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Research on Changes in Residents' Consumption Behavior under the Background of the Digital Economy

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Abstract. With the rapid development of internet technology, the digital economy has become a core driver of economic growth in China and even globally. This paper mainly studies the changes in residents' consumption behavior brought by the digital economy environment, such as the gradual shift from offline physical store shopping to online purchasing. The research aims to analyze how digital technologies and online platforms alter consumers' decision-making processes and consumption preferences, and to formulate relevant strategies and references for enterprises. This study adopts two research methods: literature analysis and case analysis. By observing data from e-commerce platforms and consumption trends on social media, it explores the role of technological development in driving consumption upgrading. The research finds that the digital economy has not only reduced the time and financial costs for consumers to search for product information but also given rise to new consumption patterns such as social shopping and personalized customization. However, it has also brought problems like information overload and personal data privacy risks. The conclusion indicates that digital consumption is characterized by online-offline integration, personalized recommendation, and community-based consumption. Future research can focus more on consumption equity issues arising from the digital industry.

Keywords: Digital Economy, Consumer Behavior, Online Consumption, Consumption Upgrading

1. Introduction

The digital economy is a new economic form centered on digital information and knowledge, driven by modern information networks and technologies. In recent years, technologies such as artificial intelligence, big data, and cloud computing have been rapidly popularized across industries, triggering profound changes and significant impacts in the field of residents' consumption. At present, most relevant studies focus on macroeconomic data, while the detailed changes and underlying reasons behind ordinary consumers' behavior remain underexplored [1]. Starting from this gap, this paper systematically sorts out the consumption characteristics and demographic traits in the digital era, clarifies the interaction between technology and residents' consumption behavior, and focuses on analyzing the impacts of digital platform features, social interaction, and the convenience of mobile payment on consumption decisions. Combining qualitative analysis with

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quantitative description, this research not only helps enterprises formulate more precise marketing strategies but also provides a foundational reference for subsequent studies on the psychological changes of consumption in the digital economy.

In addition to mainstream digital technologies, the widespread penetration of mobile intelligent terminals acts as a fundamental prerequisite for the transformation of residents' consumption logic. Smartphones, wearable devices and tablet computers break the restriction of fixed desktop internet access, enabling consumers to browse goods, communicate with merchants and complete payment anytime and anywhere [2]. Unlike the PC-era online shopping limited to home or office scenarios, mobile terminals realize the full-scene coverage of fragmented consumption, including commuting, leisure breaks and outdoor activities. This shift of consumption scenarios further stimulates the potential of spontaneous consumption, and expands the overall scale of household consumer expenditure year by year. Moreover, the popularization of third-party mobile payment represented by Alipay and WeChat Pay eliminates the complicated procedures of cash and bank card settlement, lowering the threshold of small-sum consumption and cultivating consumers' habit of frequent low-value purchases, which constitutes an important supplementary factor reshaping modern consumption patterns.

2. The positive impacts of digital economy on residents' consumption behavior

2.1. Optimization of consumers' information acquisition channels

In the traditional economy, consumers had limited channels to obtain product information at a high cost. However, in the digital economy era, search engines, intelligent recommendation algorithms, and short-video platforms have completely transformed this landscape. Information transmission is no longer restricted by geographical boundaries, allowing consumers to quickly compare similar products worldwide. This efficient and low-cost information screening has shifted consumers' focus from mere price to product quality and experience, making consumption decisions more rational and practical.

Traditional offline shopping forces consumers to spend extra time on commuting and store visits, and product information is limited to the introduction of physical shop assistants. In contrast, digital platforms aggregate massive commodity parameters, real-shot evaluation videos and cross-brand comparison charts, enabling consumers to obtain comprehensive product information within minutes. Even niche goods from overseas manufacturers can be searched and evaluated by domestic users, which greatly weakens the information asymmetry between merchants and consumers that prevailed in the offline retail market for a long time.

2.2. Diversified and shortened consumption decision paths

Traditional consumption generally follows a fixed process: "interest, search, purchase, share". But with the integration of digital platforms into daily life, consumption paths have become more diverse. Many consumers impulsively purchase products they like while browsing social media, even if they do not actually need them. One-click payment enables instant transactions, drastically shortening the time from intention to order placement. Meanwhile, user reviews on social platforms have become a key influencing factor, driving consumption decisions to circulate through social interactions and form a complete consumption closed loop [3].

Short-video live streaming e-commerce further accelerates the transformation from consumption intention to transaction. Anchors display product effects in real time and launch limited-time

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discounts, creating a strong situational sense that stimulates instant purchase willingness. Different from the active search mode of traditional e-commerce, live broadcast shopping adopts passive content pushing, which blurs the boundary between entertainment and consumption and produces a large number of non-routine impulsive consumption behaviors that rarely appeared under offline consumption modes.

2.3. Rise of community-oriented social consumption model

The digital economy has given rise to a group-centric consumption model. Through interest-based communities and influencer marketing, social e-commerce has transformed the traditional "people searching for goods" into "goods finding people". This model relies on trust among community members, reducing the trust barrier in consumption. In communities, consumers not only make purchases but also participate in product discussions and even design, gaining a sense of belonging. Consumption is no longer a simple transaction but a way to gain recognition and satisfy social needs [4].

Interest communities centered on beauty, outdoor sports and parent-child supplies form stable consumer groups with consistent demand preferences. Ordinary consumers share real use experience in communities, forming word-of-mouth transmission independent of official merchant advertising. Many brands launch customized limited products exclusively for specific communities, enhancing user stickiness and realizing precise matching between supply and demand, which cannot be achieved by traditional one-way retail sales.

2.4. Deep integration of online and offline consumption scenarios

Online-offline integration refers to the integration of physical stores and online services through digital technology, enabling consumers to purchase all products from physical stores online. Merchants use big data analysis, such as users' browsing history, to precisely push information about nearby stores. This model retains the experiential nature of offline shopping while offering the convenience of online payment. Additionally, this integration has expanded into various fields—for example, it has promoted the digitalization of service consumption such as distance education and internet-based medical care, further broadening the scope of residents' consumption [5].

New retail represented by supermarket instant delivery and clothing offline trial-online order perfectly combines offline experience advantages and online logistics efficiency. Consumers can touch and try physical goods in stores, then place orders online for home delivery to avoid carrying heavy goods. In the service industry, online appointment and offline experience have become standard configurations for catering, fitness and beauty industries, expanding the boundary of service consumption and driving the growth of service consumption proportion in residents' total expenditure.

3. Negative impacts of digital economy on residents' consumption behavior

3.1. Information cocoon effect and consumption discrimination risks

While the digital economy has improved consumption efficiency, platform recommendation mechanisms have also brought negative impacts. Systems continuously push content that users are interested in, limiting their exposure to a wider range of products. Consumers lose access to diverse products and information, narrowing their consumption horizons and even missing out on higher-

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quality, more affordable options. Furthermore, algorithmic bias may lead to price discrimination against different groups, undermining consumption equity and hindering the healthy development of the digital economy [6].

Platform algorithms label users based on historical consumption capacity, browsing frequency and geographical location, and set differentiated commodity pricing and preferential policies for different user groups. High-consumption users often face higher original prices while low-frequency users receive greater discounts, which violates fair consumption principles. At the same time, long-term single-type content pushing solidifies users' consumption preference stereotypes, making it difficult for small and medium-sized brands with differentiated advantages to reach potential consumers, forming a monopoly tendency of head merchants in the digital consumption market.

3.2. Personal information leakage and privacy security hidden dangers

The operation of the digital economy relies heavily on large-scale data collection. When making purchases, users' geographic locations, payment habits, social connections, and other information are all recorded. Inadequate data protection on platforms can easily result in personal information leaks. Consumers' concerns about privacy security significantly reduce their willingness to consume. Therefore, building a secure and reliable data protection system while advancing technological development is a critical issue that must be addressed for the growth of the digital economy.

Many small and medium-sized e-commerce platforms lack standardized data storage and encryption systems. User order addresses, mobile phone numbers and payment records may be illegally collected and sold to third-party marketing institutions, leading to frequent harassing calls and fraud risks. Even large mainstream platforms have occasional data leakage incidents, continuously weakening consumers' trust in digital consumption channels and restricting the sustainable expansion of online consumption scale.

4. Conclusion

This study mainly explores the changes in residents' consumption behavior in the digital economy era. Specifically, the digital economy has made information searching and product price comparison more efficient, with social recommendation and online-offline integration becoming mainstream consumption patterns, enriching consumption models. However, it also presents obvious problems such as recommendation bias and personal data privacy leaks. While enjoying convenience, people should stay vigilant against potential risks.

This paper only analyzes the overall impact of the digital economy on consumption behavior and does not conduct in-depth research on consumption differences among groups of different ages and income levels. Future research can focus on the impacts of digital currencies on residents' payment habits, as well as fully automated consumption models driven by artificial intelligence and other technological directions, to further enrich research on the digital economy and consumption behavior.

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