

Analysis of Chengdu Luxury Market Based on Big Data Analysis

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Abstract: At present, luxury consumers are more eager to get social recognition, so tangible goods are favored. In this paper, the current situation of luxury goods market in Chengdu based on big data analysis is analyzed. The original logs obtained by using software such as Web crawler go through preprocessing operations of web records such as data cleaning, identification of the same user and identification of independent sessions in turn, so as to obtain data that can be directly discovered and used, and extract these data related to user behavior analysis. Big data analysis shows that Chengdu luxury goods market has great potential, but irrational consumption is serious. Therefore, the government and relevant departments should set up specialized agencies for luxury goods management as soon as possible, formulate corresponding management measures and strengthen the supervision of luxury goods.

Keywords: Big data, Chengdu, Luxury market.

1. Introduction

With the continuous increase of urban population in China, the improvement of people's living standard and the growing maturity of consumers, Chengdu's luxury consumption market has developed rapidly in recent years. China's economic opening and market globalization have had a profound impact, and the luxury era has gradually entered China. The lifestyle represented by luxury goods hit it off with the social trend of self-development, and luxury goods gradually became a flaunt and proposition to show personality and self-development [1].

Nowadays, for many people in China, luxury has always been the shining star on the pyramid of life, which holds people's dreams [2]. With the rejuvenation of consumers and the change of consumption concept, as well as the rapid progress of luxury materials, processing technology and production technology, and the continuous updating of design styles and concepts, consumers' aesthetic demand for luxury goods tends to be personalized, and luxury aesthetics has attracted people's attention and attention. This paper mainly analyzes the current situation of Chengdu luxury goods market based on big data.

2. Concepts and Categories of Luxury Goods

The word "luxury" has been widely discussed in the fields of economics and institutional studies since ancient times. In recent years, the definition of "luxury" and "luxury" has been controversial. Luxury goods contain unique cultural meanings, and at the same time they are influenced by the social and economic environment. Therefore, its meaning involves not only the material category, but also the moral connotation. Therefore, "non-essential" is not a good explanation for the definition of luxury goods.

The ratio of market value to quality of luxury goods is the highest among the three types of goods, and it has the characteristics of high value and high quality. This explanation is relatively consistent with the excellent quality and high value of luxury goods on the market. From the

sociological point of view, the role of luxury goods in interpersonal relationships is emphasized. Luxury goods owners show people their personal taste, personal wealth, social status and power through luxury goods [3-4]. From the perspective of marketing, the value of goods includes both tangible and intangible. Luxury goods are undoubtedly the products with the lowest ratio of tangible value to intangible value. Luxury goods involve different categories of various disciplines. From the perspective of different disciplines, the definition of luxury goods is also different. It can be concluded that in the process of considering the definition of luxury goods, not only the natural and social attributes of luxury goods themselves, but also the relativity of time and space should be considered.

The forms of luxury goods are diverse, and the more common ones can be divided into physical and non-physical forms. In economics, luxury goods are defined as products with the highest ratio of value to quality, that is, goods whose demand growth is higher than income growth. The emergence of new luxury goods conforms to the requirements of marketization, and also reflects the trend of popular consumption of luxury goods [5]. It belongs not only to the wealthy class, but also to the middle class. Unlike ordinary commodities, which are necessities of life and are not as expensive as traditional luxury goods, they are between the "top level" and the "masses". In this paper, the definition of luxury goods is generally used in the world: luxury goods are a kind of consumer goods that surpass people's daily living needs and can provide people with great enjoyment, which includes both spiritual and material enjoyment, and is unique, scarce and rare.

3. Big Data Analysis of Luxury Users

Generally speaking, Chengdu's luxury consumption market has a relatively simple consumption structure, and most of its consumption is concentrated in jewelry, bags, fashion and other sections. At present, luxury consumers are more eager to get social recognition, so tangible goods are favored. There are many factors that affect luxury goods: such as the value of goods, after-sales of goods, relative prices of other luxury goods, income and personal wealth, social and cultural habits,

the quality of residents, education level, tax policy, etc [6-7].

Due to the large-scale application of the Internet in our daily life, it is difficult to find effective information in the vast amount of data. Web log mining plays an important role in Website structure optimization and page reorganization, and finds user behavior patterns from web access logs. Through statistics, analysis and synthesis of the records in the Web log files, we can find and eliminate the causes of errors, understand the distribution of users' access, effectively grasp the operation of the server, and better strengthen the maintenance and management of the system [8]. According to the characteristics of data in Web logs, these data can't be directly used for algorithm input, so the original data must be cleaned and converted into data that users can directly use for mining.

Data preprocessing is the first and most critical step in Web log mining, because the data collected by Web crawler is semi-structured, as shown in Figure 1. After pre-processing, the original data will be clean, accurate and useful, and stored in a format suitable for pattern recognition, pattern analysis and other operations, so that the mining algorithm can be better used to mine Web logs.

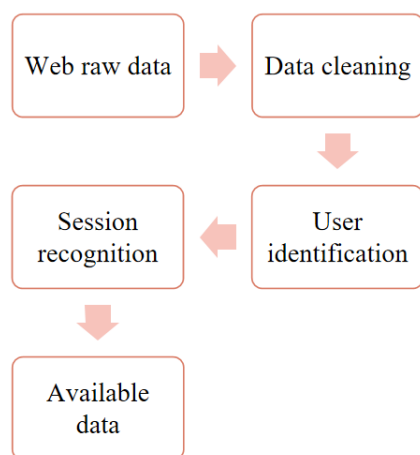


Figure 1. Data preprocessing process

User identification refers to identifying which records in log data are triggered by the same online user, and connecting the access records of the same user can get the browsing sequence of the user in this period. For the e-commerce users' browsing behavior that this paper focuses on, the field that identifies the user information contained in the Cookie is proposed, and whether it is the same user is identified according to the field. When the IP address is the same, the operating system and browser used are the same, the user is identified according to the logical structure between the pages of the website: if the requested page can't be reached from any of the visited pages, the user is judged to be a new user.

The original logs obtained by using software such as Web crawler go through preprocessing operations of web records such as data cleaning, identification of the same user and identification of independent sessions in turn, so as to obtain data that can be directly discovered and used, and extract these data related to user behavior analysis. Looking at the Source IP field in the Web log, you can get the location information of users who log on to the website. According to different regions where users live, their concept of purchasing goods is different [9].

From the Cookie information, you can get the information

of the products that users have browsed before, and compare these information with the products that users have recently visited. If they belong to the same category, it means that this user is more inclined to buy the products of that category.

4. Analysis of the Present Situation of Chengdu Luxury Market

4.1. Luxury consumption market has great potential

Luxury brands set aside local partners in Chengdu to expand with great fanfare, opening flagship stores in commercial prime locations in major cities. It can be seen from this that Chengdu's luxury consumption market is huge, and the world's top luxury brands are unwilling to lag behind, landing in Chengdu one after another. Up to now, almost all the world-class luxury brands have set up branches in Chengdu. In the past three years, the growth rate of quite a few luxury brands in Chengdu market has been amazing, with individual brands even reaching 80%-100%, far higher than the growth rate of about 10% in other countries and regions in the world. It can be seen from the above data that with the rapid growth of Chengdu's economy and the rapid rise of the middle class, China has become a big consumer of luxury goods with great potential.

The growth rate of luxury consumption indicates the size of luxury consumption market. Traditionally, the luxury consumption market in Chengdu is dominated by male consumers. Now, due to the further improvement of women's social and economic independence, the proportion of women in the luxury consumption market is increasing day by day. With the active purchase of female consumers, the sales of luxury goods such as cosmetics, perfumes and accessories are growing rapidly [10]. In Chengdu, it is not uncommon to spend 40% or more on luxury goods, which is the irrational phenomenon of luxury goods consumption in Chengdu.

4.2. Consumption abroad accounts for a large proportion of luxury goods

With the improvement of Chengdu's opening to the outside world, outbound travel has become more and more popular. With the rapid development of overseas travel industry and the increasing number of outbound tourists, the amount of consumption abroad has increased dramatically year after year. On the one hand, leaving Chengdu gives consumers the opportunity to contact foreign cultures and products, on the other hand, it also gives consumers more choices to buy. In the past two years, several local luxury e-commerce platforms in Chengdu have gone offline one after another, and a well-known luxury e-commerce company has recently attracted the attention of the outside world due to the bankruptcy storm. On the other hand, Chengdu's consumption upgrading is still on the rise, especially affected by the epidemic situation, and the global luxury goods circulation is blocked, which further promotes the development of Chengdu's luxury goods consumption market.

The data shows that from 2018 to 2019, Chengdu consumers accounted for nearly 1/3 of luxury consumption in China. Affected by the epidemic, overseas travel is restricted. In 2020, the proportion of luxury goods in Chengdu will reach 75%. Chengdu's consumption upgrading level continues to improve, and the epidemic factors promote the further development of the domestic high-end consumer market, which is good for domestic luxury goods trading and

circulation as a whole (Figure 2).

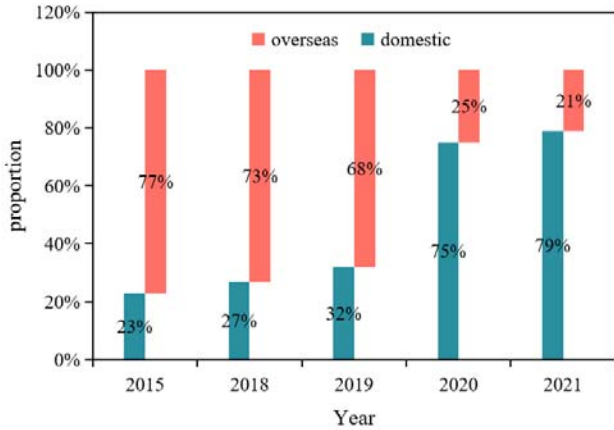


Figure 2. The proportion of judo consumed by consumers in luxury goods

No matter which particular segment of luxury goods market it is in, the core pain points of the market are still the concerns about counterfeit goods and after-sales service guarantee. The source guarantee and after-sales service of the upstream supply chain of the industry extended by the market pain point have become the key factors. It can be said that as long as consumers' concerns about counterfeit goods and after-sales are solved, luxury e-commerce can achieve great development.

4.3. Luxury consumers are younger

Chengdu luxury goods market will record a growth of 23%-25% to 520 billion yuan this year. After 90, it will become the main force of consumption. Compared with the middle-aged and elderly people, the post-90s generation can get more information. With the continuous improvement of the spending power of the post-90s generation, the scale of Chengdu luxury market is expanding rapidly, and the mainstream luxury consumer groups are also changing.

Among the luxury consumers in the market, consumers born 80 years ago, 80-90 years old, 90-95 years old and 95-00 years old account for 7%, 43%, 31% and 19% respectively, and the number of consumers born after 90 years old has reached half (Figure 3).



Figure 3. Luxury consumption structure

Chengdu's luxury market has been expanding in recent years. No matter from the scale of consumers or the proportion of market contribution, the post-90s consumers

have become the backbone of Chengdu's luxury market, with a strong willingness to consume and a rapid increase in consumption amount. With the further improvement of consumption power after 95 and 00, Chengdu luxury goods market will become younger and younger.

4.4. Irrational consumption is serious

Compared with mature luxury markets such as Europe, Chengdu's luxury market has its own particularity, that is, vanity is greater than taste in consumer psychology. Chengdu luxury goods market shows a strong vanity consumption, that is, conspicuous consumption. Chengdu has less taste-oriented enjoyment consumption, and buying luxury goods is mainly for others. Different from foreign countries, the biggest feature of Chengdu-style luxury consumption is to meet the needs of business gifts. In the officialdom of Chengdu, the gift level reflects a person's power value.

Consumers in Chengdu often buy luxury goods for "face" because they show off their wealth. Most luxury consumers in Chengdu have blind obedience psychology, so they don't know the brand attributes, historical connotations, functional positioning, etc. of the luxury goods, and only choose the price and brand awareness as the basis when purchasing. Young people choose high debt to consume luxury goods in order to show off their wealth, and the phenomenon of irrational consumption is serious.

5. Conclusions

In this paper, the current situation of luxury goods market in Chengdu based on big data analysis is analyzed. The original logs obtained by using software such as Web crawler go through preprocessing operations of web records such as data cleaning, identification of the same user and identification of independent sessions in turn, so as to obtain data that can be directly discovered and used, and extract these data related to user behavior analysis. Chengdu's luxury market has great potential, with a large proportion of luxury consumers' consumption abroad and younger luxury consumers, but the phenomenon of irrational consumption is serious. Therefore, the government and relevant departments should set up specialized agencies for luxury management as soon as possible, formulate corresponding management measures, strengthen supervision over luxury goods, and provide local luxury enterprises and consumers with a healthy and orderly luxury market environment.

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