

Review on shoe identification and profit model

Yichen Yin

JinaneTomas School, 250000, China

2478991962@qq.com

Abstract. With the rise of sneaker culture, the shoe resale market is huge, which has led to a large number of resale trading platforms. This article mainly analyzes the market development status of shoes and the importance of shoe appraisal service in the resale platform, then summarizes the shoe appraisal method, analyzes the core resale platform profit model, and take the platform, for example, analyzes the transaction commission, community traffic cash, technical service fee and other main profit business, again on the basis of the future development direction.

Keywords: shoe identification, profit model.

1. Introduction

From 2011 to 2019, the scale of the global sneaker market continued to expand and the growth rate showed an upward trend. In 2018, the size of the sneaker market was as high as US\$146.5 billion, an increase of US\$72.3 billion compared with 2011. In 2019, the size of the sneaker market continued to grow, reaching US\$168.47 billion. Sales of the sneaker market are expected to grow to \$278 billion in 2025. Judging from the number of sneakers sold, the total global sneaker sales in 2019 were 1.1898 billion pairs, far exceeding the 613.5 million pairs in 2010, an increase of 95%. The sneaker market continues to expand at a high speed. The two brands of Nike and Adidas account for the highest proportion of global sneaker revenue, accounting for 23% and 16% respectively. Taking Nike as an example, Nike's revenue in the first quarter was 9.1 billion US dollars. From 2019, the United States has the largest share of the global sneaker market sales, reaching 31.1%, and China is 7.1%.

In the world, some top sports brands such as Nike, Adidas, Reebok, Puma, Mizuno, New Balance, Umbro, etc. all started with sports shoes and have led the development trend of international sports shoes. At present, the production bases of these world's top sports shoes have been transferred to developing countries such as Asia and Latin America. From a global perspective, the current sports shoe production areas are mainly concentrated in China, India, Vietnam, Indonesia and Thailand in Asia, and Italy in Europe, Spain and Portugal, and Brazil in South America. There are 30,000 to 40,000 shoe-making companies in the world, including sports shoes, with a total of nearly 10 million employees in the shoe-making industry, shoe materials, shoe machines and other related industries.

The global sneaker market has expanded steadily since 2010, with an estimated \$168.47 billion in 2019. In 2019, Nike and Adidas brands had the top global revenue, with 23% and 16%, respectively, and Puma accounted for 4% of global revenue. The national fitness boom has driven the growth of global sports consumption. As one of the hot consumption spots of sports consumption, sports shoes have also achieved relatively bright achievements, gradually forming a sneaker culture. With the development of the market, the shoe culture is expanding rapidly, and today's sneaker market has also entered a new prosperity period, but the imitation and fake shoes emerge one after another, seriously affecting the shoe market and the fair competition business system. The production and sales chain of fake goods has realized the transnational division of labor, and the globalization of fake goods is becoming more and more intense, which is greatly disrupting the normal trading order of the global shoe market and damaging the market environment. "True truth" is still the pain point of the market. The huge demand, high price brought by many fake shoes mixed among them. And huge illegal interests, low cost of illegal protection, lack of independent innovation protection have also become the inducement of the spread of fake shoes. According to the report, the gang hid fake shoes that had not yet been marked, such as brand logo, under other items, and were added through customs, such as Nike marks. Therefore, the identification of true and false shoes has gradually appeared, and even developed into a professional and business model.

In general, shoe identification has gone through three stages: when Putian shoes flooded, ordinary consumers learned to identify imitation, after the rise of limited edition, custom edition, less output makes fans of a brand start to seek more professional appraisal; after the rise of shoe speculation trend, shoes are no longer limited to fan circulation, and more consumers / speculators almost completely rely on appraisal agencies for all kinds of limited and customized edition. In this process, the fraud technology also gradually changes from extensive imitation to fine reproduction, and the production line and design drawings made from the OEM are almost fake. In the current situation of the shoe market, some shoe trading platform identification services. In the identification industry, there are fewer and fewer things to distinguish between true and false, and it has been focused on the sign details. For those engaged in second-hand shoes trading platform, on the one hand directly provide the appraisal in the process of transaction, can greatly improve the user viscosity, on the other hand, these platforms are also open up the transaction scenario appraisal services (general charge, such as poison APP 5 yuan), this will provide the platform with huge pool of potential customers.

The second chapter of this article mainly studies the identification method of the existing sneakers, the third chapter studies the profit model of the sneakers appraisal service, and finally summarizes this article in the fourth chapter.

2. Study on the sneaker identification method

The sneaker culture has been out of the circle and has gradually become the social currency of young people. The sneaker culture originated in the United States in the last century. At first, it was limited to basketball. After incorporating elements of hip-hop and life, it continued to go out of the circle. The Air Jordan line truly took sneaker culture to the extreme and brought it to the world. After entering the 21st century, the circle of sneakers was further expanded, and the Yeezy series was born to further activate the sneaker market. At the same time, sneakers continue to gradually shift from monotonous sports mechanization to comfort, leisure and fashion, truly establishing the Sneaker culture. Like Moutai, sneakers are a kind of mid-to-high-end optional consumer goods. With their unique cultural attributes and collection attributes, they are gradually becoming the social currency of Generation Z. Generation Z is the main consumer group of sneakers.

As these years fake shoe technology continues to improve, want to distinguish a pair of shoes is more and more difficult, even professional appraisers, also see the situation. For the small white, to identify a pair of shoes, it is more difficult. General sneaker identification can mainly be carried out from the appearance, materials and other aspects, mainly including the following several.

Shoe box. On sneaker identification, not only the shoe itself, shoe box and other packaging is the first need to distinguish true and false. It can mainly be compared and analyzed from the following aspects. First, whether the font on the shoe box and other packaging is clear, whether the spacing is consistent, it is best to compare with the genuine shoe box when judging. Second, whether the steel seal on the shoe box and other packaging texture is clear, the imitation is generally no steel seal, or the steel print is not clear, no logic, the naked eye can clearly distinguish.

Shoe body. This aspect mainly judges the outline of the shoe type, the materials of each part of the shoe body, the fine degree of workmanship, can be identified by whether the line is smooth, whether the color is clear and bright, whether the brand logo of the shoe body is correct, whether there is too serious glue overflow or rough place to do the work.

Tread. Observe the positioning hole under the insole. There is a positioning hole under the general shoes, and through the sole of the line is neat can also be auxiliary judgment.

The AI-assisted identification. With the development of information technology, AI artificial intelligence assisted by shoe identification technology has become a basic technology of shoe resale platform identification business, and combined with the manual review mechanism, to provide the accuracy and efficiency of identification.

In addition to simple general identification methods such as appearance observation and analysis of materials, there are some special identification methods according to different brands, taking AJ

shoes as an analysis for example. The identification of AJ sneakers can be analyzed from some more detailed aspects. From the logo analysis of AJ, people in the AJ circle know that a typical identification method is that the letters R and D are connected together, while the false is separate, the false logo is not deep logo relief; from the tongue analysis of AJ, there is a woven label on the tongue and the NIKE logo on the label side. Authentic NIKE shoes add two to the logo here, if no or only one, it is fake. The AJ shoe contains a size tag with "Jumpman", and the fake shoe is sewn to the back of the tongue and the real shoe to the inside side of the shoe;

3. Analysis of the profit model of sneaker identification

Appraisal services generally appear on platforms such as post bars, communities, and forums. These appraisers are not professional. They have their own formal jobs and identities. They only start the research on sneaker identification because they are sneaker lovers. At that time, there was no clear definition of appraisers, and there was no unified platform to integrate these loose appraisers, and there was no need to obtain any qualification certificates. In the early days, as long as you have enough experience in playing shoes and a certain knowledge of sneakers, you can become an appraiser. However, a qualified appraiser with a certain fan base needs to achieve a high accuracy rate in the appraisal to accumulate word of mouth. However, as the influence of the trend continues to deepen, this unprofessional personal identification model highlights a series of problems and hinders the normal development of the sneaker industry. Under such circumstances, there have been many platforms that provide transaction and appraisal services, and there are professional appraisers on the platforms, such as Poison App, Nice and Get, and Check App, which just entered in May this year. "Check" is a trendy product appraisal trading platform under Zhuanzhuan. It has established a brand-new trendy product appraisal team and jointly created a double appraisal service with get. The reason why the appraisal platform has a certain authority is that it has professional appraisers. They conduct research with hundreds of fashion shoes of Nike, Adidas and other brands every day, and a true or false identification can convince consumers. The demand for sneakers continues to rise, and the development of counterfeit goods has not been hindered, which has also made appraisers sought after, and the salary is also very considerable.

As an emerging profession derived from the sneaker market, it has high requirements for the character of appraisers, because when the sneaker market becomes extremely hot, these appraisers are crucial to the development of the entire industry. Different shoes of different brands have their own unique features, whether it is the logo or the line. Because the counterfeiting craftsmanship of fake shoes is also very exquisite, newcomers in the general appraisal circle will not see it, which also requires top-level sneaker appraisers to accumulate at least four or five years of experience. More and more people are joining sneaker appraisers, but only a few are recognized in the circle. The appraiser industry also implements the survival of the fittest. Under the temptation of interests, there are also some popular appraisers who are forced to change careers because they have lost the trust of consumers. The platform is a systematic construction for appraisers and a more stable development model. The professional appraisal platform also promotes the healthy development of the entire industry.

Sneaker consumption gradually as clothing consumption, market scale gradually increased, at this stage shoe sales are no longer limited by comfort and functional judgment, more consumer demand for shoes for brand effect, color collocation and trend elements, etc., under the background of shoe culture, shoe trading and brand identification service development rapidly, formed the shoe trading and identification industry chain. At present, shoe identification has become the core service of shoe resale trading platform, and also the core competitiveness of shoe resale platform. The identification items mainly include whether they are genuine, whether new, whether there are traces of trial on, whether the shoes and shoe boxes are defective, etc., and so on, relying on the appraisal service and formed a trading model and profit model.

Next, we take the typical acquisition resale platform to analyze its profit model with "appraisal" as the core. Dewu platform is a commodity resale platform incubated by Hupu in 2015. It is a platform for information exchange and shoe identification. It has accumulated a large number of users who love the vertical fields such as sports and trend. Since the launch of the APP mall, it has taken the lead in making its debut with the "C2B2C" business model. The seller supplies the goods to the platform to identify the goods; the buyer can only see the brand, style, size and price. A simple summary is that the transaction mode of seller delivery-platform identification-buyer receiving goods builds a trust foundation for both buyers and sellers to form a relatively perfect identification service, so as to build a business model centered on "appraisal". The main profit business of the acquisition includes the following aspects:

(1) Transaction commission. The commission between the seller and the buyer. The information shows that the commission on the platform is 7.5% -9.5% of the product pricing. The higher the product pricing, the more the number of transactions, the more the service fee income of the product. If you can have the pricing power, it means that you can get a higher service fee income.

(2) Technical service fee. Technical service fee is 5% of the commodity price, minimum RMB 15, up to RMB 249, as per the standard specified on the bid page; operation service fee (including packaging service fee, inspection fee and identification fee) is RMB 33 for shoe order and RMB 38 for other orders; transfer service fee is 1% of the commodity price, up to 10%.

(3) Realization of community flow. It provides brands with community traffic, helps them increase sales, and charges fees from the transaction volume.

In this profit model, Dewu needs to maintain a certain degree of community user activity and consumption, operate the community content well, attract the brands to settle in, improve the company's revenue, and realize a virtuous circle between the community, users and brand owners.

4. Summary

The sneaker market is developing rapidly, and the entry of capital has brought a niche subculture such as sneakers into the vision of consumers and has become a well-known new culture. Appraisal has become a necessity under such circumstances. As long as appraisers are truly professional, they can better serve consumers and effectively promote the development of the industry. Sneaker resale market mainly faces mixed true and false shoes, "retail" consumer identification of shoes is not professional enough, to bear a greater transaction risk. The authenticity of sneakers affects the core of sneaker value. At this stage, sneakers are basically determined by manual identification. sneaker identification is a problem restricting the shoe resale market. This paper mainly reviews the basic methods of sneaker identification, including appearance, details and emerging AI auxiliary identification methods, and analyzes the business logic and its profit model based with the current shoe resale trading platform.

References

- [1] Safdeye J. Shoe assembly, shoe and related footwear method [J]. US, 2005.
- [2] Zugibe, F. T., J. Costello, and M. Breithaupt. "Identification of a Killer by a Definitive Sneaker Pattern and His Beating Instruments by Their Distinctive Patterns." *Journal of Forensic Sciences* 41. 2(1996): 310-313.
- [3] Hays D L. Shoe insole and methods for identification: US, US20080073229 A1 [P]. 2008.
- [4] Rida I, Bakshi S, Chang X, et al. Forensic Shoe-print Identification: A Brief Survey [J]. 2019.
- [5] Fernau M L. Shoe mounted identification assembly and method: US, US6684543 B2 [P]. 2004.
- [6] Dai X . Content-Based Image Retrieval Method and Its Application to Shoeprint Identification. IEEE, 2010.