покупкой
5	Чат-боты для решения вопросов до совершения покупки
6	Push-уведомления с рекомендациями и скидками на мобильном телефоне
7	Рассылки по электронной почте с рекомендациями и скидками
8	Обращение к покупателю по имени
9	Персональные рекомендации и предложения на сайте интернет-магазина
10	Рекомендации продуктов, основанные на статистике покупок других пользователей, похожих на меня по вкусам и предпочтениям
11	Мессенджеры для общения с менеджерами

12	Мобильное приложение
13	Возможность внести изменения в стандартные параметры товара (цвет, материал и т.д.)
14	Корзина
15	Рекомендации продуктов, дополняющих те, которые я ищу или покупаю
16	Рассылки в соц. сетях с рекомендациями и скидками
17	Персонализация методов доставки и оплаты
18	Рекомендации и реклама на основе истории действий в соц.сетях
19	Другое

Раздел 2. Вопросы про персонализацию

Р1. Знаком ли Вам термин персонализация?

1	Да
2	Нет
3	Затрудняюсь ответить

Р2. Приведите пример персонализации в интернет-магазине. Вопрос показывается, если Р1 = 1.

Открытый вопрос

Р3. Что у Вас ассоциируется с персонализацией в интернет-магазине?

Открытый вопрос

Раздел 3. Вопросы про персонализацию во время покупки

Сценарий 1

Представьте, что вы собираетесь купить одежду, и интересующий Вас товар можно купить в обычном интернет-магазине.

Вам будет предложено оценить важность функции интернет-магазинов на этапах до, во время и после покупки товара.

Q10. Как часто вы покупаете одежду?

1	Один или несколько раз в неделю
2	Два-три раза в месяц
3	Один раз в месяц
4	Несколько раз в год

Q11. Как часто вы покупаете одежду в интернет-магазине?

1	Один или несколько раз в неделю
---	---------------------------------

2	Два-три раза в месяц
3	Один раз в месяц
4	Несколько раз в год
5.	Никогда

C1. Прежде всего, вы хотели бы узнать больше информации об интересующем Вас товаре. Насколько важно для Вас, чтобы интернет-магазин использовал перечисленные ниже инструменты во взаимодействии с Вами на этом этапе?

1.	Рекомендации на основе истории поиска
2.	Рекомендации похожих продуктов
3.	Реклама и рекомендации продуктов на основе геолокации
4.	Возможность проконсультироваться с менеджером перед покупкой
5.	Чат-боты для решения вопросов до совершения покупки
6.	Push-уведомления с рекомендациями и скидками на мобильном телефоне
7.	Рассылки по электронной почте с рекомендациями и скидками
8.	Обращение к покупателю по имени
9.	Персональные рекомендации и предложения на сайте интернет-магазина
10.	Рекомендации продуктов, основанные на статистике покупок других пользователей, похожих на меня по вкусам и предпочтениям
11.	Мессенджеры для общения с менеджерами
12.	Мобильное приложение

Шкала оценки:

1	2	3	4
Совершенно не важно	Здорово, если они есть, но отсутствие функции для меня не критично	Желательно, чтобы эта функция была	Очень важно, чтобы эта функция была

C2. Вы определились с выбором продукта и находитесь в процессе совершения покупки. Насколько важно для Вас, чтобы интернет-магазин использовал перечисленные ниже инструменты во взаимодействии с Вами на этом этапе?

1.	Возможность внести изменения в стандартные параметры товара (цвет, материал и т.д.)
2.	Чат-боты для решения вопросов во время совершения покупки
3.	Персонализация методов доставки и оплаты

4.	Корзина
5.	Рекомендации похожих продуктов
6.	Обращение к покупателю по имени
7.	Персональные рекомендации и предложения на сайте интернет-магазина
8.	Возможность проконсультироваться с менеджером
9.	Мобильное приложение
10.	Рекомендации продуктов, дополняющих те, которые я ищу или покупаю

Шкала оценки:

1	2	3	4
Совершенно не важно	Здорово, если они есть, но отсутствие функции для меня не критично	Желательно, чтобы эта функция была	Очень важно, чтобы эта функция была

С3. Вы совершили покупку (выбрали товар и оплатили его). Насколько важно для Вас, чтобы интернет-магазин использовал перечисленные ниже инструменты во взаимодействии с Вами на этом этапе?

1.	Чат-боты для решения вопросов после совершения покупки
2.	Рассылки по электронной почте с рекомендациями и скидками
3.	Обращение к покупателю по имени
4.	Мобильное приложение
5.	Push-уведомления с рекомендациями и скидками на мобильном телефоне
6.	Рекомендации продуктов, основанные на статистике покупок других пользователей, похожих на меня по вкусам и предпочтениям
7.	Мессенджеры для общения с менеджерами
8.	Рекомендации на основе истории поиска
9.	Персональные рекомендации и предложения на сайте интернет-магазина

Шкала оценки:

1	2	3	4
Совершенно не важно	Здорово, если они есть, но отсутствие функции для меня не критично	Желательно, чтобы эта функция была	Очень важно, чтобы эта функция была

С4. Насколько Вы согласны со следующими утверждениями? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

При взаимодействии с интернет-магазином в описанном выше процессе совершения покупки...

я обеспокоен безопасностью моих личных данных, собранных компанией для показа рекламы и рекомендаций.
я обеспокоен тем, что моя личная информация, собранная компанией, может быть передана 3-м лицам.
я обеспокоен тем, что моя личная информация, собранная компанией, может быть использована не по назначению.
я испытываю чувство незащищенности, когда вижу рекламу, которая отражает мои желания и вкусы.
я перестаю чувствовать себя безопасно, когда вижу рекламу, которая отражает мои желания и вкусы.
я ценю рекламу, которая помогает быстрее найти нужный мне товар.
я ценю рекламу, которая позволяет найти товары по моему вкусу и предпочтениям.
я с удовольствием смотрю рекомендации и рекламу по моим вкусам и предпочтениям.
реклама, которая совпадает с моими интересами и желаниями, делает покупки более веселыми и приятными.
я готов предоставить личные данные компании, чтобы получать рекламу и рекомендации по моим вкусам и предпочтениям.

Сценарий 2

Представьте, что вы собираетесь купить одежду, и интересующий Вас товар можно купить только в магазине в социальной сети (например, в VK).

Вам будет предложено оценить важность функции интернет-магазинов в соц.сетях на этапах до, во время и после покупки товара.

Q10. Как часто вы покупаете одежду?

1	Один или несколько раз в неделю
2	Два-три раза в месяц
3	Один раз в месяц
4	Несколько раз в год

Q11. Как часто вы покупаете одежду в магазине в соц. сетях?

1	Один или несколько раз в неделю
2	Два-три раза в месяц

3	Один раз в месяц
4	Несколько раз в год
5.	Никогда

С1. Прежде всего, вы хотели бы узнать больше информации об интересующем Вас товаре. Насколько важно для Вас, чтобы интернет-магазин в соцсети использовал перечисленные ниже инструменты во взаимодействии с Вами на этом этапе?

1.	Рекомендации и реклама, основанные на статистике покупок других пользователей, похожих на меня по вкусам и предпочтениям
2.	Рекомендации похожих продуктов
3.	Реклама и рекомендации продуктов на основе геолокации
4.	Возможность проконсультироваться с менеджером перед покупкой
5.	Чат-боты для решения вопросов до совершения покупки
6.	Push-уведомления с рекомендациями и скидками на мобильном телефоне
7.	Рассылки в соц. сетях с рекомендациями и скидками
8.	Обращение к покупателю по имени
9.	Мессенджеры для общения с менеджерами
10.	Рекомендации и реклама на основе истории действий в соц.сетях

Шкала оценки:

1	2	3	4
Совершенно не важно	Здорово, если они есть, но отсутствие функции для меня не критично	Желательно, чтобы эта функция была	Очень важно, чтобы эта функция была

С2. Вы определились с выбором продукта и находитесь в процессе совершения покупки. Насколько важно для Вас, чтобы интернет-магазин в соцсети использовал перечисленные ниже инструменты во взаимодействии с Вами на этом этапе?

1.	Возможность внести изменения в стандартные параметры товара (цвет, материал и т.д.)
2.	Чат-боты для решения вопросов во время совершения покупки
3.	Персонализация методов доставки и оплаты
4.	Корзина
5.	Рекомендации похожих продуктов
6.	Обращение к покупателю по имени

7.	Возможность проконсультироваться с менеджером
8.	Рекомендации продуктов, дополняющих те, которые я ищу или покупаю

Шкала оценки:

1	2	3	4
Совершенно не важно	Здорово, если они есть, но отсутствие функции для меня не критично	Желательно, чтобы эта функция была	Очень важно, чтобы эта функция была

С3. Вы совершили покупку (выбрали товар и оплатили его). Насколько важно для Вас, чтобы интернет-магазин в соцсети использовал перечисленные ниже инструменты во взаимодействии с Вами на этом этапе?

1.	Чат-боты для решения вопросов после совершения покупки
2.	Рассылки в соц.сетях с рекомендациями и скидками
3.	Обращение к покупателю по имени
4.	Push-уведомления с рекомендациями и скидками на мобильном телефоне
5.	Рекомендации продуктов, основанные на статистике покупок других пользователей, похожих на меня по вкусам и предпочтениям
6.	Мессенджеры для общения с менеджерами
7.	Реклама и рекомендации продуктов на основе геолокации
8.	Рекомендации и реклама на основе истории действий в соц.сетях

Шкала оценки:

1	2	3	4
Совершенно не важно	Здорово, если они есть, но отсутствие функции для меня не критично	Желательно, чтобы эта функция была	Очень важно, чтобы эта функция была

С4. Насколько Вы согласны со следующими утверждениями? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

При взаимодействии с интернет-магазином в социальной сети в описанном выше процессе совершения покупки...

я обеспокоен безопасностью моих личных данных, собранных компанией для показа рекламы и рекомендаций.

я обеспокоен тем, что моя личная информация, собранная компанией, может быть передана 3-м лицам.

я обеспокоен тем, что моя личная информация, собранная компанией, может быть использована не по назначению.
я испытываю чувство незащищенности, когда вижу рекламу, которая отражает мои желания и вкусы.
я перестаю чувствовать себя безопасно, когда вижу рекламу, которая отражает мои желания и вкусы.
я ценю рекламу, которая помогает быстрее найти нужный мне товар.
я ценю рекламу, которая позволяет найти товары по моему вкусу и предпочтениям.
я с удовольствием смотрю рекомендации и рекламу по моим вкусам и предпочтениям.
реклама, которая совпадает с моими интересами и желаниями, делает покупки более веселыми и приятными.
я готов предоставить личные данные компании, чтобы получать рекламу и рекомендации по моим вкусам и предпочтениям.

Раздел 4. Индивидуальные особенности

M1. Насколько Вы согласны со следующими утверждениями? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

1.	Я применяю разнообразные быстрые сочетания клавиш (также называются «горячие клавиши» и hot keys) в программах, которые я использую на персональном компьютере/ноутбуке.
2.	Я всегда изменяю настройки своих цифровых устройств и приложений, чтобы адаптировать их под себя.
3.	Я знаю мощность, объем памяти и размер хранилища, разрешение экрана и другие общие технические характеристики моих устройств.
4.	Я использую различные методы для хранения и организации данных (физические и облачные хранилища, классификация по папкам и т. д.).
5.	Я активно использую широкий спектр цифровых инструментов (электронную почту, чаты, SMS, социальные сети, блоги и т. д.) для общения.
6.	Я владею инструментами совместной работы в Интернете (общие календари, системы управления проектами, видеоконференции, приложения по управлению задачами, файлы с общим доступом и т. д.).
7.	Я умею создавать сложный контент из разных мультимедийных материалов (текст, фотографии, видео, музыка и т. д.) в разных цифровых форматах.
8.	Я периодически проверяю настройки безопасности на своих устройствах, в приложениях и в социальных сетях, а также меняю пароли моих личных профилей и устройств.

9.	Я всегда понимаю, какой цифровой инструмент лучше всего подходит для моих потребностей и целей в каждом конкретном случае.
----	--

M2. Насколько Вы согласны со следующими утверждениями? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

1.	В своих поездках по магазинам я покупаю именно то, что хочу.
2.	В своих поездках по магазинам я покупаю именно то, что мне нужно.
3.	Я расстраиваюсь, когда во время шопинга мне приходится идти в другой магазин(ы), чтобы завершить свои покупки. (выделилась в отдельный «фактор»)
4.	Обычно мои поездки по магазинам продуктивны.
5.	Я чувствую себя умным покупателем во время шопинга.

M3. Насколько Вы согласны со следующими утверждениями? (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

1.	Я испытываю радость во время шопинга.
2.	Мне приятнее тратить время на шопинг, чем на другие дела.
3.	Во время похода по магазинам я чувствую восторг от поиска товаров.
4.	Поход по магазинам действительно похож на побег от чего-то.
5.	Мне нравится быть погруженным в атмосферу новых товаров в магазине.
6.	Я наслаждаюсь поездкой по магазинам ради нее самой, а не только из-за вещей, которые я, возможно, куплю.
7.	Я могу продолжать ходить по магазинам, но не потому, что это необходимо, а потому, что мне этого хочется.
8.	Шопинг помогает мне забыть о своих проблемах.
9.	Для меня шопинг сродни приключению.

Раздел 6. Социально-демографические вопросы

Спасибо за Ваши ответы. Напоследок ответьте, пожалуйста, на несколько общих вопросов о Вас.

D1. Укажите свой пол

1	Мужской
2	Женский

D2. Укажите свой возраст

1	Младше 18
2	18-24
3	25-29
4	30-34
5	35-39
6	40-44
7	45-49
8	50 и старше

D3. Укажите уровень Вашего образования

1	Неполное среднее
---	------------------

2	Среднее
3	Среднее специальное
4	Неполное высшее
5	Высшее (бакалавриат или специалитет)
6	Высшее (магистратура)
7	Высшее (аспирантура)

D4. С какими из перечисленных областей наиболее тесно связана Ваша профессиональная деятельность?

1	Наука / Образование
2	Искусство / Культура
3	Здравоохранение
4	Соцобеспечение
5	Государственная служба
6	Сфера обслуживания и торговля
7	Интернет-медиа / Телевидение / Радио / Журналистика
8	Реклама / Маркетинг / Маркетинговые исследования / Консалтинг
9	Финансы
10	Сельское хозяйство
11	Промышленное производство
12	Телекоммуникации
13	ИТ
14	Доставка, сбыт, перевозки
97	Ни с одной из перечисленных

D5. Каков род Ваших занятий в настоящее время?

1	Рабочий
2	Служащий / Работник офиса / ИТР (инженерно-технический работник)
3	Педагог / Врач
4	Военнослужащий (армия, милиция, пожарная охрана и т.п.)
5	Руководитель отдела / Менеджер / Бригадир / Начальник цеха, участка
6	Директор предприятия, компании
7	Предприниматель / Владелец компании
8	Творческий работник (художник, писатель и т.п.)
9	Пенсионер
10	Домохозяйка
11	Студент/ аспирант/ учащийся
97	Другое (укажите, что именно)

D6. Есть ли у Вас дети?

1	Да
2	Нет

D7. Укажите, пожалуйста, свое семейное положение.

1	Замужем/ женат/ в гражданском браке
---	-------------------------------------

2	Не замужем/не женат/ вдовец/ вдова
---	------------------------------------

D8. Как бы Вы охарактеризовали материальное положение Вашей семьи?

1	Нам не всегда достаточно денег даже на еду
2	У нас хватает денег на еду, но купить одежду для нас - серьезная проблема
3	Нам хватает на еду и одежду, но купить телевизор, холодильник или стиральную машину нам будет сложно
4	Мы можем купить основную бытовую технику, но на автомобиль нам не хватает
5	Наших средств хватает на все, кроме таких дорогих приобретений, как квартира или загородный дом
6	У нас нет никаких финансовых затруднений, при необходимости мы можем купить квартиру или дом

D9. Оцените, насколько Вы согласны со следующими утверждениями, касающимися Вашей жизни в условиях санкций (с конца февраля 2022 г.) (1 – абсолютно не согласен(а), 5 – полностью согласен(а))

1	Я испытал(а) финансовые трудности (потеря работы, снижение доходов/увеличение расходов, повышение цен и т.д.)
2	В связи с последними новостями я ощущаю повышенный стресс и тревогу
3	Мне пришлось изменить мои привычки (урезать траты, отказаться от определенных продуктов и т.д.)

Appendix 2. Translation and sources of scales

Digital literacy scales

Competence area	Competence	Question translation
Devices and software operations	Shortcuts and hotkey usage	Я применяю разнообразные быстрые сочетания клавиш (также называются «горячие клавиши» и hot keys) в программах, которые я использую на персональном компьютере/ноутбуке
	Settings personification in software	Я всегда изменяю настройки своих цифровых устройств и приложений, чтобы адаптировать их под себя
	Knowledge of basic device specifications	Я знаю мощность, объем памяти и размер хранилища, разрешение экрана и другие общие технические характеристики моих устройств
Information and data literacy	Smart storage and organization of data	Я использую различные методы для хранения и организации данных (физические и облачные хранилища, классификация по папкам и т. д.)
Communication and collaboration	Various communication tools usage	Я активно использую широкий спектр цифровых инструментов (электронную почту, чаты, SMS, социальные сети, блоги и т. д.) для общения
	Various collaboration tools knowledge	Я владею инструментами совместной работы в Интернете (общие календари, системы управления проектами, видеоконференции, приложения по управлению задачами, файлы с общим доступом и т. д.)
Digital content creation	Complex multimedia content creation	Я умею создавать сложный контент из разных мультимедийных материалов (текст, фотографии, видео, музыка и т. д.) в разных цифровых форматах
Safety	Safety settings periodical checks	Я периодически проверяю настройки безопасности на своих устройствах, в приложениях и в социальных сетях, а также меняю пароли моих личных профилей и устройств
Problem-solving	Task-appropriate digital tools knowledge	Я всегда понимаю, какой цифровой инструмент лучше всего подходит для моих потребностей и целей в каждом конкретном случае
Source: Labazanov, R. S. (2020). The effect of user digital competence on smartphone perceived quality in the Russian market [Master Thesis]. Graduate School of Management .		

Privacy concern scale

Privacy concerns refer to the potential loss of control over personal information when released to a firm (Featherman & Pavlou, 2003; Xu et al., 2011).

English	Russian
I would be concerned about the privacy of personal information about me collected on a website like this	Я был бы обеспокоен безопасностью моих личных данных, собранных подобным веб-сайтом.
Source: Taylor, D. G., Davis, D. F., & Jilapalli, R. (2009). Privacy concern and online personalization: The moderating effects of information control and compensation. <i>Electronic commerce research</i> , 9(3), 203-223.	
I am concerned that others can find private information about me from Tmall.	Я обеспокоен тем, что моя личная информация может быть передана 3-м лицам.
I am concerned that the information I submit to Tmall could be misused.	Я обеспокоен тем, что моя личная информация может быть использована не по назначению.
Source: Chen, Q., Feng, Y., Liu, L., & Tian, X. (2019). Understanding consumers' reactance of online personalized advertising: A new scheme of rational choice from a perspective of negative effects. <i>International Journal of Information Management</i> , 44, 53-64.	

Vulnerability scale

Vulnerability arises when consumers lack a sense of control over the situation and experience a state of powerlessness, brought about by marketplace imbalances (Aguirre, et al., 2015).

English	Russian
Online personalized advertising makes me feel exposed.	Персонализированная реклама вызывает у меня чувство незащищенности.
Online personalized advertising makes me feel unsafe.	Персонализированная реклама лишает меня чувства безопасности.
Source: Chen, Q., Feng, Y., Liu, L., & Tian, X. (2019). Understanding consumers' reactance of online personalized advertising: A new scheme of rational choice from a perspective of negative effects. <i>International Journal of Information Management</i> , 44, 53-64.	

Savings in time and effort scale due to personalization

English	Russian
I value Web sites that are personalized for my usage experience preferences	Я ценю сайты, которые персонализированы под мои пользовательские предпочтения.
Source: Chellappa, R. K., & Sin, R. G. (2005). Personalization versus privacy: An empirical examination of the online consumer's dilemma. <i>Information technology and management</i> , 6(2), 181-202.	

Better product fit due to personalization

English	Russian
I value goods and services that are personalized based on information that is collected about me.	Я ценю товары и услуги, которые персонализированы на основе данных обо мне.
Source: Chellappa, R. K., & Sin, R. G. (2005). Personalization versus privacy: An empirical examination of the online consumer's dilemma. <i>Information technology and management</i> , 6(2), 181-202.	

Hedonic value from personalization

English	Russian
I can feel the pleasure to get personalized information.	Я чувствую радость, когда вижу информацию и рекламу по моим вкусам и предпочтениям.
I can experience more fun and lively shopping.	Реклама, которая совпадает с моими интересами и желаниями, делает покупки более веселыми и приятными.
Source: Lee, J. M., & Rha, J. Y. (2016). Personalization–privacy paradox and consumer conflict with the use of location-based mobile commerce. <i>Computers in Human Behavior</i> , 63, 453-462.	

Consumer willingness to share personal information

English	Russian
I am comfortable providing information about me to this firm in return for personalized services and products.	Я готов предоставить личные данные компании, чтобы получать рекламу и рекомендации по моим вкусам и предпочтениям.
Source: Chellappa, R. K., & Sin, R. G. (2005). Personalization versus privacy: An empirical examination of the online consumer's dilemma. <i>Information technology and management</i> , 6(2), 181-202.	

Rankings of personalization techniques

English	Russian
<ol style="list-style-type: none"> 1. Not important at all 2. Nice to have 3. Somewhat important 4. Critically important (essentials) 	<ol style="list-style-type: none"> 1. Совершенно не важны 2. Здорово, если они есть, но отсутствие функции для меня не критично 3. Желательно, чтобы эта функция была 4. Очень важно, чтобы эта функция была
Sources: Taherdoost, H. (2019). What is the best response scale for survey and questionnaire design; review of different lengths of rating scale/attitude scale/Likert scale. <i>Hamed Taherdoost</i> , 1-10.	

List of personalization techniques considered in the research

1. Рекомендации на основе истории поиска
2. Рекомендации похожих продуктов
3. Реклама и рекомендации продуктов на основе геолокации
4. Возможность проконсультироваться с менеджером перед покупкой
5. Чат-боты для решения вопросов до совершения покупки
6. Push-уведомления с рекомендациями и скидками на мобильном телефоне
7. Рассылки по электронной почте с рекомендациями и скидками

8. Обращение к покупателю по имени
9. Персональные рекомендации и предложения на сайте интернет-магазина
10. Рекомендации продуктов, основанные на статистике покупок других пользователей, похожих на меня по вкусам и предпочтениям
11. Мессенджеры для общения с менеджерами
12. Мобильное приложение
13. Возможность внести изменения в стандартные параметры товара (цвет, материал и т.д.)
14. Корзина
15. Рекомендации продуктов, дополняющих те, которые я ищу или покупаю
16. Рассылки в соц. сетях с рекомендациями и скидками
17. Персонализация методов доставки и оплаты
18. Рекомендации и реклама на основе истории действий в соц.сетях

Based on source: 8th International GSOM Emerging Markets Conference - 2021 (GSOM EMC 2021), St. Petersburg, October 4-5, 2021. Smirnova M. M., Alkanova O. N., Golovacheva K. S., Gogua M. M. Round table: Personalization in Marketing.