



A COMPARISON OF PRODUCT PERSONALIZATION AND PRODUCT CUSTOMIZATION: A CONCEPTUAL FRAMEWORK*

ÜRÜN KİŞİSELLEŞTİRME VE ÜRÜN ÖZELLEŞTİRMENİN KARŞILAŞTIRILMASI: KAVRAMSAL BİR ÇERÇEVE

Seyfettin ANMAÇ¹

Abstract

Personalization is the adaptation of products or services to the preferences of the customer in terms of some features. Individualization in products and services is called product personalization when it is initiated by the company and product customization when it is initiated by the customer. In this study, product personalization and product customization are discussed and compared as two different personalization concepts. Based on literature review it is pointed out that whereas product personalization is a process initiated by the company, based on customer data, where the control is in the company and focused on personalized experience; product customization is a process initiated by the customer, based on customer preferences, where the customer is in control and focused on the flexibility and options of the user.

Key Words : Personalization, Customization, Personalized Marketing

Jel Classification : M30, M31

Öz

Kişiselleştirme ürün veya hizmetlerin bazı özellikleri bakımından müşterinin tercihlerine daha uygun hale getirilmesidir. Ürün ve hizmetlerde bireyselleştirme şirket tarafından yapıldığında ürün kişiselleştirme, müşteri tarafından yapıldığında ise ürün özelleştirme olarak adlandırılmaktadır. Bu çalışmada ürün kişiselleştirme ve ürün özelleştirme iki farklı kişiselleştirme kavramı olarak ele alınmış ve karşılaştırılmıştır. Literatür taraması sonucunda ürün kişiselleştirmenin firma tarafından başlatılan, müşteri verisine dayanan, kontrolün şirkette olduğu, kişiselleştirilmiş deneyime odaklanan bir süreç iken; ürün özelleştirmenin ise müşteri tarafından başlatılan, müşteri tercihlerine dayanan, kontrolün müşteride olduğu, kullanıcının esnekliğine ve seçeneklerine odaklanan bir süreç olduğu belirtilmiştir.

Anahtar Kelimeler : Ürün Kişiselleştirme, Ürün özelleştirme, Kişiselleştirilmiş Pazarlama

Jel Kodlar : M30, M31

* Bu çalışma “Dijital Pazarlamada Ürün Kişiselleştirme ve Ürün Özelleştirmenin Karşılaştırılması ve Müşteri Kişiselleştirme Hassasiyetine Yönelik Bir Araştırma” isimli tezden üretilmiştir.

¹ Ph.D. Research Assistant, Hakkari University, Faculty of Economics and Administrative Sciences, Business Administration, seyfettinanmac@hakkari.edu.tr, ORCID: 0000-0002-7878-1797

INTRODUCTION

The concept of personalization is quite widely used today. Personalization has a wide set of meanings, from simply having a customer's name on a company's website to customizing the product according to consumer wants and needs. Similarly, personalization technologies cover a wide range from the use of common databases to generating of a dynamic web page, from machines and algorithms that set personalized patterns to data mining (Kramer et al., 2000:45).

Personalization is a complex and comprehensive concept. While there is a basic understanding about personalization, the concept was not as well- established as other marketing concepts. There are still studies that treat personalization as a sub-set of segmentation, which does not reflect the true meaning of personalization (Chandra et al., 2022:1556-1557).

Although personalization does not yet have a globally use, it offers great potential for businesses with developments in technology and data analytics. Through these developments, businesses can make human experiences more personal during purchasing, in distribution channels, in store, in online and at every touchpoint (Boudet et al., 2019:2). It is widely accepted that personalization will bring great benefits for businesses. However, in practice, it can be expressed that businesses have yet to achieve the benefits they expect from personalization (Vesanen, 2007:415). One of the top reasons why businesses are not getting the benefits they expect from personalization is the lack of a clear understanding of personalization. Therefore, in this study, it is aimed to contribute to a better understanding of the concept by comparing product personalization and product customization concepts.

Despite the exciting opportunities that personalization offers for businesses, many marketers feel that they don't have the tools to manage the process correctly. In a study which conducted with marketing executives, only 15 percent of CMOs stated that their company was doing the right thing when it comes to personalization (Boudet et al., 2019: 2). “Another study pointed out that serving a personalized online customer experience is a top priority for marketing teams and can increase conversion and engagement substantially. However, less than 10% feel they are equipped with the right tools, skill sets, data and technology to execute successfully” (<http://personalizationprofessionals.org>). However, research shows that if adequate steps are not taken in this regard, great opportunities will be missed. In fact, companies that execute personalization correctly have stated that their revenues have increased between 5 and 15 percent, while the effectiveness of their marketing efforts has increased by 10 to 30 percent (Boudet et al., 2019: 2).

1. LITERATURE REVIEW

1.1. The Concept of Personalization

In today's difficult conditions where competition is intense, one of the most important issues for companies is to retain their customers. Retaining long-term customers is more valuable to companies and the cost of acquiring new customers is higher. Despite this fact, in an intensely competitive environment, companies are forced to strive for both. For modern businesses, there's now a new way to do both: personalization. Research shows that businesses that use personalization effectively can increase their sales by 10 percent and more, while at the same time receiving a 5 to 8 percent better return on marketing spend (Meuer et al., 2019: 2).

There are many definitions of personalization in the literature. According to the technology-based definition provided by the Personalization Consortium, personalization is the adaptation of business-customer interactions in electronic commerce using technology and customer data (Vesanen, 2007:410). Consortium of Personalization Professionals defines personalization “as the collection of user data to deliver some type of targeted user experience in real-time. This can be based on first-party data (e.g. user profile information), third-party data (e.g. browser data) or many other variations. The user of the website or app is then served customized content based on this input. While many elite organizations have done this for years using proprietary algorithms (like Amazon or Netflix), personalization has now become accessible to the “everyday” digital team via optimization engines and plugins” (<http://personalizationprofessionals.org>). Customers obtain benefits from personalization. Better experience, better satisfaction and better preferences match are some of the benefits (Wind and Rangaswamy, 2001; Arora et al., 2008). Personalization is the customization of some characteristics of a product or service so that the customer can obtain more convenience, lower cost, or some other benefit. It can be initiated by customer or firm (Peppers and Rogers, 1997). When customer personalizes the appearance and content of a website, personalization is initiated by the customer; when the company offers personalized offers and addresses the customer's name, personalization is initiated by the company (Wind and Rangaswamy, 2001). At the same time there are some risks and costs for both the company and the customer. These are privacy risks, extra investments, paying more, waiting more and spam risk (Bardakci and Whitelock, 2003; Chellappa and Sin, 2005; Vesanen, 2007; Karwatzki et al., 2017).

Marketers are increasingly applying personalization to improve performance expected from their marketing activities. But personalization is a difficult area to implement. The main reason of applying personalization is the motivation to get the benefits through one-to-one marketing and customer relationship management. Marketers try to meet their customers' expectations and avoid being perceived as spam and getting negative reaction. In this context developments in information and communication technologies offer new opportunities to collect data about customers, analyze this

data and implement personalized marketing activities (Vesanen, 2007).

Chandra et al. (2022) indicates that **the co- word analysis** of keywords that authors enlist in their publications reveals six distinct co- word (thematic) clusters consisting of 40 keywords. These are “personalized recommendation, personalized relationship, customer insights in personalized marketing, personalization–privacy paradox, personalization concept and discourse in marketing, and personalized advertising” which they are part of personalized marketing. As shown in figure 1 and pointed out in the study, co-word cluster 5 (purple network) shows that the concept of personalization, customization and one-to-one marketing is prominent in terms of its importance, centrality, and omnipresent occurrence.

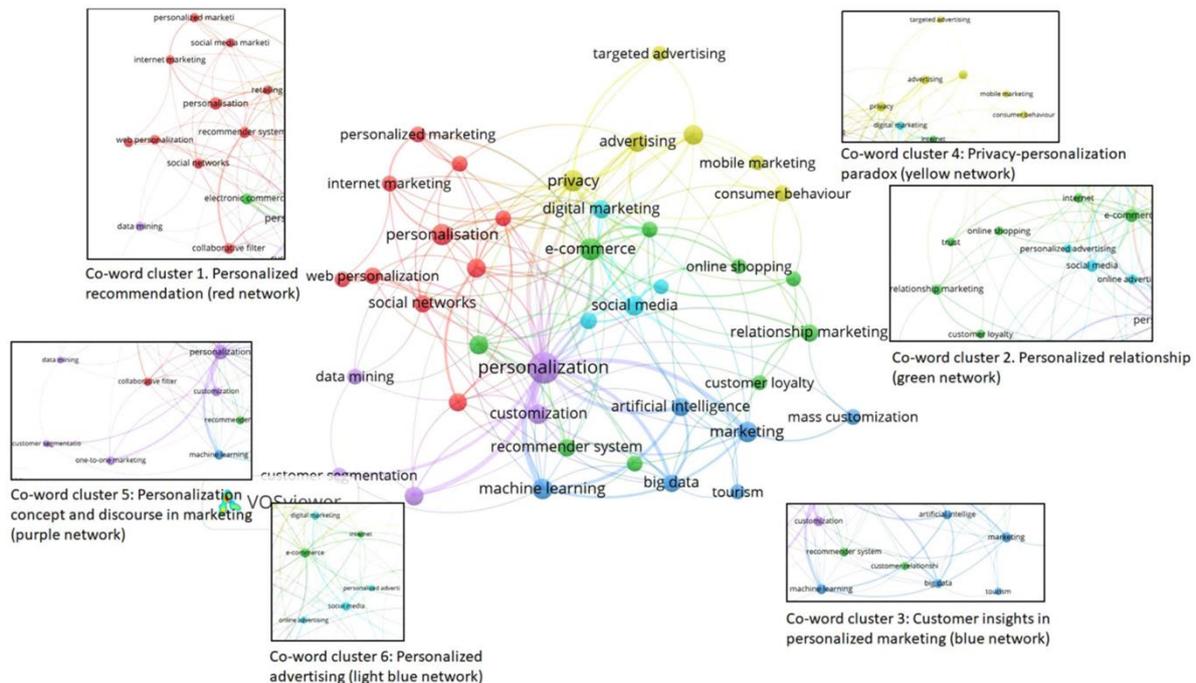


Figure 1. Chandra et al. (2022)

The basic assumption in personalization is that personalized products provide a higher degree of satisfaction than standard products, which in turn provide a better match for consumer preferences. Of course, there is one basic condition for the realization of this assumption and that is to reach the correct customer information (Franke et al., 2009:103). At this point, developing information technologies offer companies the opportunity to individualize products and services they offer to customers by using customer information. One-to-one marketing and personal offerings encourage customers to visit companies' internet addresses, reach more content and finally their purchase behavior (Tam and Ho, 2005: 271).

Personalization basically depends on two factors. The first one is the company's ability to obtain and process customer information and the second is the customer's willingness to share information and use personalization services (Chellappa and Sin, 2005: 182).

A Comparison Of Product Personalization And Product Customization: A Conceptual Framework

There are some concerns that come with personalization. One of them is the violation of privacy. Personalization is basically based on information collected from customers, which can create a discomfort for the customers that their personal information is being used. The second problem is that personalization is a costly, expensive process. The process requires data collection and the use of expensive software using this data. It is also a problem for the companies whether the personalization is executed correctly or not. A book or another product recommended to the customer based on his/her personal information may have been incorrectly recommended (Arora et al., 2008:308).

1.2. Product Personalization and Product Customization

In the literature, product personalization and product customization have sometimes been used interchangeably, and sometimes they have been used to refer two different things. Some studies imply product personalization as a specific form of product differentiation which tailors a solution for a particular person, whereas product customization has been defined as combining personalized information and flexible product design. As such, customization is specified as a part of personalization (Vesanen, 2007:412). Another study stated that there is no significant difference between product personalization and product customization and that two concepts cannot be separated from one another. Personalization is defined as customizing a feature of a product or service to offer more convenient, lower cost and some other additional benefits for the customer; product customization is considered as treating a particular customer in a different way based on the interaction created (Peppers et al., 1999, as cited in Vesanen, 2007:412). Allen et al. (1998) implies that while personalization is firm-driven customization is customer-driven.

Since the studies of the field is comparatively new, the concept of personalization and customization are still developing. Some researchers uses personalization and customization interchangeably, whereas some underline their difference. “Among researchers who define personalization and customization as separate concepts, the consensus seems to be that the term personalization is used in three instances; (i) in company-driven processes; (ii) when marketing, especially personalized communication, is studied; and (iii) in the internet environment. Customization is perceived as an activity controlled by users, for example, configuring the content of a website, whereas mass customization focuses mainly on tailor-making of products emphasizing affordable prices” (Sunikka and Bragge, 2012:1054)

Applying a company's marketing mix to an individual customer is crucial for one-to-one marketing. In this regard, in the studies that distinguish the two concepts, personalization is defined as the need for the company to decide which marketing mix is appropriate for the customer, while customization is evaluated as the customer proactively determining the components of his/her own marketing mix. While decisions about personalization are based on previous data about the customer, customization is made by the customer (Arora, 2008:305).

Amazon's personalized book and music recommendations, for instance, are good examples of personalization. Here, a list of recommendations is created based on information obtained from the customer and the customer does not have any proactive contribution to the generation of this list. In customization, as in the case of Dell, customers can determine the characteristics of the computer they will order. In a way they can create their own computers. While the New York Times magazine personalizes article options for its readers based on customer information (product personalization), Yahoo customers can decide for themselves which stocks must appear in the stock section based on the background of their pages (product customization) (Arora, 2008:305).

Senin için önerilen ürünler ve fırsatlar

Xiaomi FlipBuds Pro Kulak İçi Kablosuz Kulaklık, Aktif Gü...
%14 Fırsat
1.249,00 TL
 Önceki: 1.454,49 TL

PHILIPS
 Philips

Electrolux Pure C9 PC91-ALRG Toz Torbasız Elektrik...
6.299,00 TL

PUMA Roma Basic Low Boot Erkek
853,00 TL 'den başlayan fiyatlar

Figure 2. Example of Personalization: Amazon

Amazon personalizes their App's home page (Figure 2) using their customers recent shopping and visits. This feature improves customer experience and increases customer satisfaction.

Product customization is used in numerous industries. A large number of restaurants allow their customers to make changes to existing menus. A study shows that 81 percent of motorcycle users want to adjust the seats to suit them. Sporting goods giant Adidas is another company that uses customization. Faced with intense competition to develop new products that are suitable for its customers, Adidas has adopted a strategy that allows its customers to participate in the production process of shoes. A study on this subject indicated that customers choose these shoes rather than standard ones. Companies like Spreadshirt and Levis allow customization in garments. Customers can

A Comparison Of Product Personalization And Product Customization: A Conceptual Framework

specify their preferences and make changes to the products. IKEA and Bemz Furniture have established a strategic partnership to produce furniture products that are tailored to customer needs and engage the customer (Arora, 2008:305).

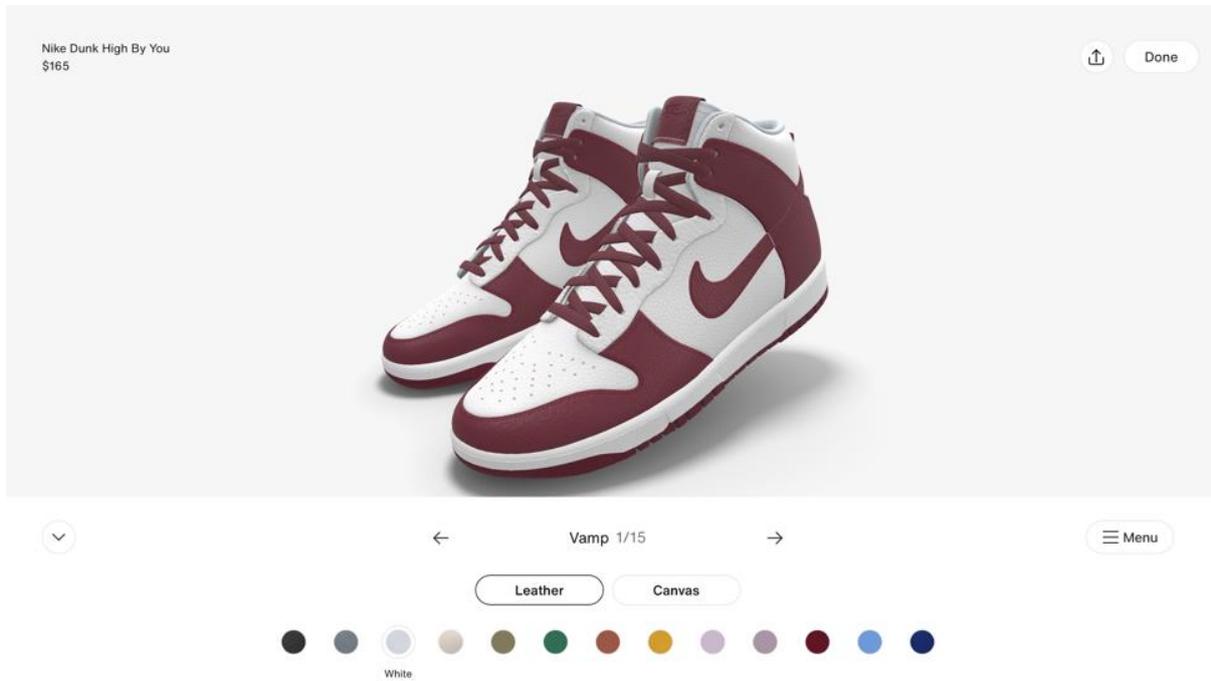


Figure 3. Example of Customization: Nike

Nike gives a tool to its customers to modify existing products (Figure 3). Using that tool customers get a chance to create their personalized products based on their preferences.

One of the key features that distinguishes personalization from customization is that personalization uses customer data analyzed statistically in order to estimate customer responses to prices, promotions, or marketing communications. At this point, companies must solve two problems; the first one is the question of the accuracy of estimates. That's because personalization is based on the logic of matching the right marketing activity with the right customer. At this point, if the cost of miscategorization is big, it could be a better option for the company not to do personalization. For example, annoying and distracting a customer by recommending books they're not interested in can produce worse outcomes than not recommending them to the same customer at all. The second problem is how far the company should go in one-to-one marketing and what limits of the company will be in this regard (Arora, 2008:310).

Product personalization and product customization can be categorized as two different types of one-to-one marketing. Personalization happens in a case a business decides which marketing mix is right for each of its customers; customization takes place in case a customer proactively tailors the components of the marketing mix to him/her (Arora, 2008:306).

In this study the differences between personalization and customization is summarized in table 1:

Table 1. Personalization vs Customization

Personalization	Customization
A firm-initiated concept	A customer-initiated concept
Based on customer data	Based on customer preferences, needs
The control is in the company	The control is in the customer
Firm driven (the firm develops personalized offerings)	Customer driven (the customer decides on the features of the offerings)
Focuses on highly personalized experience	Focuses on user's flexibility and options
No efforts needed from user	Efforts needed from user

A critical question for companies is when to use product customization or product personalization strategies. At this point, the data collected, and the nature of this data are very important. In fact, personalization is possible when reliable and collectable customer data is obtained. Otherwise, product customization is considered a better option. When there is not enough data about the customer, letting customer to execute personalization can be considered a more appropriate strategy for businesses. However, to do this the business must offer the customer the tools to personalize.

Another important related question for businesses is which marketing components should be personalized and which ones should be customized. Personalizing the price and customizing the product seems to be a good option for the company, but in this case too, consumer reactions are critical (Arora, 2008:318).

One of the potential disadvantages of product customization is undoubtedly the cost. For instance, customized Adidas shoes cost about 30 percent more compared to regular ones. The question that needs to be answered here is whether the output from the implemented strategy can overcome the cost or not. Customization can also complicate the purchasing decision by making the product selection process more complex. Studies show that there is a tension between the higher benefit of the customer and the more complex decision-making process. Another problem with customization is the possibility of increasing customer expectations. For example, the BMW customer may want everything to be customised from the inside to the outside of the car (Arora, 2008:309).

A Comparison Of Product Personalization And Product Customization: A Conceptual Framework

Some personalization models and recommendations developed in the literature of personalization is based on the depth of product assortment and the intensity of customer-company interaction. However, some studies show that product assortment can create an excessive amount of information requirement for the customer after a certain point. Moreover, customers show a heterogeneous distribution when it comes to willingness and ability to participate in the personalization process. This often results in customer confusion and waste of operating resources (Ricotta and Costabile, 2007:6). There are also some issues with product personalization, one of them is the misconception that product assortment automatically delivers greater value to the customer. The findings suggest that in such a case an undesirable confusion may arise for the customer (Dellaert and Stremersch, 2005:219). Studies show that some customers get additional value by interacting with companies and creating products together, while some of them are disappointed because their expertise and product involvement is low. After all personalization can result in confusion and customer dissatisfaction (Ricotta and Costabile, 2007:7).

2. CONCLUSIONS

The question of to what extent the company should make product personalization and to what degree product customization is another question that businesses need to find an answer. Also, should personalization be done at the individual level, segment level, or somewhere in between? The solution of this problem depends on an accurate prediction of consumer preferences and choices, as well as information about economic and psychological factors. The same issue applies to product customization. Should the company allow its customers to customize 10%, 50% or 90% of the product? The answer to this question seems depend on the ability of the customer to choose and design the product.

All these questions briefly discussed above, are actually intended to answer a fundamental question for firms. How can firms combine both concepts? The company designs the product up to a point, personalizes it according to customer preferences, then adds some features that the customer wants to the product and makes it special for him. But what is the boundary between these two strategies? What are the factors that determine this line? To what extent should consumer be given freedom, and to what extent should the firm stand in the background? (Arora, 2008:318).

To answer all these questions a comprehensive and solid framework is needed. The lack of clear and unified definitions and terms of personalization and customization is an obstacle to the development of the field. This study aims to increase understanding of how product personalization and product customization differs. Based on the previous literature we found that two concepts differ in terms of six main title: (1) personalization is a firm-initiated concept, while customization is a customer initiated-concept; (2) personalization is based on customer data, while customization is based on customer preferences, needs and choices; (3) the control is in the company during

personalization, while the control is in the costumer during customization; (4) personalization focuses on highly personalized experience, while customization focuses on user's flexibility and options; (5) personalization is firm driven during the process, while customization is customer driven and (6) finally during personalization no efforts needed from user, but when it comes to customization efforts needed from user.

Future studies can address the relationship between product personalization, product customization and consumers' privacy concerns. The effects of privacy concerns in terms of both concepts can be discussed.

REFERENCES

- Allen, C., Yaeckel, B., & Kania, D. (1998) *Internet World Guide To One-To-One Web Marketing*. John Wiley & Sons, Inc.
- Arora, N., Dreze, X., Ghose, A., Hess, J. D., Iyengar, R., Jing, B. ... Sajeesh, S. (2008) Putting One-To-One Marketing To Work: Personalization, Customization, And Choice. *Marketing Letters*, Vol; 19, No; 3-4, p;305
- Bardakci, A. ve Whitelock, J. (2003) Mass- Customisation in Marketing: The Consumer Perspective, *Journal Of Consumer Marketing*, Vol;20, No;5, p;463-479
- Boudet, J., Gregg, B., Rathje, K., Stein, E., & Vollhardt, K. (2019) The Future Of Personalization— And How To Get Ready For It. *Recuperado el*, 12
- Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022) Personalization in Personalized Marketing: Trends And Ways Forward, *Psychology & Marketing*, Vol;39, No;8, p;1529-1562
- Chellappa, R. K. ve Sin, R. G. (2005) Personalization Versus Privacy: An Empirical Examination Of The Online Consumer's Dilemma, *Information Technology And Management*, Vol;6, No;2-3, p;181-202
- Dellaert, B. G., & Stremersch, S. (2005) Marketing Mass-Customized Products: Striking A Balance Between Utility And Complexity. *Journal Of Marketing Research*, Vol; 42, No;2, p;219-227
- Franke, N., Keinz, P., & Steger, C. J. (2009) Testing The Value Of Customization: When Do Customers Really Prefer Products Tailored to Their Preferences?, *Journal of Marketing*, Vol;73, No;5, p;103-121
- Karwatzki, S., Dytyenko, O., Trenz, M. ve Veit, D. (2017) Beyond The Personalization–Privacy Paradox: Privacy Valuation, Transparency Features, and Service Personalization, *Journal of Management Information Systems*, Vol;34, No;2, p;369-400
- Kramer, J., Noronha, S. ve Vergo, J. (2000) A User-Centered Design Approach to Personalization. *Communications of the ACM*, Vol;43, No;8, p;44-48

A Comparison Of Product Personalization And Product Customization: A Conceptual Framework

Meuer, M., Middelhoff, J., Segorbe, J., & Vollhardt, K. (2019) *The New Way to Engage With Energy Customers: Personalization At Scale*. McKinsey & Company

Peppers, D., & Rogers, M. (1997). *The One-To-One Future*. New York: Double Day Publications.

Ricotta, F., & Costabile, M. (2007). Customizing Customization: A Conceptual Framework For Interactive Personalization. *Journal Of Interactive Marketing*, Vol;21, No;2, p;6-25

Sunikka, A., & Bragge, J. (2012) Applying Text-Mining To Personalization and Customization Research Literature—Who, What And Where?. *Expert Systems with Applications*, Vol;39, No;11, p;10049-10058

Tam, K. Y., & Ho, S. Y. (2005) Web Personalization As A Persuasion Strategy: An Elaboration Likelihood Model Perspective. *Information Systems Research*, Vol;16, No;3, p;271-291

Wind, J. ve Rangaswamy, A. (2001). Customerization: The Next Revolution in Mass Customization. *Journal of Interactive Marketing*, Vol;15, No;1, p;13-32

www.personalizationprofessionals.org (Access: 21.05.2023)

Vesanen, J. (2007). What is Personalization? A Conceptual Framework. *European Journal of Marketing*, Vol;41, No;5/6, p; 409-418