

Analysis on the Ski Industry in China

Yuyan Wang^{1,*}

¹Qingdao No.2 Middle School, Qingdao, China, 266000.

Abstract. As the living standard increased, more and more people join this sport. The rapid development of skiing equipment and ski resorts stimulates multiple people to experience skiing. This paper analyzes the current situation and development of the ski industry in China. Based on the case study, the author analyzes the prospect and provides suggestions in the end for ski companies.

1 Introduction

There are more than 6000 ski resorts all over the world, with about 400 million skiers. Especially in northern Europe and America, the ski industry is an important economic pillar. For example, in the Tirol state of Austria, the value created by the ski industry in winter accounts for 9.72% of GDP and 16.7% of the local employed population[1]. In 2019, there were 28 more ski resorts in

China, bringing the total to 770, an increase of 3.77%. The number of skiers at domestic ski resorts rose from 19.7 million in 2018 to 20.9 million in 2019, an increase of 6.09%[2]. There are 770 ski resorts in 28 provinces, with the top five being Heilongjiang, Shandong, Xinjiang, Hebei and Shanxi. This paper mainly focuses on three aspects: the customer segmentation of China skiing industry, one prominent case of ski resort, and the suggestion to recent ski industry in China.

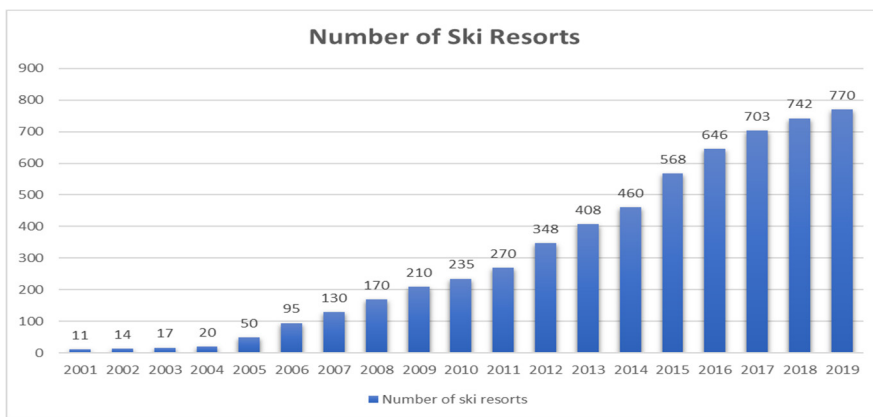


Fig. 1. The tendency of the Number of Ski Resorts

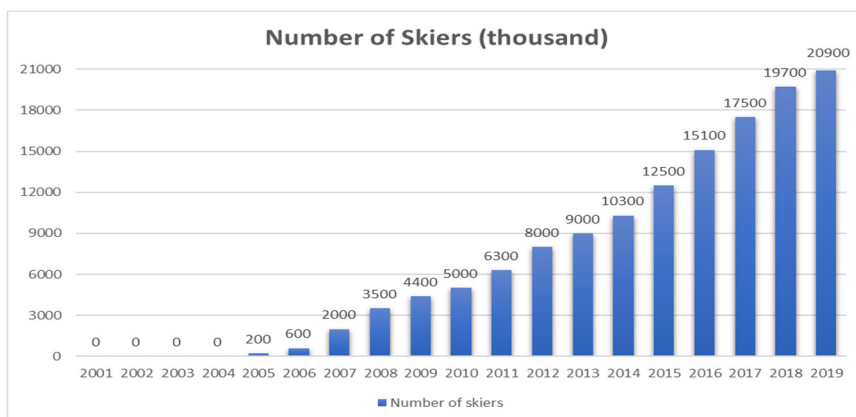


Fig. 2. The tendency of the Number of Skiers

* Corresponding author: nancywangyy@outlook.com

2 Process Of Development

The snow and ice industry in China is in the initial stage of development. Skiing originated and developed in Scandinavian countries, and has appropriate natural environment for skiing. The cold weather and long period of winter provide abundant snow that covers the mountain. The Alpine region has also become the most popular ski resort because altitude partly determines whether snow conditions are good or bad. For example, there are 51 ski resorts with millions of trips (the average number of ski trips reaches 1 million in winter) in the world, and the Alpine region has more than 40[2].

By contrast, the skiing population in China accounts for less than 0.2%, and the national cable car lifting equipment is even less than one ski resort in Europe. The short history and insufficient development of skiing hinder the prosperity of this sport in China.

"At the moment skiing in China is a very niche sport and it will take a long time to popularize. Although favorable policies can speed up the process, it is difficult to compress the relatively long history of decades or hundreds of years of others into one or two years to complete industrial development and maturity." said Lu Hui, who works in Vanke Ice & Snow Business Division[3].

3 Teaching System And Cost

China has not formed a unified ski teaching system, and

each ski resort has its graded teaching system. At present, China's ski instructor standards are still at a very preliminary stage, due to the low assessment threshold, low recognition in the domestic ski industry, and the lack of relevant institutions' daily inspection and stage creation of China's ski instructor system.

The development cost of the Chinese ski market is large and the cycle is long. All the topographic survey, the construction of snow traits, skiing apparatus (from snowmakers to skis), and even the design of the whole ski resort (including hotels, restaurants, snow parks, hot spring, etc.) should be involved in the plan. And these costs are high.

4 Analysis Of Customers

Effective customer analysis can deeply analyze customer needs and respond to changes in customer needs. Through reasonable and systematic customer analysis, enterprises can know what kind of needs different customers have, analyze the relationship between customer consumption characteristics and business benefits, and get the optimal planning of operation strategy. More importantly, potential customers can be found, so as to further expand the scale of business, so that the rapid development of the enterprise.

4.1 Gender

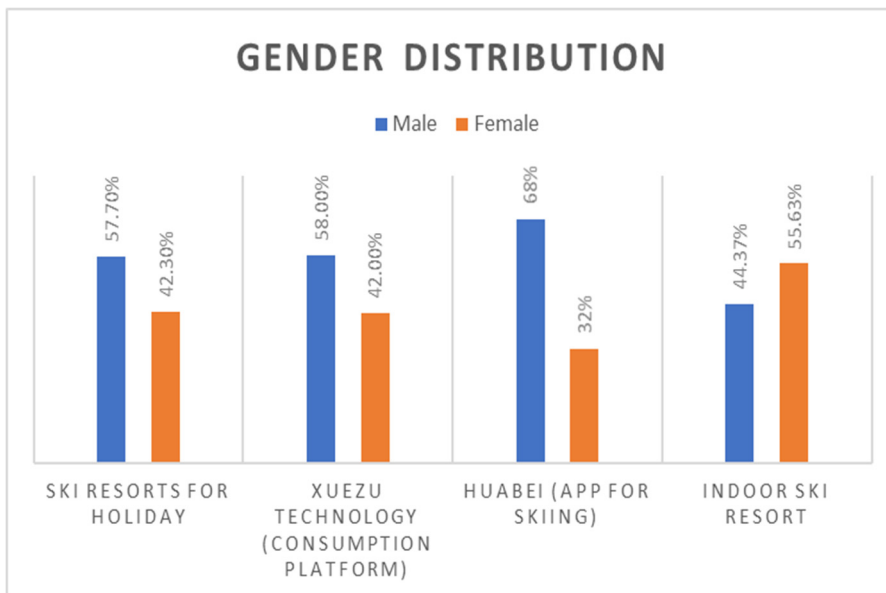


Fig. 3. Gender Analysis[2]

From the comparison in figure 3, expect the data from indoor ski resort, the percentage of male skiers is bigger than the percentage of female skiers. This phenomenon can be in part illustrated through the different levels of interest in skiing between male and female, and more males have a higher one.

One reason for the higher percentage of female in indoor ski resorts is that usually the slope indoor is less

steep than that outdoor, especially in mountains. Moreover, there are less snow traits or equipment to do some freestyle skiing and technical action. Therefore, the result is reasonable.

4.2 Age

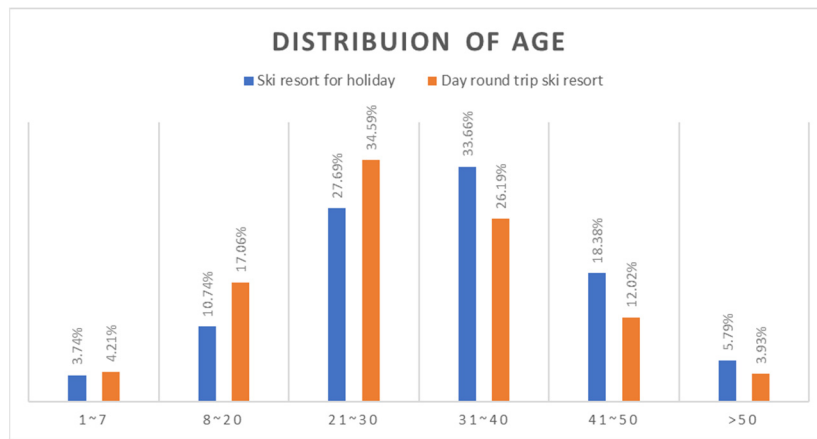


Fig. 4. Age Analysis[4]

Figure 4 shows that whatever schedule it is for skiing, about 60% of people are 21 to 40, which means young adults are more interested in this sport than younger teenagers and older people. Skiing is a very exciting sport and it is easy to get injured, so the percentage of people between the ages of 1 and 7 and older than 50 is pretty small, less than 10%.

4.3 Companion

We can also get some information by analyzing the data of relevant people going skiing. In figure 6, the top two of the largest percentage are 27% and 25% for people who go skiing with friends or colleagues and go skiing with families, respectively. According to this analysis, the ski resorts can establish recreational facilities or provide more parent-child campaign.

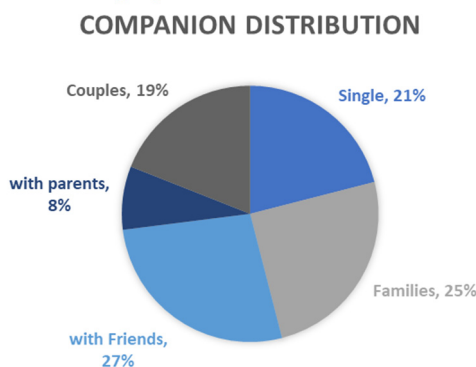


Fig. 5. Companion Analysis[5]

5 Case study

5.1 Companies

- China Vanke Co.,Ltd.
Vanke is a large residential real estate developer. It is engaged in developing, managing and selling properties across more than 60 mainland Chinese cities in the Pearl River Delta, Yangtze River Delta and Bohai-Rim Region. It also has expanded into Hong Kong, the United States, the United Kingdom, and Malaysia since 2012[6].

Vanke also continues to actively explore businesses such as ski resorts. The Group operates three ski resorts, namely the Jilin Vanke Songhua Lake resort, Beijing Shijinglong ski resort and Beijing Xishan ski resort. Among which, the customer flow and the customer satisfaction rate of the Jilin Vanke Songhua Lake resort stayed ahead in the industry and has won the “Best Ski Resort in China” title in the World Ski Awards competition for three consecutive years[7].

- Jilin Vanke Songhua Lake resort

Vanke Songhua Lake Resort is the first mountain resort project of Vanke Group, which is located in Jilin City, Jilin Province. Songhua Lake Resort is a key tourism project of Jilin Province, a core tourism strategy project of Jilin City, and a new landmark of China’s mountain resort.

- Jilin Songhua Lake International Resort Development Co. LTD

The first mountain resort project of Vanke Group is the only resort in China combining large destination ski resort and city ski resort, and the one closest to the city in China[8].

5.2 Financial information (2019)

Table 1. Jilin Songhua Lake International Resort Development Co. LTD (2019)

Category	Cost (million)
Net Profit	¥ -637,972.45
Total Profits	¥ -849,251.46
Total Sales	¥ 662,961.17
Total Assets	¥ 27,860,897.15
Main Business Income	¥ 304,587.03

From Table 1, we can figure out that Jilin Songhua Lake International Resort Development Co. LTD has a negative net profit and total profit. The manifest ski resort is a difficult project that needs high investment and a long period to recover the cost. Also, the data verify that the epidemic strongly influenced the skiing industry and brings massive loss. However, the corporation received relatively acceptable cost in total sales, total assets, and main business income.

5.3 Marketing strategy

5.3.1 The right choice

China's growing middle class stimulated a real estate boom in the northeastern city of Changchun and elsewhere, and Vanke prospered in the 1990s and 2000s. Starting in the late 2000s, however, growing overcapacity became a challenge that Vanke Changchun had to overcome to sustain existing growth rates.

China's northeast has rugged geography and an unusually harsh winter climate, making it unsuitable for many types of activities. But Changchun lies within the world's golden snow belt, getting perfect snow that skiers prefer. The regional general manager argued that building a ski resort would be an appropriate way to exploit underutilized resources. Eventually, Vanke's Wang Shi was persuaded to enter the market. In 2013, construction began on the Songhua Lake Ski Resort. The later development verifies that the choice was sensible.

5.3.2 The construction of facilities

World-class facility in the resort was the result of a collaboration by international and domestic designers, architects and builders. The project cost 40 billion yuan (the US \$6 billion) and spanned more than 7 square kilometers (2.7 square miles)[9]. All ski-related infrastructure was imported from Italy and Austria. Songhua's six ski lifts run on Italy's world-leading Doppelmayr systems. Vanke also uses SMI snowmaking and Prinoth snow-compacting machines, which are the best equipment in the industry.

The ski resort has a total of 34 quality ski trails, skiing area of 175 hectares. There are six cableways for people. Songhua Lake ski Resort has one of the longest mountain ski trails in China, with a total length of 5.23 kilometers[9]. Five advanced ski slopes have been certified by the International Snow Federation. Snowfield junior and senior slopes are evenly distributed, which can meet the needs of international professional events and family vacations.



Fig. 6. Songhua Resort Trail Map[10]

The Songhua resort's supporting amenities are equally impressive. The main activity center is a cluster of seven

buildings along fully pedestrianized streets with 17,000 square meters (183,000 square feet) of condominium space, a 46,000-square-meter (500,000 square feet) 5-star hotel as well as 10,000 square meters (108,000 square feet) of shops, clubhouses, restaurants, and VIP rooms[9].

5.3.3 Cultivate customers

Most Chinese people remain newbies to the sport with the account of "90%" beginner skiers. Most belong to China's vast and newly risen middle class. Ski resorts, particularly premium ones like Songhua Lake, typically have more success with sporting enthusiasts and skiing veterans. Indeed, Songhua resort's slopes have a far higher ratio of beginner runs to intermediate and advanced levels than the typical ski resort of comparable quality. The ratio is 4:4:2 beginner[9], intermediate, and advanced, respectively.

Vanke Songhua's longest run is designed for beginners, a highly atypical choice in an industry where most novices might not even be adept at accessing ski lifts. This means Vanke Songhua is one of the few places in the world where beginners can quickly enjoy a picturesque view from summit to base. Vanke aims to build a sustainable base of patrons that it can upskill and ultimately generate more revenue from them.

5.3.4 Apartment project

Vanke's investment was not without risk. One way the company managed to hedge its bets was through selling residential units in the ski village at Songhua resort. These facilities lie within Vanke's core competency of real estate and have shorter investment horizons. Consequently, blending these units into a more capital-intensive project, like a ski resort, can smooth out the rate of return, and reduce Vanke's overall exposure.

5.3.5 Differentiation strategy

Vanke still opted to rely on quality as a differentiation strategy. It had spent decades building a formidable reputation of providing high quality, affordable experiences. Thus, rather than attempt market segmentation, Vanke opted to collaborate with Beidahu. This differentiation strategy also had the advantage of avoiding a costly battle for mass appeal among better capitalized peers like Vanke's chief rival, Wanda.

5.3.6 A resort for all season

To hedge market demand in the winter, Vanke sought to exploit the three typically fallow seasons that ski resorts almost inevitably endure. The natural landscape and altitude are opportunities to expose Chinese citizens to new off-season sports that carry the same excitement as skiing.

After Songhua Lake's opening, Vanke collaborated with Canada's NORCO to build three mountain bike trails. It also built a high-speed cable car for individuals who prefer more leisurely vacations mostly comprised of sightseeing. In the summer of 2017, Songhua added a

water park, campgrounds, self-service bonfires, paintball, tour boats, fishing facilities, paragliding operators, and hiking operations.

6 Prospect

6.1 Influence of Covid-19

Due to the outbreak of Covid-19, all snow resorts in China were closed during the Spring Festival in 2020. The number of skiers in 2020 will fall to around 11 million, down 47.37% from a year earlier. The total number of ski resorts open is expected to fall to about 720 by 2020. The short-term revenue loss caused by the epidemic to domestic ski resorts is around 6.68 billion yuan. Considering other potential losses, the overall short-term economic loss is estimated to exceed 8 billion yuan[11].

The snow and ice industry has been hit hard. Workers in the snow and ice industry should make a good summary, adjust their development strategies, enhance their core competitiveness and improve their operating efficiency.

6.2 Influence of Olympic Winter Games

On July 31, 2015, Thomas Bach (first Olympic champion in history to be elected president of the IOC) announced that the 2022 Winter Olympics will be hosted by Beijing. Beijing became the first city in Olympic history to host both the Summer and Winter Olympic Games and the second capital city to host the Winter Games after Oslo in Norway in 1952. This rare and valuable opportunity spurs the development of ski industry.

The Winter Olympics drives the growth of the number of skiers, promotes the improvement of snowfield infrastructure and the progress of skiing equipment manufacturing, improves the competitive level of ice and snow sports and then popularizes ice and snow sports among the masses. There are also changes in China's ski industry in the preparatory stage of The Winter Olympics. Surging ski resorts have made China the country with the largest number of ski resorts in the world including the transfer of regional distribution of ski resorts and the rise of ski resorts and ski towns.

7 Suggestion

7.1 Policy support

In recent years, China has issued a number of policies to promote the development of the snow and ice industry, accelerating the rapid economic development of the snow and ice industry, and promoting the diversification of integration. Ice-snow tourism is no longer a simple tourism project, but has formed a crisscross industrial chain, transforming the traditional industrial structure of the region. Therefore, innovation drives the rapid development of the regional economy.

China should establish reasonable and comprehensive institutions to attract more customers and skiers to attend this sport. Also, the policy can offer subsidies to

companies in order to solve the problem of land resources and financing structure and encourage more investment.

7.2 Popularization of skiing activity

It is necessary to actively carry out publicity and reports on ice and snow sports and give full play to the role of news media. We can also organize and create a number of film and television works on ice and snow, so as to strengthen the publicity of knowledge and activities of ice and snow sports and spread the positive energy of ice and snow sports.

7.3 Optimization of ice-snow industry structure

In order to provide diversified products and services and improve the structure of the ice-snow industry, we can accelerate the development of ice and snow fitness and leisure industry, promote the development of ice and snow tourism industry and the deep integration of ice and snow industry and related industries. The development of equipment manufacturing snow and ice must be a high priority. China should support enterprises in developing snow and ice sports products with high scientific and technological content and independent intellectual property rights, promoting the connection of demand and resource integration in the upstream and downstream of the industrial chain.

7.4 Construction of ski teaching system

China has not formed a unified ski teaching system, and each ski resort has its graded teaching system. At present, China's ski instructor standards are still at a very preliminary stage, due to the low assessment threshold, low recognition in the domestic ski industry, and the lack of relevant institutions' daily inspection and stage creation of China's ski instructor system. It is urgent for China to establish and perfect a training system that is in line with its national conditions and the rules of ski sports, and to speed up the training of qualified coaches. At present, the quality of coaches seriously restricts the retention rate of beginners.

Based on China's mountain conditions and primary consumer characteristics, China should build a team of ski instructor trainers and examiners with international standards and popularize the training of ski instructors at all levels. At the same time, a set of uniform teaching materials systems suitable for China has been compiled and developed to cover the middle and high levels and meet the needs of skiers in various conditions, including children and the disabled.

7.5 Improvement of site facilities and skiing costume

When choosing which skiing resort to go, skiers give priority to the comfort of the living environment and the convenience of transformation. These factors influence customers' desire to ski. Usually, the more various the surrounding constructions are, the more likely the

customers will choose the ski resort. The company should reasonably establish cable cars, restaurants, accommodation, recreational facilities (karaoke, cinema, etc.), parks, and hot spring. The design has to meet the multiformity.

The survey found that 83% of Chinese skiing consumers care about their appearance when skiing, and they choose to enhance their skiing image through the styles of ski suits and gloves (80%), snow mirror masks (68%) and snowboard shoes (44%)[12]. China should initiate more fashion brands to design skiing clothes, ski boots, skis, snowboards, gloves, ski glasses, helmet. These costumes ought to meet the fashion or young people's aesthetic. This will be an effective way to attract more young customers and enhance the number of skiers.

8 Conclusion

Chinese ice-snow industry is in progress, although the number of skiers and ski places still needs complete development. Under the circumstances of the Winter Olympics, China should encourage the market and customers by establishing policies, improve equipment, unify the teaching system, and enhance popularization. Even the Covid-19 strongly influenced the industry in 2020, the author believes that the future prospect of ice-snow sports in China is doubtless anticipated.

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