Original Research Article

Exploring the influencing factors of users' purchase intention on instant retail platforms

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Abstract: In recent years, with the rapid rise of instant retail, how instant retail platforms attract and keep users has become an important challenge currently. Based on the perceived value theory and S-O-R theory, this study explores the influence mechanism of users' purchase intention on instant retail platform. Effective data are collected through questionnaire survey method to carry out the study. It is found that product quality, information quality and service quality significantly and positively affect purchase intention, while perceived value and purchase experience play a significant role in mediating the relationship between platform attributes and purchase intention. This study constructs an integrated model of "platform attributes-psychological mechanisms-behavioral outcomes", which provides theoretical support and practical guidance for instant retail platforms to optimize core attributes and design marketing strategies.
Keywords: instant retail; purchase intention; questionnaire method; product quality; service quality

1. Introduction

As one of the business models derived from "New retail", instant retail has broken the value division between online and offline in the development of traditional retail models (Wang. S. T. 2022), and meets consumers' demands for extreme speed and punctuality with "minute-level" and "hour-level" delivery (Yi. Y., & Ye. J. Z. 2024). In Beijing's key work plan for 2025, on-demand retail has been explicitly included in the category of new business forms to be supported for development. The government work report pointed out that "support the development of new business forms such as live-streaming e-commerce and instant retail." The business models of on-demand retail mainly fall into two categories: platform model and self-operated model.

This study uses questionnaires to collect consumers' real shopping data, based on perceived value theory and S-O-R theory, to explore the influence of different factors on consumers' purchase intention. This paper focuses on: 1. What factors positively influence users' willingness to buy on instant retail platforms?2. What kind of psychological process leads to consumers' behavior?3. How to enhance users' willingness to buy on instant retail platforms?

2. Theoretical analysis and research hypothesis

2.1. Impact of instant retail platform attributes

2.1.1. Product quality of instant retail platforms

Product quality is a foundational element for consumers to assess the value of the platform (Ma. Y. Q. & Zhangsun. B. W. & Chen. Y. C. 2022). Its durability and safety directly affect the value judgment, and high-quality products can enhance consumers' pleasure and stimulate impulsive purchase intentions (Adinoto NURSIANA 2021). When a product is defective, even if the product defects are successfully remedied, it may still reduce consumers' quality perceptions (Catenazzo, G. and Paulssen, M. 2023). The rarity of a new product also enhances the consumers' perception of emotional and social value (Wang, X., Sung, B. & Phau, I. 2024).

Based on this, this paper puts forward the following hypotheses:

H1a: Product quality of instant retail platforms has a significant impact on consumers' perceived value;

H1b: Product quality of instant retail platforms has a significant impact on consumer buying experience;

H1c: Product quality of instant retail platforms has a significant effect on consumer purchase intention.

2.1.2. Quality of information on instant retail platforms

Information quality covers delivery transparency, activity authenticity and update timeliness (Qi. Y. L. & Yang. Q. T. 2024), which enhances consumer trust and reduces price sensitivity by reducing information asymmetry (Chen, Y., Liu, H., Wen, Z., & Lin, W. 2023). Real-time logistics tracking, community-based evaluation system, and multi-parameter comparison function can enhance emotional value, social value, and cost perception (Qian. H. M. & Dong. Z. & Qu. H. J. 2019) (Chen, C. D., Zhao, Q., & Wang, J. L. 2020), respectively, and optimize the purchasing experience (Tseng, S.-M. 2024).

Accordingly, the following hypotheses are formulated in this paper:

H2a: The information quality of instant retail platforms has a significant impact on consumers' perceived value.

H2b: Information quality of instant retail platforms has a significant impact on consumer buying experience;

H2c: The information quality of instant retail platforms has a significant impact on consumers' purchasing intentions.

2.1.3. Service quality of instant retail platforms

Corporate competition has shifted from product quality and price to service competition (Huang. Y. M. & Xu. Y. Y. & Zhang. G. et al. 2023), and service quality is highly correlated with consumer satisfaction, directly affecting repurchase rates and word-of-mouth effects (Li. M. X. & Zhu. Y. & Su. J. L. 2024). Instant retail's service quality involves distribution efficiency, return and exchange response, and service attitudes (Yang H, Fang M, Yao J, et al. 2023). Efficient logistics reduces the cost of time, friendly service enhances emotional value, and fast returns and exchanges reduce the perception of risk (Xia L ,Yanhan S ,Shengshi Z , et al. 2024).

Accordingly, the following hypotheses are formulated in this paper:

H3a: Service quality of instant retail platforms has a significant impact on consumers' perceived value;

H3b: The service quality of on-demand retail platforms has a significant impact on consumers' purchasing experience.

H3c: Service quality of instant retail platforms has a significant impact on consumer purchase intention.

2.2. The mediating role of consumers' perceived value

Based on the S-O-R theory, platform attributes act as external stimuli that influence purchase intent through perceived value. Perceived value comprises emotional value (pleasure), social value (social image), and perceived cost (time, money, and effort trade-offs). Product quality enhances emotional value by meeting functional needs, information quality reduces decision-making costs through transparency, and service quality strengthens social value by ensuring efficient fulfillment.

Accordingly, the following hypotheses are formulated in this paper:

H4a: Perceived value mediates the relationship between product quality and consumer purchase intention in instant retail platforms;

H4b: Perceived value mediates the relationship between information quality and consumer purchase intention on instant retail platforms.

H4c: Perceived value mediates the relationship between service quality and consumer purchase intention in instant retail platforms.

2.3. The mediating role of the consumer buying experience

Purchase experience includes product experience (directly related to product quality), information experience (smoothness of information interaction), and service experience (efficiency of logistics and after-sales service) (Lemon, K. N., & Verhoef, P. C. 2016). High-quality product experience promotes repeat purchases (Das Guru, R.R. and Paulssen, M. 2020), positive information description enhances purchase intention (Sun, Y., Sekiguchi, K. & Ohsawa, Y. 2024), and efficient service experience promotes instant gratification (Mohd F N Z , Norshima H, Hafiz M R A . 2022), which together connect platform attributes and purchase behavior.

Accordingly, the following hypotheses are formulated in this paper:

H5a: Buying experience mediates the relationship between product quality and consumer purchase intention in instant retail platforms;

H5b: Buying experience mediates the relationship between information quality and consumer purchase intention in instant retail platforms;

H5c: Buying experience mediates the relationship between service quality and consumer purchase intentions

in instant retail platforms.

2.4. Construction of the theoretical model

This paper analyzes the association mechanism between platform attributes and consumers' purchase intention, and constructs a theoretical model according to the S-O-R theoretical model as **Figure 2**.
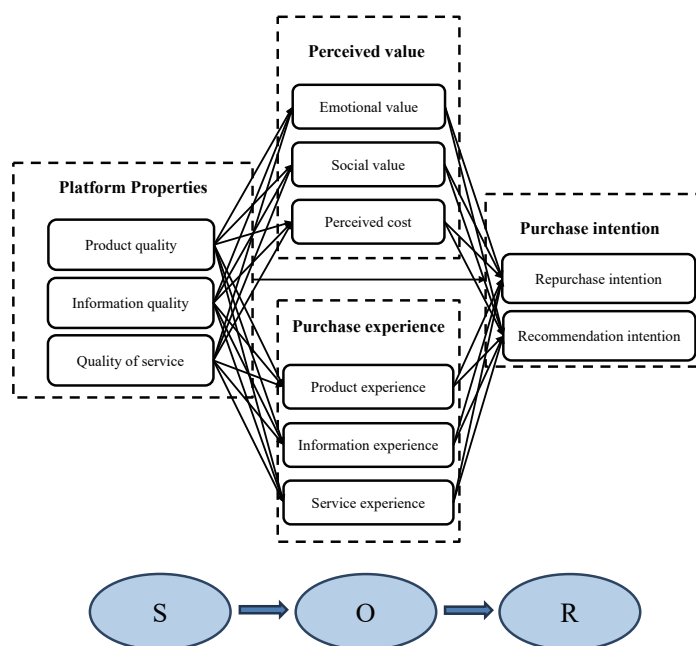

Figure 1. Research model.

3. Study design

The questionnaire scales used in this study are all from mature scales at home and abroad, and the questionnaire is measured using a Likert 5-point scale, with 1 being strongly disagree and 5 being strongly agree, covering the four core variables of platform attributes (product quality, information quality, and service quality), perceived value (emotional value, social value, and perceived cost), purchasing experience (product experience, information experience, and service experience), and purchasing intention (willingness to reorder, and willingness to recommend). (willingness to repurchase, willingness to recommend). A total of 265 questionnaires were distributed through different online platforms. After excluding invalid responses, the number of valid questionnaires was 252, and the validity rate of the questionnaires was 95.09%. The age of the sample is concentrated in 21-55 years old, the occupation is mainly office workers, and the monthly income of 6001-10000 RMB accounts for the highest proportion.

4. Data analysis and testing of results

4.1. Reliability and validity analysis

This paper is tested using SPSS24.0. As shown in Table 3, the result obtained by the KMO test is 0.932 (>0.8), and the significance of the Bartlett sphericity test is 0.000 (<0.05), which is suitable for factor analysis. The Cronbach's α coefficients for product quality, information quality, and service quality were 0.902,0.857, and 0.902, respectively, with corresponding CR values of 0.921,0.903, and 0.932. The Cronbach's α coefficients for perceived emotional value, perceived social value, and perceived cost were 0.873,0.906, and 0.875, respectively, with CR values of 0.914,0.924, and 0.914. The Cronbach's α coefficients for product experience, information experience, and service experience were 0.733,0.844, and 0.780, respectively, with CR values of 0.833,0.896, and 0.859. The Cronbach's α coefficients for repurchase intention and hospital recommendation were 0.815 and 0.843, respectively, with CR values of 0.878 and 0.897. All variables had Cronbach's α coefficients>0.6, and the Cronbach's α reliability values decreased after removing individual items, indicating good reliability. Both factor loadings and CR values were>0.6, meeting validity standards.

4.2. Factor analysis

The number of extracted common factors for each variable was consistent with the preset categorization, and the number of extracted platform attributes, perceived value, purchase experience and purchase intention components were 3, 3, 3 and 2, respectively, with KMOs of 0.868, 0.888, 0.841 and 0.844, and the cumulative variance contribution rates of 75.251%, 74.683%, 61.9695% and 66.916%, respectively. The cumulative variance contribution rates were all >60%, and the KMO values were all >0.7, with a good degree of questionnaire aggregation.

4.3. Correlation analysis

The correlation coefficients between platform attributes, perceived value, purchase experience and purchase intention were significantly different from 0 ($p<0.01$), indicating a significant positive correlation (see Table 1). (Note: Since all the perceived cost items are designed in reverse, in data analysis, the relationship between variables and perceived cost is positive. The same applies below.)"

Table 1. Descriptive statistics of variables and correlation coefficients.

	1	2	3	4	5	6	7	8	9
Product quality	1								
Information quality	0.455**	1							
Quality of service	0.483**	0.448**	1						
Emotional value	0.605**	0.445**	0.520**	1					
Social value	0.498**	0.477**	0.518**	0.499**	1				
Perceived cost	0.435**	0.420**	0.496**	0.416**	0.566**	1			
Product experience	0.531**	0.421**	0.565**	0.575**	0.521**	0.550**	1		
Information experience	0.454**	0.370**	0.443**	0.440**	0.477**	0.391**	0.505**	1	
Service experience	0.469**	0.392**	0.405**	0.494**	0.530**	0.482**	0.394**	0.250**	1
Repurchase intention	0.478**	0.443**	0.469**	0.513**	0.510**	0.493**	0.544**	0.305**	0.387**
Recommendation intention	0.604**	0.475**	0.588**	0.630**	0.625**	0.635**	0.672**	0.494**	0.502**

Note: *** indicates $p<0.001$; ** indicates $p<0.01$; * indicates $p<0.05$.

4.4. Hypothesis testing

4.4.1. The impact of the platform attributes of the instant retail platform on consumers' perceived value

The platform attributes of instant retail platforms have a significant impact on consumers' perceived value and the hypothesis is valid. Among them, product quality has the highest impact on consumers' perceived emotional value ($\lambda=0.605$, $p=0.000$), and service quality has the highest impact on consumers' perceived social value ($\lambda=0.518$, $p=0.000$) with perceived cost ($\lambda=0.496$, $p=0.000$).

4.4.2. The impact of platform attributes of instant retail platforms on consumer buying experience

The platform attributes of instant retail platforms have a significant impact on consumer purchase experience and the hypothesis is valid. Service quality has the highest impact on product experience ($\lambda=0.565$, $p=0.000$), and product quality has a significant impact on information experience ($\lambda=0.454$, $p=0.000$) and service experience ($\lambda=0.469$, $p=0.000$).

4.4.3. The impact of platform attributes on consumer purchase intention in instant retail platforms

The platform attributes of instant retail platforms have a significant effect on consumers' willingness to purchase, and the hypothesis is valid. Product quality has the highest impact on willingness to recommend ($\lambda=0.604$, $p=0.000$), followed by the impact of service quality on willingness to recommend ($\lambda=0.588$, $p=0.000$); in terms of willingness to re-purchase, product quality ($\lambda=0.478$, $p=0.000$) and service quality ($\lambda=0.469$, $p=0.000$) have similar impacts.

4.5. Mediated effects test

The Process plugin and Bootstrap bootstrap method (5000 iterations) were employed to test the mediating

effect, with all 95% confidence intervals excluding zero. The results are presented in **Table 2**.

In this paper, the following model is constructed:

Model 1: Product Quality - Perceived Value - Purchase Intention;

Model 2: Information Quality - Perceived Value - Purchase Intention;

Model 3: Service Quality - Perceived Value - Purchase Intention;

Model 4: Product Quality - Buying Experience - Buying Intention;

Model 5: Information Quality - Purchase Experience - Purchase Intention

Model 6: Service Quality - Purchase Experience - Purchase Intention.

According to Table 10, the platform attributes of instant retail platforms not only have a direct effect on consumers' willingness to buy, but also have a mediating effect on willingness to buy through the perceived value and purchase experience variables.

Table 2. Intermediary effect test.

Model	Type	Effect value	Se	BootLLCI	BootULCI	Effect amo
	Direct effect	0.193	0.045	0.105	0.281	32.11%
Model 1	Indirect effect	0.408	0.049	0.312	0.503	67.89%
	Total effect	0.601	0.047	0.507	0.694	
	Direct effect	0.112	0.039	0.036	0.188	24.19%
Model 2	Indirect effect	0.351	0.051	0.252	0.451	75.81%
	Total effect	0.463	0.047	0.371	0.554	
	Direct effect	0.156	0.042	0.074	0.238	28.84%
Model 3	Indirect effect	0.385	0.051	0.287	0.486	71.16%
	Total effect	0.541	0.044	0.454	0.628	
	Direct effect	0.280	0.052	0.178	0.382	46.59%
Model 4	Indirect effect	0.321	0.047	0.225	0.410	53.41%
	Total effect	0.601	0.047	0.507	0.694	
	Direct effect	0.196	0.043	0.111	0.281	42.33%
Model 5	Indirect effect	0.267	0.046	0.178	0.360	57.67%
	Total effect	0.463	0.047	0.371	0.554	
	Direct effect	0.248	0.047	0.156	0.340	45.84%
Model 6	Indirect effect	0.292	0.046	0.202	0.386	53.97%
	Total effect	0.541	0.044	0.454	0.628	

5. Research conclusions and future prospects

5.1. Conclusions

Product quality, information quality and service quality of instant retail platforms significantly and positively affect purchase intention; perceived value and purchase experience play an important intermediary role between platform attributes and purchase intention, of which the purchase experience intermediary effect accounts for more than 50%, which is a key bridge connecting platform attributes and purchase behavior. Product quality is the core driving force of word-of-mouth communication, and service quality has a significant impact on user loyalty.

5.2. Theoretical contributions and practical implications

5.2.1. Theoretical contributions

This study integrates the theory of perceived value and S-O-R theory to construct a model of "platform attributes - psychological mechanism - behavioral outcome" that fits the characteristics of instant retailing; clarifies the differentiated paths of perceived value and purchasing experience; and incorporates the industry-specific dimensions of instant delivery efficiency and service reliability into the analysis to improve the study of the driving mechanism of instant retailing users' purchasing intention, In addition, we incorporate industry-specific dimensions such as instant delivery efficiency and service reliability into the analysis, which improves the study of the driving mechanism of instant retail users' purchase intention.

5.2.2. Practical implications

To enhance the purchase intention of instant retail platform users, we need to optimize the core attributes of the platform and strengthen the psychological perception of users. At the level of core attributes, based on strict control of product quality, strict control of product quality, enhancement of information transparency,

optimization of distribution and after-sale efficiency; at the level of psychological perception, personalized recommendations driven by AI algorithms deliver emotional value.

5.3. Research limitations and future prospects

The study's methodology relies on cross-sectional questionnaires, limiting the ability to capture dynamic changes in consumer psychology. It overlooks moderating variables like cultural differences and technology acceptance. Future research could integrate objective transaction data to enhance scene segmentation analysis.

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