Research article

# Transformation of Consumer Behavior in the Era of Digital Change

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#### **Abstract**

This study analyzes the transformation of consumer behavior in the digital era. It examines the influence of digital technologies, online environments, and modern marketing tools on evolving consumer behavior patterns. Particular attention is paid to technological drivers such as artificial intelligence (AI), mobile applications, omnichannel strategies, and personalization, and their impact on decision-making processes and the development of digital loyalty.

**Keywords**: digital transformation, consumer behavior, e-commerce, artificial intelligence, personalization, sustainable consumption, social media, big data, online shopping, virtual reality, augmented reality, customer loyalty, digital literacy, gamification

#### Introduction

The ongoing digital revolution has fundamentally reshaped interactions between consumers and markets. While only 7% of global retail sales occurred online in 2010, by 2025 this share exceeds 22%, reaching \$6.3 trillion. This rapid transformation is driven by a combination of technological innovation, social changes, and economic shifts accelerated by the COVID-19 pandemic.

The relevance of this research lies in the need for a systematic analysis of emerging consumer behavior patterns influenced by AI, omnichannel strategies, and growing demand for sustainability. Data show that 63% of consumers who first engaged in online shopping during the pandemic have continued this practice, highlighting the permanence of digital transformations.

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Digital transformation affects not only technological aspects of consumption but also deeply impacts value systems, cognitive processes, and consumer motivations. Key characteristics of the new consumer behavior model include awareness, demand for personalization, convenience and speed, eco-conscious decision-making, and the use of omnichannel interactions in purchase decisions.

# Methods

The study employs a comprehensive methodological approach combining academic literature review, quantitative, and qualitative empirical data. The main method is an indepth review of scientific sources to establish a theoretical foundation and identify current trends. The analysis covers:

- Definition and classification of digital transformation
- Theories of consumer psychology in digital contexts
- Technological drivers of change (AI, VR/AR, big data)
- Related disciplines, including digital marketing, behavioral economics, and consumer sociology

Secondary analysis of market research data from 2015-2024, including the impact of COVID-19 on accelerating digital adoption, was used to validate theoretical findings. Interdisciplinary synthesis revealed links between technological innovations, socioeconomic factors, and behavioral pattern transformation.

## **Results**

#### 1. Conceptual Aspects of Digital Consumer Behavior Transformation

Digital transformation is a multifaceted process encompassing both social and technological innovations. It reshapes fundamental aspects of consumer consciousness, cognitive processes, and motivational structures. Consumer behavior now emerges from the interaction of macroeconomic conditions, personal preferences, and social group dynamics.

Contemporary consumer behavior is characterized by dynamic needs that require constant adaptation to changing environmental conditions. Transformations are driven by external factors as well as complex relationships among environmental changes, mental processes, and value systems [7].

# **Key Drivers of Transformation**

#### 1. Technological Drivers

- Internet development, mobile technologies, AI, and other digital tools radically change consumer interaction with information and brands.
- AI and machine learning enable analysis of large consumer datasets, predicting behavior and optimizing marketing strategies.
- VR/AR technologies enhance shopping experiences; for instance, IKEA uses AR to let consumers virtually place furniture at home before purchase [3].



#### 2. Socio-Economic Factors

- Social networks influence opinion formation; recommendations from friends, bloggers, and users affect purchase decisions.
- COVID-19 accelerated digital adoption; online sales rose 32% in 2020-2021, and 63% of new digital buyers maintained the habit [5].

## 2. Key Changes in Modern Consumers

- **2.1 Awareness and Digital Literacy.** Consumers are more informed due to easy access to online data, reviews, and comparisons. Decision-making often begins with online research: 87% search online before purchasing, and 71% use mobile devices to compare prices in stores [1].
- **2.2 Personalization and Individualized Experience.** Personalization is now essential. Consumers expect brands to provide relevant products and services based on past interactions. AI-driven analysis increases conversion rates by 20–30% [9]. Eighty percent of consumers are more likely to purchase from brands offering personalized experiences [2].
- **2.3 Social Influence and Review Significance.** Social networks significantly shape opinions. Forty-nine percent of consumers make purchases influenced by social media content, and 93% read reviews before buying [10].
- **2.4 Need for Convenience and Speed.** Digital consumers value fast and convenient shopping. Omnichannel expectations are standard; consumers demand seamless transitions across online, offline, and mobile channels [4]. Online retail now constitutes 22% of global retail sales and 12% in Russia [6].

Table 1. Key Aspects of Consumer Behavior Transformation in Digital Environments

Aspect	Transformation	
Awareness & Search	Active online research, access to large data volumes, nonlinear	
	decision paths	
Expectations	Instant, convenient, personalized, seamless omnichannel	
	experience	
Communication &	Shift to digital channels, quick response expectations, public	
Interaction	sharing of opinions	
Purchase Process	Growth of e-commerce/m-commerce, subscription and sharing	
	models, hybrid formats	
Brand Loyalty	Dynamic, experience-driven, influenced by personalization and	
	brand values	
Sources of Influence	Declining trust in traditional ads, growing impact of reviews,	
	influencers, UGC	
Consciousness	Ethical, socially responsible, eco-friendly choices, concerns	
	about data use	

## 3. Contemporary Trends

- **3.1 Sustainable Consumption.** Consumers increasingly consider ethical, sustainable, and socially responsible factors when purchasing. Fifty-eight percent are willing to pay 10–15% more for eco-friendly products [6], and 72% of millennials account for brand environmental responsibility [4].
- **3.2 AI and Personalized Recommendations.** AI and machine learning create highly personalized recommendations, increasing purchase likelihood and customer loyalty. Chatbots and virtual assistants provide instant support and advice.
- **3.3 Gamification and Immersive Experiences.** Gamification engages consumers via competitions, virtual rewards, and challenges. AR/VR adoption increases conversion rates by 40% (IKEA example) [1]. Forty-five percent of consumers would like to use VR/AR for product trials [11].

#### Discussion

Digital transformation has revolutionized e-commerce. Consumers increasingly prefer online shopping for convenience, wide selection, and price comparison. COVID-19 catalyzed this shift, and many consumers retained online shopping habits post-pandemic.

Consumer loyalty now depends on secure, convenient online shopping and consistent omnichannel experiences. Companies integrating online and offline presence successfully retain loyal customers.

## Conclusion

Consumer behavior transformation in the digital era is complex and multifaceted. Modern consumers are informed, demanding, and technologically savvy, expecting personalization, convenience, speed, and ethical standards from brands.

Future trends will be shaped by AI, VR/AR, and evolving social and environmental values. Companies adapting to these changes with innovative, personalized, and ethical experiences will gain a competitive advantage.

#### References

- 1. Akhmetova, Z. B., Kozhamkulova, Zh. T., & Kim, I. A. (2022). Transformation of consumer behavior in the context of economic digitalization: Quantitative analysis. *Vestnik Universiteta Turan*, 4(96), 116–129. https://doi.org/10.46914/1562-2959-2022-1-4-116-129
- 2. Bondarenko, V. A., & Galazova, S. S. (2023). Features of consumer behavior: Classical approaches and current interpretation. *Economy of Sustainable Development*, 4(56), 41–43.
- 3. Koznov, A. B. (2024). Transformation of consumer behavior in the digital economy era. *Vestnik Akademii Znanii*, 2(61), 219–221.
- 4. Panasenko, S. V. (2022). Study of consumer behavior in the digital generation. *Plekhanov Scientific Bulletin*, 2(22), 54–58.
- 5. Plotnikov, V. A. (2022). Transformation of consumer behavior under COVID-19. *Izvestiya SPb State Economic University*, 5–1(137), 108–114.



- 6. Rozanova, N. M. (2024). Modern consumer in the digital economy. *Vestnik Institute of Economics RAS*, 3, 26–46. https://doi.org/10.52180/2073-6487\_2024\_3\_26\_46
- 7. Trushkova, E. A. (2024). Digital transformation of consumer behavior: Factors and adaptation features. *Corporate Governance and Innovation Development of Northern Economy: Vestnik*, 4(4), 459–467. https://doi.org/10.34130/2070-4992-2024-4-4-59
- 8. Fedosenko, A. A. (2023). Modern consumer behavior in Russia: Features and trends. *Marketing in Russia and Abroad*, 4, 4-12.
- 9. Shevchenko, D. A. (2023). Evolution of consumer behavior paradigms in the digital era. *Economic Systems*, 16(2), 26–36. https://doi.org/10.29030/2309-2076-2023-16-2-26-36
- Grishaeva, S. A., Beregovskaya, T. A., & Kvachko, A. V. (2022). Consumer behavior in the digital environment: New forms of society segmentation. *Lecture Notes in Networks and Systems*, 398, 213–219. https://doi.org/10.1007/978-3-030-94870-2\_28
- 11. Shabbir, M. S., et al. (2024). The impact of digital transformation on consumer behavior: E-commerce trends and customer loyalty post-pandemic. https://doi.org/10.2139/ssrn.4960412