# Analysis of consumer behavior in Internet mode

In the era of rapid development of Internet technology, Internet consumption has been accepted by more and more people. At the same time, Internet consumers also adapt to the changes of Internet consumption platform to different degrees. Study the behavior of online consumers, help consumers understand the problems in the process of online consumption and find solutions, and provide reasonable and effective marketing strategies for online consumption platform. This paper analyzes the behavior of online consumers, including the following aspects, research background and current situation of online consumption; The decision-making process of many online consumers and the influencing factors; Analyze the behavior of online consumers; Provide reasonable suggestions for the network consumption platform.

## 1 Research background

Now, the popularity of online consumption is a normal life, and the importance of China's online consumption level has increased. According to the data, in 2016, China's Internet transaction volume reached 1.05 billion, which is expected to increase by 37.6%. 38.5% of the market was the first to buy, and the B2B market had 790 transactions and 480 million users, with an increase of 15.1%. It's a kind of world.

Internet consumption breaks the habit of traditional consumption and makes consumption faster and faster. Therefore, with the development of online consumption, the characteristics and behaviors of consumer groups must change, which also requires the marketing strategies of various online consumption platforms to appropriately change the behaviors of online consumers, so as to correctly understand the characteristics of consumer groups in online consumption, and provide reasonable and effective marketing strategies, To ensure the continuous process of continuous process.

The analysis of consumer behavior under Internet mode is the traditional decision-making in the process of analyzing consumers, while the analysis of consumer behavior under Internet mode is the analysis of comprehensive factors. It has been increased; On the one hand, the Internet provides great convenience for consumers to search and obtain information, which makes consumers more active consumption. Under the traditional mode and Internet mode, the user behavior mode has no essential characteristics, but the Internet mode can better meet the personalized needs of consumers. In terms of the characteristics and preferences of consumers, personalization can more accurately realize the matching between products and consumers.

# 2 Decision making process and influencing factors of consumers' purchase

## Decision making process of Internet Consumers

The decision-making process of consumers refers to the fine steps in the purchase process. The decision-making process of consumers mainly includes the following steps: demand analysis,

information search, evaluation and comparison, confirmation of purchase, and inspection after purchase.

### 2.1 Demand analysis

The demand of consumers is mainly a kind of psychological activity, which guides consumers to their own purposes and meet their own needs. The demand of consumers is influenced not only by consumers themselves, but also by various forces The impact of culture and other factors, the impact of consumer demand on the product, will be affected by the impact, the severity of demand, the initial stage of consumer purchase decision-making, consumer demand analysis.

#### 2.2 Information search

After consumers determine the purchase demand, they will obtain information through various aspects to further understand the goods for the services they want to buy or receive. In addition, we can have an in-depth understanding of this commodity and have a certain understanding of it; In addition, we can search the required information through the network platform.

#### 2.3. Evaluation and comparison

After consumers know the information of the purchased goods, they need to evaluate the determined information. For example, consumers usually consider whether the demand of the goods matches their purchasing power; Whether the real value of goods can be reflected. By comparing the performance of the products Price and purpose determine whether to purchase or the type of purchase.

### 2.4. Confirm purchase

After consumers complete the evaluation and comparison, they have to go to the major online shopping platforms to buy. At this stage, consumers tend to consider the type of goods and self demand matching goods, to decide which degree they want, and then select the brand for this kind of goods, so as to ensure that the quality of the products meet the requirements, and will not hinder, and choose the goods suitable for their own payment.

#### 2.5. Post purchase comments

The evaluation of the value of the goods paid for and used by consumers will evaluate whether the goods meet their own standards, according to the quality of the goods and their service attitude in the process of purchase, which will play an important role in encouraging or correcting suggestions, the process of post purchase comments and the possible positive production and sales of the products.

## 3 Project data and analysis objectives

User behavior is a Taobao user behavior data set provided by Alibaba, which is used to study the implicit feedback recommendation problem.

This data set contains all the behaviors of about one million random users (including click, purchase, add purchase and like) with behaviors from November 25, 2017 to December 3, 2017. The organization form of data set is similar to movielens-20m, that is, each row of data set represents a user behavior, which is composed of user ID, commodity ID, category ID, behavior type and label to prevent recall.

## **Analysis objectives**

- 1. User browsing, index trend
- 2. What kinds of products and animals are users interested in? What are the differences between paid users and non paid users
- 3. Conversion rate, loss rate and repurchase rate
- 4. Characteristics of user purchase behavior
- 5. It is known that RFM model can classify users

#### **Data overview**

#### **Dataset**

File	Description	Feature
UserBehavior.csv	All user behavior data	User ID, item ID, category ID, behavior type, ti

#### UserBehavior.csv

We random select about 1 million users who have behaviors including click, purchase, adding item to shopping cart and item favoring during November 25 to December 03, 2017. The dataset is organized in a very similar form to MovieLens-20M, i.e., each line represents a specific user-item interaction, which consists of user ID, item ID, item's category ID, behavior type and timestamp, separated by commas. The detailed descriptions of each field are as follows:

Field	Explanation
User ID	An integer, the serialized ID that represents a user
Item ID	An integer, the serialized ID that represents an item

Field	Explanation
Category ID	An integer, the serialized ID that represents the category which the corresponding item be
Behavior type	A string, enum-type from ('pv', 'buy', 'cart', 'fav')
Timestamp	An integer, the timestamp of the behavior

Note that the dataset contains 4 different types of behaviors, they are

Behavior	Explanation
pv	Page view of an item's detail page, equivalent to an item click
buy	Purchase an item
cart	Add an item to shopping cart
fav	Favor an item

## Dimensions of the dataset are

Dimension	Number
# of users	987,994
# of items	4,162,024
# of categories	9,439
# of interactions	100,150,807