
RESEARCH ON USER EXPERIENCE PERCEPTION OF SECOND-HAND TRADING PLATFORMS BASED ON E-COMMERCE POLITENESS

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ABSTRACT

With the development of the internet and the expansion of the e-commerce industry, the rise of online e-commerce platforms has provided growth opportunities for second-hand trading platforms. These platforms have accumulated a large number of users but still face certain issues such as customer service responsiveness, product quality assurance, and user personal information protection—collectively known as e-commerce politeness concerns. Based on the perspective of e-commerce politeness, this study utilizes the critical incident technique to explore users' perceptions of interactions on second-hand trading platforms. Based on the analysis results, recommendations are proposed to enhance service quality for sellers and improve customer satisfaction for buyers, providing valuable insights for second-hand trading platforms.

Keywords: Second-hand e-commerce platform, E-commerce politeness, User perception, Critical incident technique.

1. INTRODUCTION

The second-hand e-commerce market is flourishing, with platforms such as Xianyu and Zhuanzhuan in China, Mercari in Japan, and Poshmark in the United States growing rapidly. As internet technology continues to evolve at an accelerated pace, future demand for second-hand trading platforms is expected to increase significantly. Users tend to seek cost-effective products, leading sellers to list lower-value or unused items for resale. Buyers, in turn, purchase second-hand goods at relatively lower prices compared to brand-new items, forming a complementary demand cycle that further drives the development of second-hand trading platforms.

Second-hand trading platforms have a low barrier to entry for sellers—users can register an account, provide personal information, and immediately start selling items. Platforms match sellers' products with potential buyers quickly. On the buyer side, personalized recommendations help users find desired products, communicate transaction details with sellers via platform functions, complete payments online, and initiate logistics, reducing waiting times and transaction costs.

The growth rate of second-hand trading platforms surpasses that of traditional retail industries. Bae et al. (2022) stated that the resale market for second-hand goods is growing 11 times faster than traditional retail, with an estimated market size surpassing \$60 billion by 2028. This trend demonstrates that second-hand trading platforms have become a focal point for consumers and a valuable subject for further research.

However, in the Consumer-to-Consumer (C2C) model, second-hand trading platforms frequently encounter issues such as false advertising, ineffective customer service resolution, and personal privacy concerns—all of which contribute to dissatisfaction among users. These include

critical user experience problems within human-machine interactions, directly influencing the current state and future development of second-hand trading platforms. This study applies the critical incident technique (CIT) to analyze users' key satisfaction and dissatisfaction events, providing improvement strategies to optimize user experience, enhance service quality for sellers, and improve purchase experience and customer satisfaction for buyers. Ultimately, this supports the positive development of second-hand trading platforms and enables better services.

2. LITERATURE REVIEW

2.1 Second-hand trading platforms

Second-hand trading platforms serve as intermediaries to meet the transaction needs of sellers and buyers for idle items. These platforms provide an online marketplace for the exchange of pre-owned goods, playing an essential role in the booming e-commerce industry. They also effectively reduce transaction costs and promote the circulation and reuse of goods (Bae et al., 2022). Representative second-hand trading platforms include Xianyu and Zhuanzhuan in China, Mercari in Japan, and Poshmark in the United States, all of which have become leading platforms in this field. Enhancing the circular utilization of product resources and strengthening the perceived value of second-hand products can be achieved by incorporating sustainability narratives into platform marketing strategies. Jian Xu et al. (2022) proposed linking product history with environmental stories to increase user awareness of second-hand value.

Current research on second-hand trading platforms primarily focuses on user trust, user experience, and platform functionality. Consumers' trust and satisfaction in these platforms are influenced by economic benefits, platform features, psychological ownership, emotional interactions, and information transparency. Emotional interactions and transparency play a key role in establishing trust. Regarding the dimension of transaction experience, Wang and Sun (2023) found that information accuracy, communication efficiency, and after-sales support are critical factors affecting consumers' willingness to engage in transactions. Additionally, Putra and Nadlifatin (2024) noted that 38% of young users prefer repurchasing items through live-streamed second-hand e-commerce, indicating a tendency for younger consumers to favor interactive shopping experiences.

Second-hand trading platforms act as intermediaries connecting sellers and buyers, while logistics companies handle product transfers. Platforms facilitate transactions by displaying products and matching buyers and sellers. After transactions are completed with payments and identity verification, the platform collaborates with logistics companies to provide tracking, returns, and after-sales services, forming a transactional network illustrated in Figure 1 (dashed lines). The four key participants—platforms, buyers, sellers, and logistics companies—interact directly, including buyers and sellers engaging in critical transaction-related events, logistics companies tracking product shipments, and platforms providing services. Together, they create a complete transaction cycle, represented in Figure 1 (solid lines), demonstrating the interconnected flow of commerce, finance, logistics, and information within the ecosystem.



E-commerce politeness refers to the application of technology, process optimization, and rule improvement by e-commerce platforms to ensure users feel respected, informed, and empowered to make choices throughout their interactions. While focusing on platform functionality, it is equally important to emphasize integrity and respect between individuals. The concept of e-commerce politeness originates from Whitworth (2005), who proposed the theory of polite computing. This theory introduces principles of politeness in social interactions into technology design, emphasizing that software should reflect social politeness by granting users autonomy in their choices. The meaning of politeness in user experience refers to how users perceive their interactions during human-computer interactions. In the context of second-hand trading platforms, users' overall experience and interaction quality can define whether a platform exhibits polite behavior. Any aspect of user interaction that leads to dissatisfaction can be considered an impolite behavior by the platform.

According to the research of DeLone and McLean (2003), the politeness of an e-commerce platform can be evaluated based on three aspects: system functionality, product quality, and customer service. A deficiency in any of these areas can lead to user dissatisfaction. If a platform demonstrates strong governance capabilities, users recognize its role as a trustworthy intermediary. However, if the platform fails to regulate seller behavior or maintain price balance, users may perceive such failures as systemic impoliteness (Bardhi & Eckhardt, 2012). Pavlou and Gefen (2004) also pointed out that when a platform cannot effectively constrain seller behavior or balance pricing, user trust declines, leading to halted transactions or negative feedback. In the e-commerce field, Chen and Hu (2017) found that users place high importance on transaction autonomy and the completeness of product information provided by the platform. Whitworth and Liu (2009)

emphasized that platforms should protect users' right to information and choice. Furthermore, they advocated for polite interface design to enhance the friendliness of human-computer interactions, ultimately improving platform usability.

Whether dealing with the uncertainties of second-hand transactions or interpersonal interactions, technology should coexist with human sentiment. Relying solely on technology while neglecting user experience may drive users away (Sheldon, 1997). Additionally, based on the theory of e-commerce politeness, Chen and Huang (2025) concluded that the service quality of e-commerce platforms is linked to user behavior. This provides valuable insights into optimizing service quality and improving user-friendly experiences.

3. RESEARCH METHODOLOGY

3.1 Critical Incident Technique

The Critical Incident Technique (CIT) is a qualitative research method proposed by American psychologist Flanagan in 1954. CIT identifies the essence of phenomena by collecting and analyzing key incidents or processes that significantly impact an individual's cognition, emotions, and behavior (Flanagan, 1954).

CIT has been widely applied across various fields. For example, Salo and Frank (2017) used CIT to study users' responses to mobile application failures, identifying different behavioral reactions in various situations. Peltola et al. (2022) employed CIT to analyze physician-patient interactions to understand key factors influencing medical communication. Ramesh and Jarke (2002) applied CIT to pinpoint critical decision-making moments in team collaboration, demonstrating that specific timeframes or scenarios determine outcomes. Hoffman and Lee (2015) utilized CIT to examine disruptive faculty behavior and its impact on students, providing insights for optimizing educational services.

Given its maturity and stability, CIT has been widely adopted by scholars, though few studies have employed this method to analyze user experience perceptions in second-hand trading platforms. Therefore, this study applies CIT from the perspective of e-commerce politeness, focusing on user perceptions during interactions with second-hand trading platforms to gain deeper insights into users' experiences and attitudes toward platform usability.

3.2 Research Design and Data Collection

This study examines major domestic second-hand trading platforms such as Xianyu and Zhuanzhuan using CIT, with a particular focus on e-commerce politeness in human-computer interactions. The research design integrates both online and offline data collection methods. The questionnaire includes demographic information such as gender and monthly income to analyze variations and correlations between different user groups and their platform usage behaviors, with an emphasis on user perceptions of second-hand trading platforms.

In this study, CIT was used to collect and analyze user-described satisfactory and unsatisfactory incidents to gain a direct understanding of their experiences on second-hand trading platforms. The analysis identifies the causes of satisfactory and unsatisfactory incidents, revealing underlying issues to optimize platform efficiency, enhance customer service quality, and improve user satisfaction.

The survey was conducted from January 15, 2025, to March 5, 2025, with questionnaires distributed and collected both online and offline at random. This mixed-method approach ensures

a sufficient data volume to support the study's conclusions. The questionnaire includes open-ended questions such as user experiences with satisfactory and unsatisfactory incidents during transactions, whether they would continue using the platform after improvements to unsatisfactory incidents, and their monthly expenditure on the platform. CIT was employed to present behavioral characteristics and analyze the causes behind user satisfaction and dissatisfaction in human-computer interactions.

4. DATE ANALYSIS

4.1 Basic Information

This study collected a total of 301 questionnaires. After removing 28 responses that were off-topic or inconsistent, 273 valid questionnaires were retained for data analysis. Among them, there were 273 valid key satisfaction incidents and 272 valid key dissatisfaction incidents, totaling 545 incidents. The study's respondents and activity attributes were relatively simple, and the sample size met the CIT methodology requirements (Flanagan, 1954). The proportion of male respondents was 43%, and female respondents accounted for 57%, showing a fairly balanced distribution. Among dissatisfaction incidents, there were 155 cases from female respondents and 117 from male respondents. Among satisfaction incidents, 146 cases were reported by female respondents and 127 by male respondents. Most respondents were between 19-25 years old, accounting for 71.73%, followed by those aged 26-35 years (13.29%). A majority of respondents held a bachelor's degree or higher (67.04%), while 7.31% held a postgraduate degree or above. Full-time students made up the largest proportion (77.41%), while working professionals accounted for 20.6%. Regarding platform usage frequency, 37.87% of respondents reported using second-hand trading platforms a few times per month, while daily and weekly users were relatively fewer. In terms of monthly spending, 47.51% of respondents spent between 1,501-3,000 RMB, followed by 38.54% spending 1,000 RMB or less. For expenses specifically on second-hand trading platforms, the majority spent between 101-500 RMB per month (45.18%), while 42.52% spent 100 RMB or less. High-expenditure users were relatively rare. The study found that respondents were predominantly young, highly educated, and part of the student demographic. They frequently used second-hand trading platforms but had relatively low spending habits. Their overall monthly expenditure ranged between 1,501-3,000 RMB, indicating a moderate level of purchasing power.

4.2 Classification Principles

This study collected 273 satisfaction incidents and 272 dissatisfaction incidents. Based on the key incidents, an initial classification was conducted. Satisfaction incidents were categorized into seven types: platform customer service, system functionality, discount mechanisms, product quality, personal privacy, precise recommendations, and security assurance. Dissatisfaction incidents were categorized into six types: security assurance, product quality, precise recommendations, platform customer service, personal privacy, and logistics tracking. Detailed classification names and descriptions are listed in Tables 1 and 2.

Table 1: Classification and Detailed Description of Key Satisfaction Events

Category Name	Detailed Description
Product Quality	The degree to which the actual product matches the seller's description, ensuring completeness, authenticity, and reliability.
Precise Recommendations	The platform provides personalized recommendations based on user preferences, helping users quickly find desired products.
Security Assurance	Transparency in the transaction process and product pricing between buyers and sellers, ensuring a secure transaction and preventing fraudulent activities.
Platform Customer Service	A service team that assists users in resolving issues during transactions, including after-sales service, response timeliness, seller service attitude, and platform appeals.
Personal Privacy	Ensuring that personal information is not leaked during registration and transactions, protecting user rights and financial security.
System Functionality	Centered on product and service capabilities, meeting user needs while ensuring speed and convenience throughout the transaction process.
Discount Mechanisms	A series of promotional policies such as price reductions, reward points, and discount coupons that enhance the value-for-money experience for users.

Table 2: Classification and Detailed Description of Key Dissatisfaction Events

Category Name	Detailed Description
Product Quality	The degree to which the actual product matches the seller's description, ensuring completeness, authenticity, and reliability.
Precise Recommendations	The platform provides personalized recommendations based on user preferences, helping users quickly find desired products.
Security Assurance	Transparency in the transaction process and product pricing between buyers and sellers, ensuring a secure transaction and preventing fraudulent activities.
Platform Customer Service	A service team that assists users in resolving issues during transactions, including after-sales service, response timeliness, seller service attitude, and platform appeals.
Personal Privacy	Ensuring that personal information is not leaked during registration and transactions, protecting user rights and financial security.

Logistics Tracking	The platform provides updates on packaging, status, and location during transportation, allowing users to monitor shipping and delivery speed to ensure a smooth transaction.
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This study specifically invited three classifiers to categorize the key satisfaction and dissatisfaction incidents reported by users. As shown in Table 3, all three classifiers have a thorough understanding of the second-hand e-commerce industry and possess relevant usage experience.

Table 3: Background Information of Classifiers

Classifier	Job Position	Work Experience
Classifier 1	Operations Manager at a Second-Hand E-Commerce Platform	Has five years of experience in second-hand e-commerce platform operations, highly proficient in e-commerce marketing.
Classifier 2	Marketing Specialist at an E-Commerce Platform	Has extensive experience in market promotion, skilled in planning and executing marketing campaigns.
Classifier 3	Professional Seller on a Second-Hand E-Commerce Platform	Frequently uses second-hand trading platforms and is an experi

4.3 Reliability and Validity Analysis

4.3.1 Reliability Analysis

Reliability refers to the consistency of results obtained when measuring the same variable using the same method, indicating the stability of the measurement. Reliability is typically assessed using Fleiss' Kappa coefficient, which ranges from -1 to 1. If the coefficient value falls between 0.81 and 1, it signifies a high degree of agreement among the classifiers (Järvelin & Vakkari, 2022). The reliability analysis of the CIT method can be divided into two aspects: individual classification consistency and inter-classifier consistency (Flanagan, 1954).

Individual classification consistency refers to the degree of agreement when a classifier categorizes the same data multiple times, reflecting the stability of classification results. In this study, three classifiers were invited to conduct the first classification, followed by a second classification 30 days later. The results were then analyzed for individual classification consistency, all of which exceeded 0.8, indicating a high level of agreement, as shown in Tables 4 and 5.

Table 4: Number of Individual Consistencies Among Classifiers – Most Satisfactory Incidents

Classifier	Number of Individual Consistencies	Individual Consistency
Classifier 1	253	0.927
Classifier 2	254	0.930
Classifier 3	256	0.938

Table 5: Number of Individual Consistencies Among Classifiers – Most Unsatisfactory Incidents

Classifier	Number of Individual Consistencies	Individual Consistency
Classifier 1	243	0.893
Classifier 2	246	0.904
Classifier 3	233	0.857

Inter-classifier consistency refers to the degree of similarity in classification results when multiple classifiers categorize the same data, reflecting the reliability of subjective judgment (Koo & Li, 2016). This study summarizes the classification data of the three classifiers to determine inter-classifier consistency, as shown in Tables 6 and 7.

Table 6: Number of Inter-Classifier Consistencies – Most Satisfactory Incidents

Number of Inter-Classifier Consistencies	Classifier 1	Classifier 2	Classifier 3
Classifier 1	253	-----	-----
Classifier 2	210	254	-----
Classifier 3	200	224	246

Table 7: Number of Inter-Classifier Consistencies – Most Unsatisfactory Incidents

Number of Inter-Classifier Consistencies	Classifier 1	Classifier 2	Classifier 3
Classifier 1	243	----	----
Classifier 2	229	246	-----
Classifier 3	216	236	233

This study verifies the average inter-classifier consistency among the three classifiers based

on the data from Tables 4 and 5. The formula is shown as follows:

$$A = \frac{\frac{2M_{12}}{n_1+n_2} + \frac{2M_{23}}{n_2+n_3} + \frac{2M_{13}}{n_1+n_3}}{N} \quad (1)$$

$$R = \frac{(N \times A)}{1 + [(N - 1) \times A]} \quad (2)$$

Where:

R = Reliability

N = Number of classifiers

A = Average inter-classifier consistency

M = Number of matching classifications between classifiers (e.g., M_{12} represents the number of identical classifications between the first and second classifier)

n = Number of classification judgments made by each classifier (e.g., n_1 represents the number of classification judgments made by the first classifier)

Based on the above formula, the results are shown in Table 8:

Table 8: Classification Reliability Table

Category	Average Inter-Classifier Consistency (A)	Reliability (R)
Satisfactory	0.841	0.941
Unsatisfactory	0.943	0.979

Table 8 shows that the average inter-classifier consistency in this study exceeds 0.8, indicating that the classification results of the three classifiers exhibit good consistency and stability. Additionally, the reliability values are all above 0.9, demonstrating strong agreement among the classifiers. Therefore, the questionnaire used in this study meets reliability standards, providing a solid data foundation and classification reference for subsequent research efforts (Flanagan, 1954).

4.3.2 Validity Analysis

Validity refers to the ability of a measurement tool or method to accurately assess the intended subject, evaluating the effectiveness and precision of the measurement approach. Validity can be categorized into content validity, expert validity, and face validity.

- 1) Content validity refers to whether the selected measurement tool fully and appropriately reflects the intended objectives (Wilson et al., 2012).
- 2) Face validity is determined by general users based on first impressions—whether the measurement tool aligns with the purpose of measurement and whether the results appear related to the measurement objectives (Thomas et al., 1992).
- 3) Expert validity involves professional judgment by specialists who assess the rationality and scientific rigor of the measurement tool based on their expertise and experience (Polit & Beck, 2006).

The questionnaire in this study aligns well with the themes and scope of second-hand trading platforms. The questions are well-designed and representative, accurately reflecting the survey's

research objectives, thereby demonstrating strong content validity. Additionally, the questionnaire is concise and easy to understand. Three experts from the e-commerce industry were invited to conduct subjective classification and evaluation based on their own experience and understanding, objectively reflecting the classifiers' assessments, which contributes to face validity. Expert validity is often applied during the questionnaire design phase. In this study, two university business management professors were invited to evaluate the questionnaire. Before the official survey, a small-scale test was conducted where experts analyzed the collected data and reviewed the effectiveness of the questionnaire. Based on their findings, refinements were made to improve its reliability and accuracy. Consequently, the questionnaire in this study demonstrated strong validity, meeting the criteria for content validity, expert validity, and face validity, providing a solid reference for future research.

4.3.3 Classification Results

After categorizing and quantifying the collected key incidents based on classification names, this study aims to provide a more concrete representation of user perceptions of second-hand trading platforms. To achieve this, two representative cases from each of the seven satisfaction categories and six dissatisfaction categories were selected for case presentation, as shown in Table 9 and Table 10.

Table 9: Key Cases of Most Satisfactory Incidents

Category	Typical Classified Incidents
Product Quality	I purchased a CCD camera on Xianyu—the quality was excellent, it takes great pictures, and works smoothly.
	The electronic device I bought on Zhuanzhuan matched its product description perfectly. The quality was guaranteed, and I was very satisfied upon receiving it.
Precise Recommendations	I was interested in electric guitars but found them expensive. I searched for affordable beginner models on the platform, and afterward, every time I opened it, I saw electric guitars. Eventually, I found the perfect one through the recommendations.
	Whenever I open the platform, the content displayed aligns with my recent interests and saved items, providing highly personalized recommendations.
Security Assurance	I once purchased an online learning course on Xianyu, and the platform warned me about the risks of buying virtual goods. I found this security measure very helpful.
	When purchasing valuable items on Xianyu, I can inspect them before payment, preventing fraudulent transactions such as empty packages—this gives me great confidence in my purchases.
Platform Customer Service	When purchasing a second-hand tablet, I had many uncertainties, so I asked customer service a lot of questions. The representative patiently answered each question without showing any frustration.

	When a second-hand item was defective and the seller refused a refund, customer service promptly intervened, resolved the issue, and processed the refund—great after-sales support.
Personal Privacy	When sharing product information, the platform required me to enable permissions myself, seeking my approval instead of making decisions on my behalf.
	Xianyu prompts me to enter my payment password, ensuring that purchases are not automatically completed—this protects my financial security.
System Functionality	I sold a film camera on Xianyu using the platform's suggested pricing feature, and it sold quickly.
	When selling an old book on Xianyu, the platform's process was highly user-friendly and efficient. From listing the item to communicating with buyers, each step was clearly guided.
Discount Mechanisms	Electronics were very affordable—I got my long-desired model at half price, such a great deal!
	The platform offers discount coupons for brands like Tustin, Coodie Coffee, Luckin Coffee, and McDonald's. Even Meituan's expansion coupons are available, saving me a significant amount of money.

Table 10: Key Cases of Most Unsatisfactory Incidents

Category	Typical Classified Incidents
Product Quality	I bought a camera on the platform, advertised as "99% new," but it was far from that. When I received it, it was visibly worn, with scratches hidden from the product description.
	I sold an old tablet on the platform, but the provided quality inspection report did not match the actual condition of the product.
Precise Recommendations	The platform keeps recommending products I'm not interested in or don't need. Even after marking an item as "disliked," it still appears in suggestions, negatively impacting my shopping experience.
	Frequent spam and intrusive ads disrupt browsing—every time I check products, advertisements pop up and irrelevant items are pushed to me.
Security Assurance	A product had a clearly marked price, but when confirming the shipping details with the seller, they suddenly changed the price—I felt deceived.
	Some dishonest individual sellers conceal repair histories for items like electronics, falsely claiming they haven't been repaired.

Platform Customer Service	I once bought a second-hand fridge, but it arrived broken. When I contacted customer service, they were impatient and quite rude.
	I purchased a second-hand phone on an e-commerce platform, but it turned out to be completely faulty. The customer service ignored my messages and handled the issue poorly—terrible after-sales support.
Personal Privacy	After entering my phone number on the platform, I started receiving frequent spam calls and messages, making me feel that the platform's privacy protection is inadequate and my information was leaked.
	I once had a dispute with a seller over a purchase. When I reported it to the platform, they shared the seller's personal information with me. I was shocked and concerned about privacy violations.
Logistics Tracking	After purchasing an item, the seller delayed shipping for an extended period. When it finally arrived, the packaging was so poor that the product was damaged.
	I bought a second-hand item on the platform, but the logistics tracking showed no updates, and the delivery was slow. Even after urging the seller, nothing changed.

Based on the above classifications, the summarized data has been organized into Table 11 and Table 12.

Table 11: Summary of Classified Satisfactory Incidents

Category	Classifier 1	Classifier 2	Classifier 3	Average	Ranking
Platform Customer Service	128	123	96	115.67	4
Security Assurance	25	23	42	30	3
System Functionality	18	35	31	28	6
Discount Mechanisms	21	27	32	26.67	7
Personal Privacy	26	30	22	26	5
Product Quality	28	18	27	24.33	1
Precise Recommendations	27	17	23	22.33	2

Table 12: Summary of Classified Unsatisfactory Incidents

Category	Classifier 1	Classifier 2	Classifier 3	Average	Ranking
Platform Customer Service	108	111	100	106.33	4
Security Assurance	57	49	56	54	3
Product Quality	50	44	48	47.33	1
Precise Recommendations	20	26	30	25.33	2
Logistics Tracking	19	22	20	20.33	6
Personal Privacy	18	20	18	18.67	5

Statistical analysis was conducted on the classified satisfactory and unsatisfactory incidents. Among the satisfactory incidents, the average number of incidents related to platform customer service was 115.67, accounting for 42.37% of the total. Security assurance had an average of 30 incidents (10.99%), while system functionality had an average of 28 incidents (10.26%). Based on these statistics, it can be observed that second-hand trading platforms with responsible customer service, well-developed system functionality, and attractive discount mechanisms are more popular among users and tend to generate higher purchase intentions.

Among the unsatisfactory key incidents, the average number of incidents related to platform customer service was 106.33, accounting for 39.09% of the total. Security assurance issues had an average of 54 incidents (19.85%), while product quality issues had an average of 47.33 incidents (17.34%). This suggests that when platforms suffer from poor service quality, insufficient security assurance, product discrepancies, or misleading advertisements, they quickly trigger consumer dissatisfaction and significantly reduce purchase intentions.

This study highlights that in satisfactory incidents, platform customer service accounts for approximately four times more cases than other categories, while in unsatisfactory incidents, it is about two to three times higher than other categories. Thus, whether the incident is positive or negative, platform customer service plays a crucial role in shaping user perceptions of second-hand trading platforms. Since second-hand transactions involve risk, customers rely heavily on platform customer service—its response speed, service attitude, and professionalism directly influence user trust and decision-making. Poor customer service can lead to a decline in transaction willingness among both buyers and sellers, reducing platform engagement. Therefore, platforms should enhance their customer service oversight mechanisms, train high-quality customer service representatives with good service attitudes, prompt after-sales support, and quick responses to optimize the user experience.

5. CONCLUSION AND RECOMMENDATIONS

Although second-hand trading platforms are widely favored by users and effectively meet their needs, there are still areas that require improvement. This study analyzes users' perceptions of key incidents in second-hand trading platforms from the perspective of e-commerce etiquette, utilizing the Critical Incident Technique (CIT) for an in-depth investigation. The findings reveal

that platform customer service, system functionality, discount mechanisms, product quality, personal privacy, precise recommendations, security assurance, and logistics tracking significantly influence consumer purchase intentions. Based on this, the following recommendations are made for second-hand trading platforms, buyers, and sellers.

5.1 Recommendations for Platforms

5.1.1 Strengthening Customer Service Professionalism and Responsibility

Whether in satisfactory or unsatisfactory incidents, the proportion of cases related to platform customer service is significantly high, demonstrating that users place great importance on customer support quality. Therefore, it is crucial for the platform to ensure responsive, courteous, and efficient customer service. A hybrid model that combines AI-powered efficiency with human flexibility could be beneficial: AI chatbots could handle simple or common inquiries, while human representatives could address complex issues with personalized support. Additionally, platforms should regularly train and evaluate customer service teams, establishing an incentive system to reward high-performing agents and improve service standards—ultimately reducing user frustration.

5.1.2 Optimizing the Precision of Recommendations

Platforms should avoid pushing irrelevant or unnecessary products to users, as excessive and intrusive advertising can create negative reactions and resistance. Instead, recommendations should be based on users' browsing duration and page engagement, ensuring a balanced mix of diverse, relevant suggestions. Further, platforms need to enhance monitoring mechanisms to reduce forced ads and protect user autonomy. Advertisers and merchants that exploit aggressive embedded advertisements or prioritize clicks over genuine consumer interest should face appropriate penalties. Additionally, recommendation systems should ensure fair competition by promoting multiple sellers for the same product, fostering market diversity and preventing monopolization.

5.1.3 Optimizing User Interface and Transaction Processes

Platforms should streamline interface design, ensuring clear organization of product information and services. Key features should be strategically placed on the homepage, allowing users to quickly understand platform functionalities through intuitive navigation. For first-time users, introducing a beginner's tutorial could simplify the onboarding process, reducing learning costs and enhancing overall accessibility.

5.2 Recommendations for Sellers

5.2.1 Ensure Strict Quality Control

The accuracy of product descriptions is the top concern for buyers. False advertising, discrepancies between product description and actual condition, or misrepresentation can greatly affect consumer sentiment and purchase intent. If sellers list low-quality or misleading products, buyers may lose trust not only in the seller but in the entire platform. To maintain credibility, sellers should ensure that the physical product matches its description, providing honest and transparent details. Exaggeration or excessive embellishment should be avoided. Additionally,

sellers can certify high-value items, such as digital devices, by obtaining an authenticity report and enabling customer reviews, allowing buyers to better understand the product before purchasing.

5.2.2 Utilize Promotional and Discount Strategies Effectively

Discounts significantly increase consumer willingness to buy. Sellers can offer coupons, cashback rewards, time-limited discounts, or free gifts during festivals or platform events to attract price-sensitive buyers, while avoiding excessive mandatory promotions. Additionally, sellers should clearly list product prices, ensuring price consistency before and after transactions. Any price adjustments should be promptly communicated to buyers to prevent unexpected price hikes. Bargaining and withdrawal policies should also be clearly explained to protect buyer rights and ensure transparency.

5.2.3 Improve Customer Service Responsiveness and Professionalism

Sellers should maintain professional communication skills when interacting with buyers, using standardized responses while patiently and responsibly addressing inquiries without deflecting issues. Continuous self-improvement is encouraged to enhance professionalism and build a reputable seller profile. To optimize efficiency, sellers can implement automated response functions, where AI chatbots handle basic and common queries, while human representatives address complex issues. This ensures efficient communication and prevents frustration caused by repetitive, robotic responses.

5.3 Recommendations for Buyers

5.3.1 Strengthening Personal Privacy Protection

Buyers should safeguard their personal information while using the platform, providing only essential details during transactions and avoiding unnecessary disclosure of phone numbers, addresses, or other sensitive data. Regularly clearing browsing history, disabling unnecessary permissions, and encrypting important personal information can further enhance privacy protection. Buyers should also be cautious of strangers, avoid clicking on suspicious links, and promptly report any issues to the platform.

5.3.2 Enhancing Security Awareness

Before completing a transaction, buyers and sellers should confirm product details and communicate thoroughly. Using chat tools to record relevant discussions can help protect buyers' rights if issues arise later. During payment, buyers should prefer third-party escrow payment platforms instead of direct bank transfers or QR code payments to minimize fraud risks. Additionally, carefully verifying the payment amount on the checkout page, developing fraud awareness, and practicing preventive measures before, during, and after transactions can help safeguard personal finances.

5.3.3 Making Effective Use of Platform Features

Before purchasing an item, buyers should carefully check authentic product reviews, utilizing the comment section to gain deeper insights. Relying solely on ratings and sales figures may not provide a comprehensive understanding—instead, referencing product images, detailed

descriptions, and follow-up reviews ensures a more informed decision. If a dispute arises, buyers should avoid direct conflicts with sellers, retain chat records and product details, and immediately seek assistance from platform customer service. Platform intervention can improve problem resolution efficiency and help prevent dishonest seller behavior.

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