

# Research on E-commerce Platform of Online Shopping Consumers

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## ABSTRACT

In recent years, e-commerce platforms have emerged in an endless stream, including Amazon and eBay in the high-end international market, Tmall and JD.com in the high-end Chinese market, Pinduoduo and Taobao in the low-end market. It is not so difficult for many companies to share a piece of the online shopping business. However, due to the serious homogeneity of online shopping platforms, it is difficult for users with special purchasing needs to find suitable e-commerce platforms. At the same time, different e-commerce platforms have different user stickiness for different products. Therefore, understanding users' preferences and reasons for purchasing on the platform can help enterprises improve the efficiency and accuracy of marketing. For example, after big data analysis, companies can push different products to different groups of people with more accurately and more appropriate prices. This paper chooses four popular e-commerce platforms at present: JD, Taobao, Pinduoduo and Tmall as the analysis objects. Analyzing consumers' purchasing tendency and reasons for different platforms by investigating. For different online review systems, reviews and comments have different effects on sales. Under the classified evaluation system, the total number of reviews and the number of positive comments have a significant positive impact on sales. Negative reviews or comments have a significant negative impact on sales [1]. Hence, in this experiment, the author hopes to collect feedback from consumers to analyze whether the four platforms are successful in marketing within different consumer groups, and to analyze the reasons why different consumer groups are attracted to these four platforms. According to the survey, users tend to have obvious preferences when buying different products. For example, they tend to choose JD.com when buying electronic products, while they tend to choose Taobao and Pinduoduo when buying low-priced daily necessities. At the same time, the author will also classify the consumers participating in the survey according to age and gender in order to analyze the impact of these factors on the choice of purchasing platform.

**Keywords:** *E-commerce, marketing strategy, consumer segmentation, collection of comments from consumers, business analysis*

## 1. INTRODUCTION

In recent 20 years, the way people live has changed radically. According to A New Marketing Paradigm for Electronic Commerce, Hoffman, Novak and Chatterjee suggested that a fundamental lack of faith between most online stores and consumers has prevented people from shopping online or even providing information to web providers in exchange for access to information [2]. The price of online shopping is more transparent, and the usage is easier. With the update of smart phones, people can completely buy any products they want at home. However, as in other industries, user stickiness remains one of the most important factors for e-commerce

companies. The tweaks and changes that shopping platforms make to user usability and stickiness are long-term process. Moreover, they still have a lot of space for improvement. A company never wants to see that it limit itself to some consumers or certain products. Therefore, all e-commerce platforms are working hard to find and broaden their user groups and find appropriate marketing methods. Consumption is a two-way behavior. On the one hand, e-commerce platforms will select some consumers and market the products they want to sell to them. On the other hand, consumers have their own preferences for different platforms. Therefore, in this paper, the author randomly select some consumers and ask them to evaluate

different e-commerce platforms. At the same time, the author try to help companies analyze different types of consumers, so that they can effectively market them. The interaction among consumer segments: Policy decisions rest on assumptions about the nature and type of interactions among consumer segments[Christine Moorman And Linda L. Rice 2013 [3] This means that companies must be aware of comments about different platforms, both themselves and others. According to the website features and their individual characteristics to the context of the influence of the network shopping acceptance, Zhong Xiaona claims that: On the relationship between cognitive and behavioral, useful cognition has positive influence on consumer shopping frequency, PEU have indirect effects on frequency of shopping [4]. Therefore, it is necessary to find out what factors affect consumer cognition from different perspectives.

## 2. QUESTIONNAIRE DESIGN

### 2.1. Respondents:

In this experiment, the author randomly selected different types of respondents. There should be no limitations in the analysis of consumers on e-commerce platforms. Online shopping is not only the choice of young people, but also middle-aged and old people with higher purchasing power. According to research provided by iMedia Data Center, 58 percent of Internet users shop online multiple times a month, and more than 40 percent of this group are middle-aged users. From 2013 to 2018, the amount of online shopping transactions in China increased from 2,679 hospitals to 5,737 billion yuan, with a compound growth rate of 84.6%. Moreover, in 2020, the number of online shopping users in China reached 782 million, accounting for 79.1% of the total Internet users [5]. Whether or not the percentage of middle-aged and older users continues to grow, with such a large population base, the survey must include as many different types of users as possible to ensure diversity and credibility of the survey. Through the research on the service industry, McDougall found that customer value-perceiving (i.e., transferred value) can promote the formation of service industry loyalty. In e-commerce mode, the value-perceiving of customers is composed of product quality, service quality, price, brand image, etc. When

the value-perceiving of customers is high, they will show behavioral loyalty and attitudinal loyalty [6]. Hence, the author conducted the survey from two different perspectives. The author asked users to choose their favorite platform with specific reason among the four online shopping platforms mentioned above. There are the reasons to choose: cost performance, product quality, software design, after-sales service, and product variety. Moreover, the author hopes to classify consumers by gender and age to understand the impact of these factors on their consumption behavior. The author thinks these two factors are the most critical. Female users may be more inclined to buy daily necessities, beauty products. Male users are more likely to favor electronics products, sports products and fashion products. Middle-aged users may buy health care products and pay more attention to quality. Young users and older users may choose products with high cost-performance. Data collection: In the process of the survey, the author collected 580 results from questionnaires and sent out a total of 1,300 questionnaires. The questionnaire was collected by the WeChat mini program on the Internet.

## 3. THE OBSERVATIONS

As shown in figure 1, 249 women and 331 men participated in the survey, accounting for 43% and 57% respectively. Table 2 shows that consumers' preferences for platforms are Taobao > JD > Tmall > Pinduoduo. Product quality, product variety, product quality, and cost performance are the most positive responses for each of the four platforms. JD has been received well comments in terms of product quality, cost performance and after-sales service. However, there are many problems in product variety and UI design. There are no obvious problems with Taobao other than its software design. The overall audience of Tmall is small, and it get positive responses for product quality and after-sales service. Pinduoduo has the smallest audience and is poorly evaluated in other aspects except cost performance. By analyzing figure 2 and figure 3 at the same time, all respondents can be separated into eight groups. Among eight groups, four most common audience groups of these four platforms are respectively men aged 18-30, women aged 18-30, women aged 30-50 and men aged over 50.

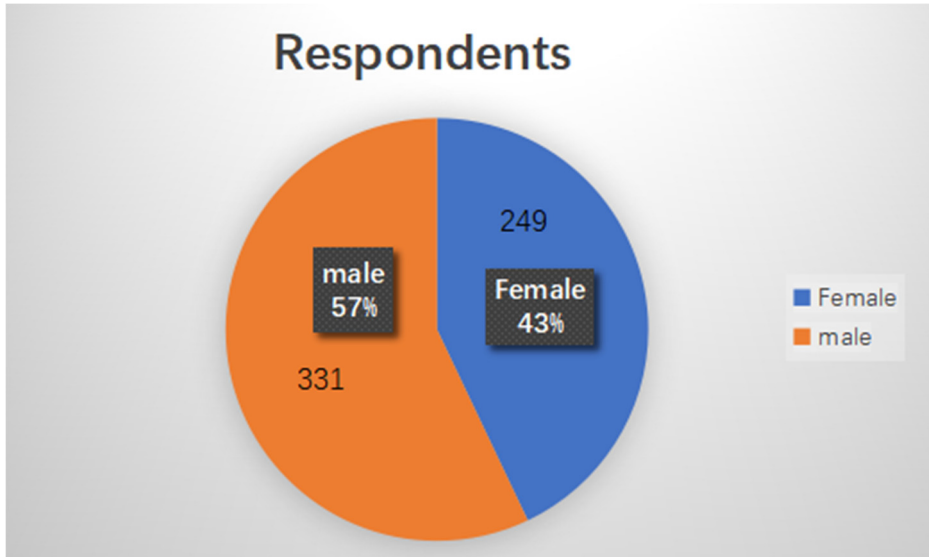


Figure 1. Gender of Responds in the Survey

CONSUMERS' ATTITUDES OF PLATFORMS

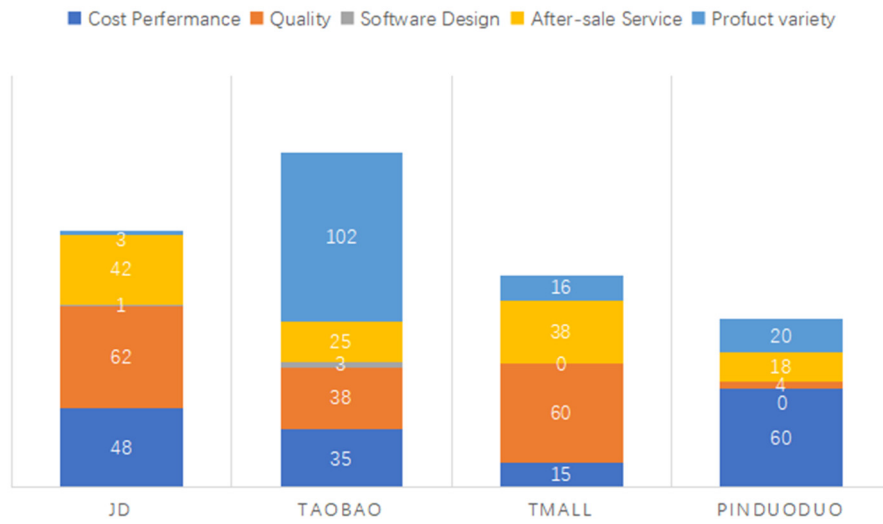


Figure 2. Consumers' Attitudes of the Platforms

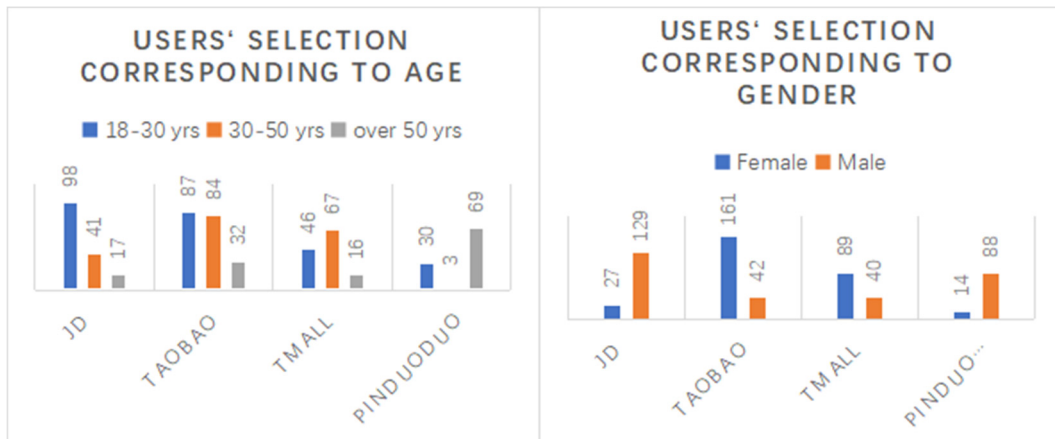


Figure 3. Users Selection Corresponding to Age and Gender

### **3.1. JD**

JD enjoys a good reputation among young male users because electronic products such as graphics cards, CPUS, mobile phones and headsets are available in JD in many styles and at low prices. At the same time, JD is also very responsible for the after-sales service of electronic products. However, the author found from the data that JD's product diversity is very low and there is basically no marketing for female customers. The proportion of women of any age group who choose JD is very low.

### **3.2. Taobao**

As one of the largest online shopping platforms in China, Taobao is favored by the most respondents. Seventy-nine percent of the respondents who liked Taobao were women. At the same time, Taobao is marketing to users of different age groups. It can be seen that the proportion of users aged 18-30 and 30-50 are 42.9% and 41.4% which is relatively close, and the proportion of elderly users over 50 is still not low. Moreover, Taobao's cost performance, product quality, after-sales and product diversity are also excellent. In particular, the product diversity got 102 votes which is basically ten times that of other platforms.

### **3.3. Tmall**

Sixty-eight percent of those who chose Tmall were women. Most people aged 30-50 choose Tmall. However, in addition to the quality of the products, Tmall received a relatively low number of votes in other areas. For example, only 15 positive votes were received for the price performance.

### **3.4. Pinduoduo**

Pinduoduo is the only platform with a majority of elderly users. Sixty-eight percent of users are over 50 years old, and the majority of users are men. It only got a high number of votes for the cost performance, but the votes related to product quality and after-sales service were very low.

## **4. MERITS AND DRAWBACKS**

### **4.1. Merits**

One of the merits about my research is that it covers all potential consumer types as much as possible, so the results are general. It is not enough for a company to analyze only a portion of consumers, because online shopping is not limited to a specific group of people. At the same time, this survey of the industry considered external and internal factors. The advantages of these e-commerce companies were not only investigated, but

also analyzed corresponding to gender and age. The survey The authors designed had relatively fewer individual variations. This survey is not to get the respondents' reviews or experience of a specific product, their reviews of the e-commerce platform were highly correlated with the overall data obtained. For example, most consumers choose JD.com because of product quality and after-sales service, and most users of JD.com are young people. If a large number of elderly people choose JD.com, the author may considers the validity of the whole experiment, and vice versa. In fact, however, very large deviations in such a questionnaire are rare, especially in highly correlated one.

### **4.2. Drawbacks**

The analysis of specific gender and age groups is more subjective. The author did not do more detailed research on the specific products such as phone or beauty products In order to better understand what factors drive consumers to buy. The factors are internal or external? How internal and external factors interact with each other. On the other hand, all my data are obtained based on WeChat. Some middle-aged and elderly people may not use WeChat, which leads to a low proportion of elderly people in the survey. Another limitation is that there is only single choice questions for respondents to choose. It is possible that some respondents may have more than one positive response to their platform which may leading to a bias in the data. What is more, these evaluation options for the platform are selected by my subjective consideration. Respondents may have different reasons to choose their favorite platform. The conclusions about consumers might be biased.

## **5. CONCLUSION**

Through the analysis of internal and external factors, female users usually choose platforms with a larger variety of products to shop. Women pay more attention to product quality than price, even regardless of age. Therefore, the company can offer different types of products to female users and pay attention to the quality of the products. Unlike women, young and middle-aged men (18-50 years old) pay more attention to product quality and after-sales support. While ensuring product quality, they prefer low-priced products. Digital electronic products are one of their favorites. Older men pay more attention to cost performance and have no obvious requirements for product quality or other factors. Therefore, for male consumers, businesses should pay more attention to quality and try to make small profits but high sales. Moreover, all online shopping platforms have not been well received by consumers in terms of software design, which is also a direction of enterprise efforts. In such a fast-paced world, any stagnant company will be eliminated.

Companies should analyze all user groups as much as possible to make marketing the most reasonable. This analysis of consumers is also preliminary. The author hopes that more people can classify and analyze the types of consumers in detail, so as not only to enhance the user's online shopping experience, but also to help companies better marketing.

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