

The Influence of Digital Age on Consumers' Purchasing Preference

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Abstract. This study mainly discusses the impact of the digital age on consumer preferences. The research aims to help enterprises better understand consumer demands and make timely strategic adjustments to avoid unnecessary profit losses. Studying the changes in consumer preferences in the digital age can enhance consumers' loyalty to enterprise products. Moreover, enterprises producing goods based on consumer preferences can avoid resource waste. This study explains the changes in consumer preferences in the digital age through three aspects: channel preference, product selection, and payment method. It also employs data analysis methods. Firstly, it designs indicators for these three aspects and finds data to draw graphs and analyze trends and finally reaches conclusions. This research analyzes the changing trends of global consumers' preferences in channels, product selection, and payment methods by statistically analyzing the trends of each indicator by year and presenting them in graphs. Through the analysis of these three aspects, it observes the changing trends of global consumers' preferences. This research enriches the research methods, breaks away from the traditional questionnaire form, and uses data to explore changes in consumer preferences, making the research conclusions more scientific. Moreover, this research adopts an interdisciplinary approach, integrating psychology, sociology, and data science to conduct a broader and deeper study of the impact of the digital age on consumer preferences.

Keywords: Digital age, consumers' purchasing preference, consumers' loyalty.

1. Introduction

In the digital age, the way consumers obtain information has undergone significant changes. Traditional media such as newspapers and television have slow dissemination speeds and limited content, often failing to provide the specific information that consumers need. Today, most consumers rely on social media and the Internet, allowing them to search for information anytime and anywhere. This method is more convenient, precise, and diverse. The way information is transmitted has also changed. Traditional media is one-way communication, with information controlled by the publisher and passively received by consumers. Platforms like social media, short videos, live streaming, and Key Opinion Leader (KOL) recommendations have broken this monopoly, enabling consumers to actively seek the content they need. The real-time dissemination of product reviews, user experiences, and promotional information accelerates decision-making. For example, on platforms like Instagram, users share evaluations, images, and comparisons in comment sections, enhancing information credibility and influencing other consumers through word-of-mouth, thereby driving the rapid growth of niche brands.

In the digital age, transaction scenarios are constantly expanding and integrating, presenting characteristics of omni-channel, socialization, and real-time. Research indicates that omni-channel has become the core direction of retail development. Experts unanimously agreed that Omni channel retail will become the standard practice in the industry. One expert noted that "the line between online and offline channels will blur to the point where no distinction is made," emphasizing the need for retailers to adapt to this integrated approach [1]. Online platforms attract users through a wide variety of products and convenient search functions, while brand-owned stores focus on maintaining core customer groups through trust. Livestream e-commerce leverages real-time interactions between influencers and their fans, whereas offline smart stores rely on data and technology to provide personalized services. Online and offline channels have achieved seamless integration, allowing consumers to make purchases "anytime, anywhere" with flexibility. For example, consumers can first

browse products online, then experience them in physical stores, and finally return online to complete their orders. The widespread use of smart devices and the Internet enable shopping during fragmented time periods, such as commuting or lunch breaks, which not only satisfies immediate needs but also increases sales opportunities for merchants. Based on this, this article examines the impact of the digital age on consumer preferences. This research is of great significance. It combines previous studies related to the topic of this article and conducts a more profound investigation. This study not only presents how consumer preferences have changed due to the development of the digital age but also provides suggestions on how industries should adjust their strategies to cope with the influence of consumer preferences.

2. The Upgrade of Technology-Driven Interactive Models

The development of digital technology has upgraded the way consumers interact with brands, with the core reflected in two aspects: personalization and a sense of participation.

For personalized interaction, technologies such as algorithmic recommendations, intelligent customer service, and virtual try-on enable a “tailored-for-each-user” service experience and provide consumers with customized experiences. Platforms push relevant products based on browsing history, purchase records, and preference tags, enhancing the targeting and efficiency of services. Research shows that personalized services have become a mainstream trend. Personalization is highlighted as a significant trend, with experts predicting that consumer experience will be tailored across all channels. One participant stated, “If you are shopping in bricks-and-mortar stores, those experiences and preferences will follow you home and on social media.” This indicates a seamless flow of consumer data and preferences across different platforms [2].

For participatory consumption, user-generated content (UGC), co-creation of products, and community interactions transform consumers from passive buyers into value co-creators. Sharing reviews, tutorials, and experiences on social platforms not only provides references for other users but also serves as an important basis for brands to improve products and marketing. Community interactions enhance a sense of participation and trust, and influencer marketing has also been proven effective globally. For example, some authors have explored the impact of TikTok influencer marketing on consumers. In addition, the results of the study indicate that TikTok influencer marketing has a significant impact on consumer behavior outcomes. Exposure to influencer collaborations positively predicts brand awareness, engagement with influencer content is associated with increased purchase intentions, and trust in TikTok influencers positively influences actual purchasing behavior. These findings highlight the effectiveness of TikTok influencers in driving brand awareness, influencing purchase intentions, and ultimately impacting consumer purchasing behavior [2].

3. Specific Impacts of the Digital Era on Consumer Purchase Preferences

An increasing number of consumers consider online shopping as one of their primary consumption channels. Due to its convenience, online shopping has gradually become an important component of the shopping landscape. Research shows that convenience was highlighted as a critical aspect, as consumers prioritize hassle-free shopping experiences that save time and effort. Website design and user experience were identified as influential factors, with well-designed and user-friendly websites leading to increased consumer engagement and higher conversion rates [3]. When choosing a platform, consumers consider factors such as precise search, cost-effectiveness, and fast delivery. Consumers can quickly find products, compare prices and reviews, and receive items promptly. This efficient experience enhances satisfaction and loyalty. Social channels provide additional decision-making support. Platforms like Instagram Shopping and Amazon deeply integrate social interaction with shopping, where real-time feedback and community discussions build trust and influence purchasing decisions, for example, seeing product reviews shared by friends in a community. In the

digital era, trust between consumers and merchants is a key factor in channel preference. Research shows that trust is a key factor in fostering consumer loyalty, which can lead to repeat purchases, as demonstrated [4].

Consumers' product choices are evolving toward personalization, functionality, and self-expression. Standard mass-market products are no longer sufficient to meet their needs. Consumers are more inclined to choose customized options, such as engraved jewelry or furniture in exclusive colors, to reflect their personal taste. Emotional value is also becoming increasingly important, as consumers tend to prefer brands that align with their own values. For example, brands that focus on environmental sustainability. After being exposed to environmentally related content, consumers are more willing to purchase biodegradable or carbon-neutral products. Research shows that the findings of the study provide clear evidence supporting the effectiveness of green marketing. It was found that having a green image and offering high-quality green products contribute significantly to customer satisfaction. Interestingly, the research also revealed a positive correlation between prices and satisfaction, indicating that consumers are willing to pay higher prices for environmentally friendly products of superior quality [5]. Besides, the findings identified that emotional value had the highest positive impact on consumer emotion compared to the other values [6]. Short-cycle trends and short-video marketing also influence purchase frequency. Recommendations, new product tutorials, and reviews on short-video platforms stimulate consumers' desire to buy, increasing their demand for "novelty." For example, consumers are no longer satisfied with buying just a few basic items each season and instead frequently purchase trendy items of the current season.

Consumers place greater emphasis on convenience, flexibility, and benefits in payment and consumption methods. Mobile payment options such as Apple Pay and PayPal have become mainstream, especially NFC, QR code scanning, or automatic deduction methods, which improve payment efficiency. Credit-based payment schemes, such as "interest-free installments" and "buy now, pay later," are popular, particularly among younger groups, as they reduce short-term spending pressure while meeting consumption needs. Membership systems offer points, exclusive rewards, or tiered privileges, enhancing long-term consumer loyalty and making consumers feel that their value is recognized.

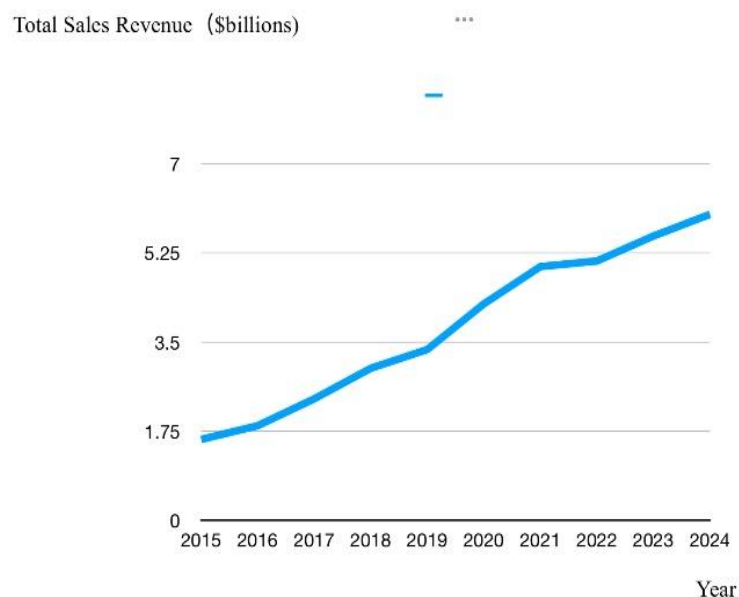


Figure 1. Global online retail sales, 2015-2024 (in billions)

Data Source: Capital One Shopping Market Size (\$billions)

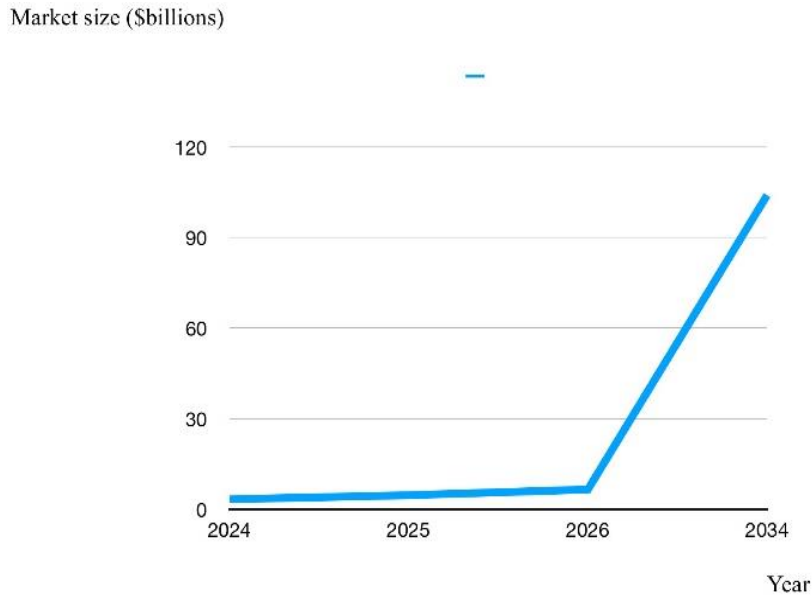


Figure 2. Sales trend of personalized beauty products (forecast data for 2025,2026 and 2034)
Data Source: Data for 2025, 2026 and 2034 are forecasted values used to illustrate future trends

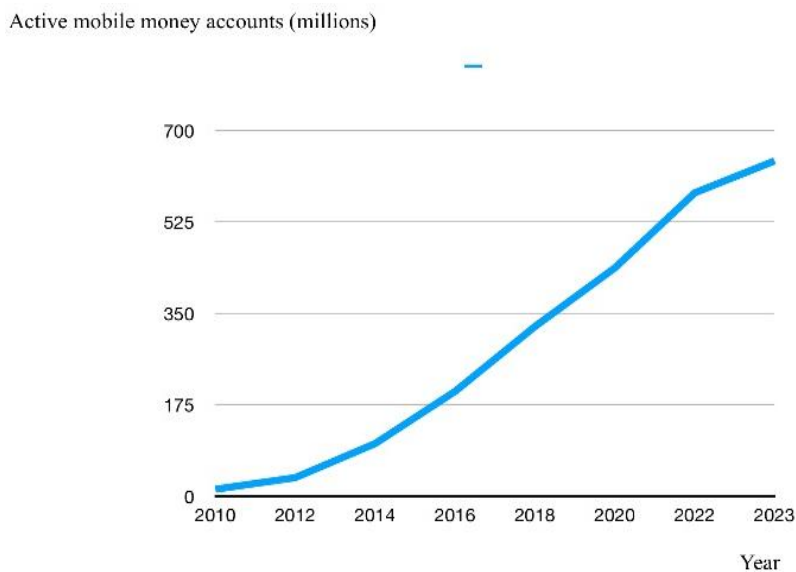


Figure 3. Global active mobile money accounts, 2010-2023(in millions)

Data Source: Our World in Data (based on GSMA Mobile Money Data).

As shown in Figure 1, for channel preference, online retail sales have increased from \$1.548 billion in 2015 to \$6.007 billion in 2024. During the study period, online retail sales showed a significant growth trend.

For product selection, as shown in Figure 2, the data for 2025, 2026, and 2034 are platform forecasts used to illustrate future trends of niche products. It can be observed that personalized/customized products exhibit a rapid growth trend. The platform even predicts that the global market size of personalized beauty products could reach \$104.04 billion by 2034.

For payment methods, mobile Payment Penetration: There were 13.12 million mobile money accounts in 2010, growing to 641.82 million in 2023, showing significant growth. As seen in Figure 3, the number of mobile money accounts shows an increasing trend, indicating that mobile payment penetration is deepening. (Changes in active account numbers are used as an approximate indicator of mobile payment usage.)

For channel preference, as shown in the empirical results, online retail sales increased from \$1.548 billion in 2015 to \$6.007 billion in 2024, showing a continuous upward trend. This change may be related to the convenience of information acquisition. For example, social platforms, short videos, and live streaming provide rich information content and convenient, fast search platforms, allowing consumers to obtain product information more efficiently during shopping decisions. Omni channel integration enhances shopping flexibility and convenience, increasing the usage of online shopping channels.

For product selection, sales of personalized and customized beauty products show a rapid growth trend, with the market size forecasted to reach \$104.04 billion by 2034, indicating that consumer interest in personalized, functional, and niche products is gradually increasing. This trend may be influenced by technology-driven interactive models, such as algorithmic recommendations and UGC, which enhance consumer engagement and confidence in decision-making. In addition, customized products allow for the expression of individuality and emotional value, meeting consumers' pursuit of uniqueness. At the same time, short-video marketing and the popularity of customized products jointly drive the development of niche and personalized products.

For payment methods, the number of active mobile payment accounts increased significantly from 13.12 million in 2010 to 641.82 million in 2023, indicating that mobile payment adoption is gradually rising worldwide. Although active account numbers serve only as an approximate indicator and cannot fully reflect the actual number of users or the scale of mobile payments, they can to some extent illustrate the digitalization trend of payment methods. There are some data analysis Indicates that from the quantitative data the result found that mostly the young people are exposed towards modern technology and moved digitally in their regular activities. Most of the young people are engaged in online purchasing. They use the e-payment facilities and online banking facilities. The online shopping and e-payment making trend have been increasing regularly and it further increases the sales growth for the businesses [7]. Companies can leverage the combination of credit-based payment options and membership systems, optimizing payment processes and benefit designs to better meet consumers' demands for convenience and flexibility.

Overall, the digital era may have influenced consumer behavior in multiple ways. Changes in information acquisition methods, channel integration, personalized interaction, and payment convenience collectively shape patterns in consumer behavior. If companies can understand these trends based on data analysis and adjust strategies in channel integration, product innovation, and payment experience optimization, they may enhance market competitiveness. Additionally, changes in consumer preferences exhibit both short-term and long-term trends. On one hand, immediate needs to drive more frequent purchasing behavior. On the other hand, personalized preferences and value-oriented demands have a deeper influence on long-term product selection.

However, there are some limitations and future research directions, this study primarily relies on secondary and forecast data, which may be limited by data coverage and forecasting methods. For example, some beauty market forecast data are used to illustrate niche trends, but actual developments may be affected by policy and regional differences. In addition, the number of mobile payment accounts only reflects active accounts and cannot fully measure individual usage frequency or the scale of mobile transactions. Future research could combine consumer surveys, actual transaction data, and comparative analyses to further validate and enrich the study's conclusions.

4. Strategies for Companies to Respond to Changes in Consumer Preferences – Challenges and Difficulties

4.1. Channel and Scenario Optimization

The core of channel upgrading lies in building an omnichannel integration system. By connecting online e-commerce, brand official websites, and offline store inventories, information can be synchronized, shopping obstacles can be avoided, and seamless experiences such as “online order + offline pickup” and “offline experience + online repurchase” can be provided, eliminating the

inconveniences of a single channel. Some authors have indicated that people believe that adopting an omnichannel approach makes sense for most companies, especially for those ones that were not born digital. Consequently, as internal teams tend to create new channels and touchpoints in order to respond to changing customer behavior, guidelines and best practices should orient their practice [8].

In terms of scenario expansion, social platforms such as WeChat and TikTok should be deeply leveraged to create a closed loop of “content seeding – instant purchase – community operation.” Interest is stimulated through reviews and authentic feedback, instant purchases are facilitated via short-video channels, and user engagement is enhanced through community discounts and interactive activities. Ultimately, this drives the cycle of “seeding – purchase – retention – repurchase,” meeting consumers’ needs for “browsing while buying” and “chatting while buying.”

4.2. Product and Service Upgrades

In terms of product supply, personalization should be the core. By using big data to analyze user preferences and potential needs, “customized options” and “niche series” can be launched to overcome the limitations of standardized production. For example, clothing brands can provide “height and weight-specific recommendations” based on user data, aligning with the trends of personalized and niche consumption. Businesses can leverage big data analytics to create highly personalized marketing campaigns. By understanding individual consumer behaviors and preferences, marketers can tailor their messages and offers to better meet the needs of their target audience [9].

In terms of service experience, information transparency should be enhanced to build trust. On the one hand, product details (such as ingredients and production processes) should be proactively disclosed and after-sales services improved, allowing consumers to fully understand their rights before purchase. On the other hand, purchased users should be encouraged to share authentic reviews to provide references for potential consumers. At the same time, methods such as “live factory tours” and “ingredient traceability” can visually demonstrate the entire production process, alleviate quality concerns, and establish comprehensive trust bonds.

4.3. Marketing and Interaction Innovation

In terms of marketing, precise content marketing should be carried out based on algorithmic recommendations, delivering targeted content according to user demographics, consumption scenarios, and needs. For example, “parent-child outfits” can be recommended to mothers, fitting parenting scenarios, while “affordable quality products” can be suggested to students, covering high cost-performance products and shopping guides. This makes the content more aligned with the needs of target groups and improves conversion rates. And the technological advancements of the digital age can better assist in marketing, enabling businesses to have a more detailed understanding of consumers’ needs. Research has shown that technology-enabled interactions also offer marketers opportunities to observe consumers engaged in new ways with products, brands, stores, firms, and other consumers. These observations provide a deeper understanding of consumers’ relationships and preferences and give companies the opportunity to create new sources of value for both the consumer and the firm. In particular, personalization and recommendation systems will remain a key area for future research [10].

In terms of interaction, enhancing the sense of participation should be the focus, with diverse activities launched to deeply engage users in brand building. For instance, “product design voting” can be used to decide key design elements, or “UGC collection” campaigns can encourage users to share experiences and receive rewards. Beauty brands can invite users to vote for “new shades,” allowing preferences to directly influence R&D directions. This not only strengthens user belonging but also enables the brand to more accurately match market demand, enhancing user engagement.

5. Conclusion

This study has yielded the results that online sales are constantly increasing, the demand for personalized products and services by consumers is also constantly rising, and the number of global mobile accounts is showing a significant upward trend. These results have become an important part of reflecting the changes in consumer preferences in the digital age. Due to the continuous development of digital technology, more and more consumers are using social platforms, online platforms, online shopping and other channels to showcase their purchasing needs. Digital technology has also become one of the important shopping and payment platforms for consumers due to its convenience and timeliness. Also, due to the development of the digital age, the push of social media has led consumers to pay more attention to the uniqueness of products and the targeted nature of services. This study also has some limitations. Firstly, the beauty product market cannot represent the entire product selection market, and the research trend may have certain differences compared to other product markets. Moreover, some of the data in this study are predictive data, which may be limited by the prediction method and lead to certain data differences. This study did not use traditional research methods such as questionnaires or interviews but used authoritative data to analyze and draw conclusions. This approach can avoid certain randomness such as regional differences and make the research results more scientific and comprehensive. Additionally, this experiment incorporates various knowledge, such as sociology and psychology, and integrates the digital age into the consumer behavior theory. Future research can pay more attention to inactive netizens. One of the shortcomings of this study is that it ignores the elderly group and other inactive netizens and does not pay much attention to the changes in their consumer preferences. Future research can use questionnaires to supplement this deficiency. Another shortcoming is the lack of a perspective on implicit needs and the specific motives behind the purchasing behavior, which may lead to errors in the strategic decision-making of enterprises when examining the focus. Future research needs to supplement the study on implicit needs to make the research more comprehensive.

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