



DIGITAL TRANSFORMATION AS A STRATEGY FOR STRENGTHENING AND DEVELOPING CUSTOMER RELATIONSHIPS IN A BUSINESS ENVIRONMENT

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Abstract

Digital transformation plays a key role in shaping and improving customer relationships in a modern business environment. This paper explores how digital technologies affect customer relationship management (CRM), with an emphasis on the changes they bring to communication personalization, multi-channel access, and customer support automation. Such changes contribute to greater customer satisfaction, strengthening their loyalty, and generally better business results. Digital solutions enable organizations to better understand the needs and behaviours of their users, which increases the effectiveness of business decisions. At the same time, a new business culture based on agility, innovation, and adaptation to the user experience is also developing. Despite the advantages, the digital transformation process faces challenges such as resistance within the organization, security threats, and technical obstacles. Effective implementation of digital solutions requires a clearly defined strategy, continuous employee education, and responsible data management. Digital transformation is a strategic approach that allows companies to build long-term and quality relationships with customers in an increasingly demanding market environment. The paper presents the results of a research conducted on the implementation of digital technologies in customer relationship management processes and the effects of applying digitalization in these processes.

Key words: *Digital transformation, customer relationship management (CRM), personalization, omnichannel, customer loyalty.*

Introduction

In a business environment characterized by rapid technological change, digital transformation is becoming a key factor in the competitiveness and sustainable development of companies. It does not only involve the implementation of new technologies, but also profound changes in business models, organizational culture and market relations. The importance of digital transformation in the area of customer

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relations is particularly emphasized - from the way of communication and personalization of the offer, to monitoring the user experience and creating loyalty. Traditional models of interaction with customers, which relied on physical presence, telephone communication and limited channels, are increasingly giving way to digital solutions such as CRM systems, social networks, catboats, email marketing automation and advanced analytics of user data. Companies that successfully apply digital tools not only optimize processes, but also build deeper, more personalized and long-lasting relationships with their customers. Given the accelerated digitalization of the market and changes in consumer behaviour, one of the questions that arises is whether digital transformation can serve as a sustainable strategy for strengthening and developing customer relations, and what are its key advantages and challenges? In addition to enabling more efficient communication with existing customers, digital transformation also opens the door to new markets and consumer segments that prefer digital interaction. In an era when consumers increasingly expect personalized services and availability "on demand", companies must invest in digital capabilities to remain relevant. Digital transformation thus becomes more than technology – it is a customer-centric business philosophy.

The aim of this paper is to explore the role of digital transformation in the development of customer relationships, to analyse the attitudes and habits of users in the digital environment, with an emphasis on the importance of personalization, omnichannel presence, trust in personal data management and the impact of digital user experience on brand loyalty.

Theoretical framework and literature review

Digital transformation is a process in which organizations strategically integrate digital technologies into all aspects of their business to improve business models, user experience, and internal processes. Lozić (2023) defines digital transformation as an evolutionary process that begins with the digitalization of individual processes and ends with the integration of technologies into all parts of the organization [1]. The key role is not played by the technology itself, but by the way it is used to create additional value for the organization and its stakeholders (Bharadwaj et al., 2013) [2]. Digital transformation has developed in parallel with technological progress – from basic document digitization to advanced applications of artificial intelligence, blockchain, and automation of business activities. Pihir, Križanić, and Kutnjak (2019) conclude that the digital transformation of marketing encourages better recognition and communication with consumers, but requires the strategic integration of digital tools [3]. The success of digital transformation depends not only on the technical infrastructure, but also on an organizational culture that encourages innovation, collaboration, and agility (Westerman et al., 2014) [4]. Digital transformation is a process that leads to increased operational efficiency and greater value for customers. A central element is the unification of data from multiple channels – from e-commerce and social networks to physical stores – into a single platform that provides detailed insight into customer behaviour and needs (Payne & Frow, 2005) [5]. Such integration not only provides the possibility of personalized interactions, but



also predictive analytics that identify potential risks such as customer churn in advance and allow for timely interventions. In the area of customer relations, digital transformation allows companies to understand customer needs more deeply, predict behaviour, and create personalized experiences. This not only increases customer satisfaction, but also drives their loyalty and engagement (Kotler et al., 2021) [6]. CRM (Customer Relationship Management) systems are becoming key tools for collecting, storing and analysing customer data that helps optimize marketing and sales activities, as well as building long-term relationships with customers. Modern CRM systems include sophisticated functionalities such as predictive analytics, communication automation, social media integration and real-time personalization capabilities. Artificial intelligence further improves these processes by enabling user segmentation, product recommendations and timely and relevant interaction with customers (Nguyen & Simkin, 2017) [7]. According to Lemon and Verhoef (2016), artificial intelligence enables real-time user segmentation, customization of marketing messages and optimization of offers based on behavioural analysis - what the user will want, when and how [8]. Such an approach increases the relevance of the interaction, and thus trust in the brand.

User experience plays an increasingly important role in brand differentiation. It encompasses all touchpoints that the user has with the organization, and digital transformation enables its consistent and personalized design. Consumers expect communication and content tailored to their interests, a simple user interface, and speed and efficiency. Hrustek, Kutnjak, and Križanić (2019) emphasize that user expectations increasingly require innovations in marketing processes, especially in digital channels focused on user experience [9]. Personalization is proving to be a key factor in creating engagement and loyalty – research confirms that personalized content increases conversion rates and user satisfaction (Chaffey & Ellis-Chadwick, 2019)[10]. Generic communication is no longer acceptable; users are looking for emotional connection, transparency, and an individual approach. Managing customer relationships in a digital environment also requires a multi-channel (omnichannel) approach. It is a strategy that ensures a consistent and uninterrupted user experience across all available channels – online stores, physical locations, mobile applications, social networks, call centers, etc. Verhoef et al. (2015) define omnichannel as an integrated approach that provides customers with a consistent experience, regardless of the channel of use [15]. McKinsey (2021) states that companies that have successfully integrated omnichannel strategies achieve up to 15% higher revenue per customer and up to 10% higher loyalty compared to competitors with a traditional approach [11]. It is crucial that these channels are not used in isolation, but integrated, to provide a single view of the user and enable personalized interaction at every touchpoint (Verhoef et al., 2015) [15]. Such a strategy contributes to greater efficiency of marketing and sales activities and increases customer satisfaction and loyalty. Digital transformation also brings a number of challenges that can slow down or complicate its implementation. Among the most common are technical complexity and the need for a high level of expertise and significant investments. Burilović (2020) points out that, despite technological progress, focus on end users and managing relationships with them often remain secondary topics in the process of digital transformation of the retail sector [12]. Employees often show resistance to change,



either due to insecurity or insufficient knowledge of technology. The increased amount of user data raises issues of privacy and security, which requires strict compliance with regulations such as the General Data Protection Regulation (GDPR). In addition, the different levels of digital literacy among users mean that it is necessary to balance advanced digital solutions and traditional forms of communication. In order to successfully overcome these challenges, strategic planning, continuous employee education and transparent and two-way communication with users are essential (Westerman et al., 2014). Digital transformation in the area of customer relations is a comprehensive process that encompasses technological, organizational and strategic aspects. Through the implementation of CRM systems, personalization, analytics, omnichannel approach and a focus on the user experience, companies can achieve a significant competitive advantage. However, for sustainable success, it is necessary to proactively manage challenges and invest in an organizational culture that is open to change.

Davenport and Harris (2017) emphasize the importance of data analytics in making business decisions based on user behaviour [13]. Digital transformation also introduces the concept of the ability of an organization to adapt technologies in accordance with changing user and market expectations. Digital maturity models, such as the one developed by Kane et al. (2015), allow quantifying the ability of a company to adapt to digital trends [14]. Technologies enable not only personalization, but also prediction – what the user will want, when and how. Such an approach increases the relevance of the interaction, and thus trust in the brand.

Research methodology

The methodology used in the paper explains the purpose, goal and structure of the work in more detail. The purpose of this research was to examine how users perceive the impact of digital transformation on their own user experience and on the relationship they have with brands. The main goal was to analyse the attitudes and habits of users in the digital environment, with an emphasis on the importance of personalization, omnichannel presence, trust in personal data management and the impact of digital user experience on brand loyalty. In the first part of the paper, some of the previous research is presented through a theoretical framework and literature review. The research was conducted via a survey questionnaire over a period of one month, in June 2025, in the Republic of Croatia. The survey questionnaire was created based on the results of the literature review from the previous part of the paper. It consisted of the following elements, which included: demographic data, online shopping habits, preferences in digital functionalities, satisfaction with the digital user experience, perceptions of personalization and its value, trust in data security, omnichannel presence and expectations, and the impact of digital experience on loyalty. The survey questionnaire was created in the form of a Google forms form and distributed via social networks and e-mail by sharing a link to the form. 91 respondents (N=91) participated in the study. The collected data were analysed using descriptive statistics. Based on a theoretical literature review, the following research questions were asked:



1. How often do users consume digital channels to interact with brands?
2. Which digital functionalities have the greatest impact on user satisfaction?
3. To what extent do users recognize personalization and how does it affect their perception?
4. Do users trust the way brands manage their data?
5. How does the quality of the digital user experience affect user loyalty?

The questionnaire was anonymous, and participation in the study was voluntary. Of the total number of respondents: 57.1% are women, 41.8% are men, and 1.1% do not want to disclose their gender, while the most represented age groups are 30–44 (34.1%) and 45–60 years (30.8%). The collected data were analysed using descriptive statistics to show the basic characteristics of the responses and trends among the respondents and presented graphically, followed by interpretation of the results and discussion. Questions with the possibility of multiple answers were interpreted based on the number of choices. After analysing the results, research limitations, recommendations for further research, and the conclusion of the paper were presented.

Results and analysis of the research conducted

The survey included 91 respondents, of whom 52 were women (57.1%) and 38 were men (41.8%), while one person chose the option other/ do not want to answer (1.1%). The majority of respondents were aged 30–44 (34.1%) and 45–60 (30.8%). A significant proportion were also younger respondents aged 18–29 (27.5%). The least represented group was people over 60 (7.6%). This structure corresponds to the profile of users who are regularly exposed to digital services, which is important for interpreting the results. When asked about the frequency of online shopping and digital habits, the data show that 58.3% of respondents shop online: regularly (35.2%) or very often (23.1%), while 38.5% shop occasionally, and only 3.2% never shop online. This high level of digital engagement among consumers confirms that digital channels are already deeply integrated into everyday consumer habits, making the online experience a key place to build customer relationships.

When it comes to digital service preferences, respondents most valued the availability of mobile applications (24.18%), simple user interface (19.78%), and personalized offers (17.59%), enabling shopping through multiple channels (17.58%), and chat support (12.63%). Fast and automated communication was the least represented (8.24%). The structure of the responses is shown in Figure 1.

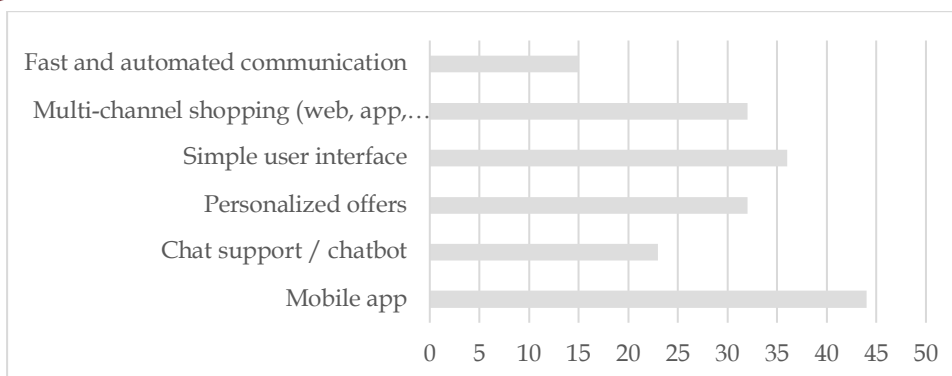


Figure 1. Digital service preferences

More than half of users (28.6%) expressed satisfaction with the digital user experience or were very satisfied (35.2%) with the services offered by the brands they use most often. On the other hand, 17.6% were dissatisfied and 8.8% were very dissatisfied, which makes a total of 26.4% of users who are not satisfied with the digital experience. 9.8% of respondents were indifferent. This indicates that the user interface, support and functionality still need to be improved, especially for the segment of users with lower digital literacy.

When asked about personalized messages according to respondents, 46.2% of respondents noticed personalization often, and an additional 24.2% occasionally, which means that around 70% of users perceive that brands adapt offers to their behaviour and interests. Also, more than three-quarters of users (75.9%) believe that personalization significantly or partially improves the user experience.

When it comes to trust in the management of personal data, 33% of users have high trust, while 30.8% have moderate trust, and 36.3% have little or no trust. This result shows that almost a third of users remain sceptical, which can negatively affect the acceptance of digital services that involve the sharing of personal information. This is a clear indication that companies need to invest more in security, transparency and communication about data management, especially in the context of personal data protection.

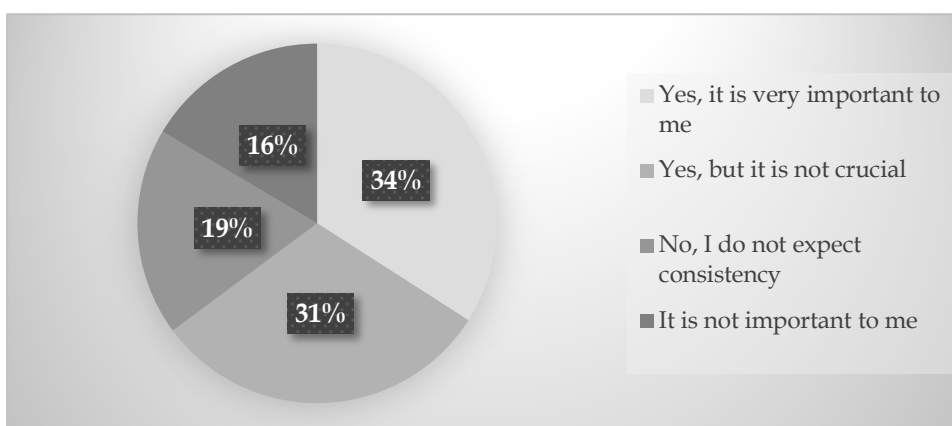


Figure 2. Multichannel communication and consistency



When asked about multi-channel communication and consistency, the majority of respondents (45.1%) regularly use multiple communication channels when interacting with the same brand, while an additional 26.4% do so occasionally. In addition, 65% of users expect the experience to be the same regardless of the channel, with 34.1% of respondents considering this very important. The results obtained indicate the importance of implementing an omnichannel strategy, which enables a consistent and integrated user experience. The structure of the responses is shown in Figure 2.

Furthermore, respondents answered questions about the impact of digital experience on their loyalty, where the results of the collected data show that digital user experience has an extremely strong impact on loyalty – 49.5% of users stated that the quality of the experience has a strong impact, and an additional 25.3% partially affects their loyalty. Only 12.1% believe that the impact of digital experience has no impact on their loyalty.

Respondents further answered questions related to the reasons for returning to the same brand in a digital environment. The results show that respondents most often return to the same brand because of personalized offers and content (23.08%) and a consistent experience across all channels (23.1%). This confirms the importance of digital personalization and an omnichannel approach in strengthening user loyalty. This is followed by ease of use of the application or website (17.58%), which highlights the importance of an intuitive and functional interface. Trust in the security of personal data (15.38%) and fast and quality support (14.29%) are also significant factors for return. Other reasons were cited by 6.57% of respondents. Users' value personalization, consistency, security and simplicity in the digital experience the most. The structure of the responses is shown in Figure 3.

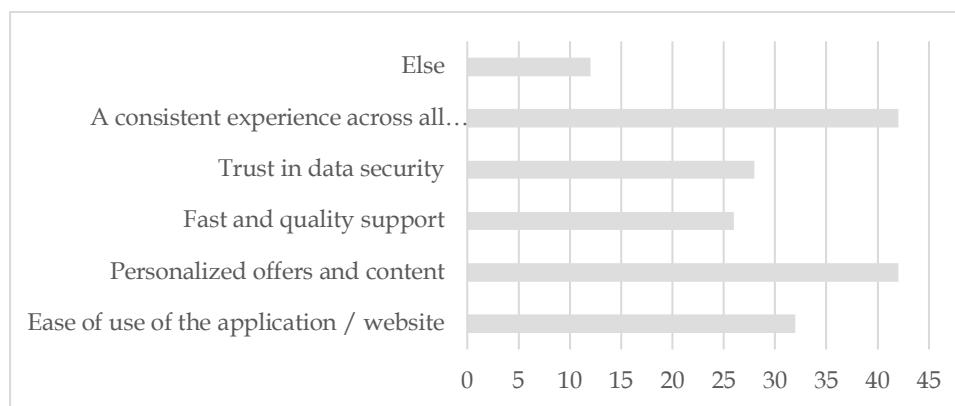


Figure 3. Elements influencing loyalty

The results of the research show that users are highly digitally active, and that their loyalty and satisfaction depend on quality and consistency, simplicity and security. Companies that strategically develop multi-channel, personalized and user-friendly systems are more likely to be successful in the long term and create relationships based on trust.



Discussion of the results

The research results confirm the theses of numerous authors (Bharadwaj et al., 2013; Kotler et al., 2021; Lemon & Verhoef, 2016) that digital transformation has a strong impact on user perception, their behaviour and the development of long-term relationships between brands and consumers. The data shows that users are increasingly consuming digital channels - almost 60% of them buy regularly or very often via the Internet, which clearly indicates a stable digital presence in consumer life. The digital functionalities that users value most include mobile applications, a simple user interface and personalized offers. This confirms the importance of user convenience and the feeling of an individualized approach, which is in line with the claims of Chaffey and Ellis-Chadwick (2019) [10] about the growing importance of personalization and emotional connection with the brand. Users perceive and positively value personalized approaches to a large extent - more than 70% of respondents notice the personalization of offers, and almost the same percentage believes that it improves the user experience. If we connect this with the fact that personalization and a consistent experience across all channels are the most common reasons for loyalty, the importance of implementing a CRM system with advanced analytics and support based on artificial intelligence is confirmed, as stated by the authors Nguyen and Simkin (2017) [7]. Despite high expectations and satisfaction, the results reveal that around 36% of respondents express little or no confidence in the management of personal data, which represents a challenge for organizations applying personalization and collecting user data. This can be connected with the need for greater transparency and consistent compliance with regulations related to the protection of personal data. The omnichannel experience question showed that customers expect consistency regardless of the communication channel - more than 65% of respondents stated this as important or very important. At the same time, the majority regularly use multiple channels, which confirms the statements of Verhoef et al. (2015) [15] on the importance of an integrated strategy in customer experience management. Digital customer experience has a direct impact on loyalty - almost 75% of respondents stated that their relationship with the brand is influenced by the quality of the digital contact. This further confirms that digital transformation is no longer an option, but a necessity to maintain competitive advantage and create value for the customer (Westerman et al., 2014) [4].

Conclusion

The results of the study show that digital transformation is key to developing quality customer relationships in a business environment. Users are looking for simple, personalized and consistent digital interactions, and their loyalty and satisfaction largely depend on the quality of these experiences. Companies that use digital technologies to build two-way, relevant and personalized relationships have a greater chance of differentiation and long-term success. The majority of respondents in this study regularly shop online and use multiple communication channels. They value mobile applications, simple user interfaces and personalized offers the most, which



indicates that users expect a high level of digital service and a customized approach. One of the key findings is the importance of personalization and omnichannel approaches for customer satisfaction and loyalty. Digital transformation that includes advanced CRM systems, user behaviour analytics and multi-channel integration can significantly contribute to the development of long-term customer relationships. At the same time, the level of user trust in the management of their personal data indicates the need for transparency, ethical data handling and compliance with regulations. Also, the results of this research indicate the need for greater trust in the protection of personal data and more transparent management of user information. A multi-channel strategy must be integrated and aligned with user expectations in terms of consistency.

When interpreting the research, the limitations of the research should be taken into account, given that the research included 91 respondents who completed a survey questionnaire. The paper used descriptive statistics and the research was conducted once. In order for the research to be representative, it is necessary to increase the sample of respondents, and conduct the research in more and longer time series so that certain changes can be correlated and further examined and analysed using more complex statistical methods. This research can be the basis for future repeated research using appropriate variables and appropriate statistical methods. It is possible to compare perceptions of digital transformation among users in different industries, investigate the impact of digital literacy and generational differences on the acceptance of personalization and automation, analyse the impact of the application of artificial intelligence on user experience and purchasing decisions, and more.

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