

Research on the Current Situation and Countermeasures of Employment Demand in China's E-Sports Industry

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Abstract: *The main purpose of this paper is to study the status of employment demand of China's e-sports industry, and give reasonable suggestions for these situations. In this article, the data analysis method is used to analyze the geographical structure, job structure and salary structure of the Chinese e-sports talent market. The main research results of this paper are that there is a serious imbalance in the talent demand structure of China's e-sports industry, regional gap, and huge gap in positions. Based on the findings, several suggestions are given on the different part of the industry chain.*

Keywords: *E-sports, Employment demand, E-sports industry*

1. Introduction

With the development of economy in China, e-sports industry becomes popular nowadays. However, e-sports is still in the early stage of development in China, and there are many problems especially in employment field. According to CNG's report, in 2018, a total of 443,000 people are employed in the e-sports industry, and the average monthly salary is 11124.8 CNY. The age of the practitioner and the gender of practitioner is unbalanced, nearly 80% of the practitioners are male, and nearly half of practitioners are at the age of 26-30. It shows that China's e-sports industry is still in a rising stage. The rejuvenation of practitioners is caused by the late start of the game industry in China. Most people who come into contact with video games were born after 1990, which makes the age of the practitioners low. Female practitioners are determined by different hobbies between men and women. Most e-sports industry positions require greater physical and mental effort, especially e-sports players, which require high-strength training, while most women in China prefer to engage in stable Occupation, which leads to a low proportion of women in this industry.

In this paper, the method of data analysis will be used to solve the employment problems of the e-sports industry.

2. Literature review

2.1. Research on e-sports

The research of e-sports industry outside China began a little early than that in China. Scholar Soumokil believes that e-sports is a sport. It is that people need to follow certain rules when participating in e-sports. With the help of information and communication technology, they compete with other contestants in the virtual world to achieve their will and purpose to exercise[1].

China's research of e-sports industry began at new millennium. The State General Administration of Sport of China officially defines e-sports as e-sports, which is the use of high-tech software equipment as sports equipment to conduct intellectual confrontation between people[2]. Through sports, you can exercise and improve the thinking ability and reaction ability of participants. Coordinate the ability of the mind, eyes and limbs and willpower to cultivate team spirit.

In summary, the e-sports in this article refers to the use of high-tech equipment as sports equipment, the intelligence and operation between people and people or teams and teams against sports.

2.2. Research on e-sports industry

The research on China's e-sports industry is very ups and downs. Yang Junying, Zhang Lin and Huang Haiyan divided China's e-sports industry into three stages. The first stage is the initial stage of germination (1990-2003)[3]. At this stage, China's e-sports industry research mainly focused on the confrontation of single game. By 2003, the State General Administration of Sports recognized the status of e-sports, in this context, e-sports competitions and clubs began to appear[4].

Liu Tingyou pointed out in the spread and promotion of e-sports in the Internet + era that China's e-sports communication is still affected by traditional ideas, and the effect of communication and promotion is not ideal[5].

Wang Feng pointed out in his article thinking about China's e-sports business model that compared with the e-sports business models in Europe, the United States and South Korea, China's e-sports industry lacks the support of laws and regulations[6].

To sum up, the current research on e-sports industry in China mainly focuses on its development history, problems and solutions in the industry.

3. China's e-sports employment demand analysis

3.1. Data processing

3.1.1. Data visualization preparation

For getting data about the China's e-sports job demand, Gooseeker software is used to collect information from the internet. Firstly, choose the Chinese biggest online website: boss.com because the recruitment information on the boss online is the most abundant, all the information about the recruitment of e-sports positions on the website in January 2022 is selected here.

Secondly, set the rules and then collecting data. First select a piece of recruitment information, and mark the information including salary, position and location as a model. Use the sample information as the crawling logic, set the next page as the page turning mark, and finally crawl the information. All the recruitment information about e-sports. A total of 1173 messages were collected, exclude the information that is not related to e-sports, and the remaining available information is total 1054. The information shows which cities need which kind of e-sports jobs.

3.1.2. Data secondary processing

Because the information collected online is not uniform in the description of the position, so we need to unify all the information. According to different parts of the industry chain, the occupation can be divided into five different parts: Content propagation, competition participation, derivative industry, content authorization, content production.

Table 1: Data secondary processing

Job attribute	City
Content authorization	Chengdu
Derivative industry	Chongqing

3.1.3. China's e-sports job demand visualization Based on Gephi

Firstly, adding all the information which have been processed to Gephi. Secondly, set the size of the dots represents the degree of connectivity, the width of the line represents the number of connected demands. Then choose Fruchterman Reingold to out put the layout figure 1.

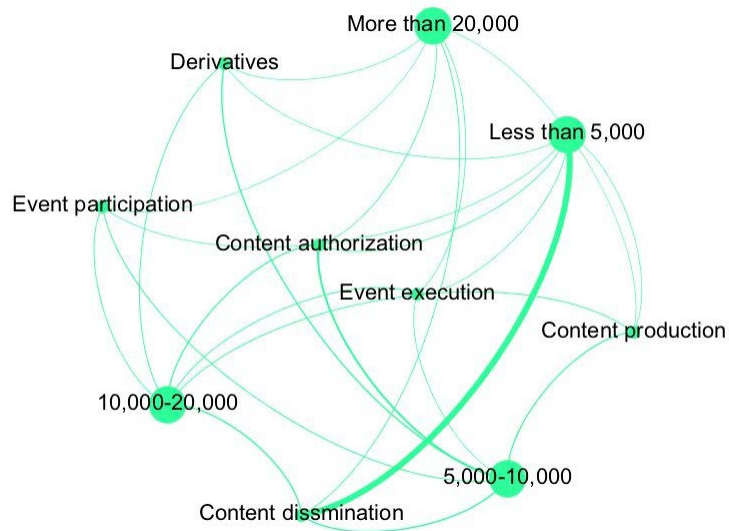


Figure 2: China's e-sports job month salary network



Figure 3: China's e-sports job month salary

As can be seen from the figure 2, overall, the salary distribution of e-sports in China is not average, most of companies want to pay less than 5000 for these people want to work for them. As the salary level rises, the number drops rapidly. Only 1% of them can get more than 20,000 per month.

From different types of posts, it can be found that the monthly salary of content communication posts is mostly below 5,000 CNY, but there are still a very small number of content communication practitioners with a monthly salary of more than 20,000 CNY. This is because most of the content communication posts are recruiting anchors, and the anchor post is relatively less difficult to engage in, can bring a huge profit to the company of anchors are not many, so there is a large monthly salary gap, the huge monthly salary gap leads to the anchor industry staff mobility is very large, it is difficult for employees to stick to this industry.

Nearly half of the employees in the content-authorization industry generally have a monthly salary of 10,000 to 20,000 CNY, and a small part of the game can earn more than 30,000 CNY a month. The company recruits employees engaged in content authorization, mainly engaged in game research and development and game operation related work, these two types of work are more difficult in technology, so the salary level is also relatively high. Because China's current market demand for game R & D and operation is relatively wide, the demand for these two types of positions will increase in the future, and the salary is likely to increase.

It can be seen from the picture that the recruitment demand for the participants in the e-sports event

is very small, but the monthly salary given is very high, most of which is more than 20,000 CNY per month. This is because e-sports players in the market demand is relatively small, only a small number of people can become professional players to participate in the competition for the club. This has led to a very small demand for professional e-sports players throughout the market. But because the professional player's talent rate is very low, the high level professional athlete is very difficult to obtain, therefore wants to recruit the high level e-sports athlete, must pay the relatively high reward.

The competition execution and the competition content production manpower demand is relatively small, the market gives these two kinds of talented person's monthly salary generally in 10,000 to 20,000 CNY. Because China's e-sports industry is still in the period of upward development, e-sports events have not been very common, talent demand is not very large, but the organization and production of event content is a very professional job, so the monthly salary of this kind of industry is still relatively high.

People in the e-sports derivatives industry, the monthly salary is generally between 5000 and 10,000 CNY, and the demand for such talent is relatively small. This is because China's derivatives market has not developed well, Internet cafes occupy the vast majority and cultural and creative products are seriously lacking, but in the future, with the gradual regulation of the market, the demand for talent and salary for this industry is also expected to be improved.

4. Suggestions for the development of China's e-sports industry

4.1. Game developer

For Chinese game development companies, the main problem is Imitation and plagiarism[7]. In view of this problem, I think the main reason is that the capital is too strong, the purchase of copyright and code can make the product enter the market at the fastest speed. Another reason is that the profit model of Chinese game companies is single, mainly relying on the in-game consumption of players to achieve profits. This has led to the impression that the quality of games made in China is not high.

In view of this problem, I think game developers can vigorously explore the factors in Chinese traditional culture and apply these factors to the development of games. For example, elements of traditional Chinese mythological *The Classic of Mountains and Rivers* can be applied to the game. Many elements in *The Classic of Mountains and Rivers*, such as Xing Tian and Jing Wei, are very emotional for many Chinese people. Through the implantation of traditional cultural factors, I think it can greatly improve the recognition of game products by Chinese consumers. However, special attention should be paid to the fact that historical facts should be respected in the transplantation of traditional culture into the game. In recent years, the controversial *King of Glory* game is due to excessive changes in traditional cultural factors. In this game, many historical characters' occupations and even gender have been changed, which makes many players feel very uncomfortable. Therefore, when absorbing traditional cultural factors, we must respect people's attitudes towards tradition.

4.2. Team and clubs

According to the above mentioned Chinese e-sports club talent selection and management of non-standard non-standard problem, put forward two solutions.

Since the main economic source of China's e-sports clubs is advertising sponsorship, this means that the club's economic income is very unstable. Once the results are not satisfactory, the club may face a situation of no income[8]. Therefore, I think China's e-sports club should also learn from South Korea, so that an enterprise to manage the club, instead of the current leader model. When the club was founded, the club is managed by enterprise professionals. The club's management is responsible for the club's business relations, such as advertising, sponsorship and so on. The coach of the club is only responsible for the training of the players, and no longer plays a role in the business operation of the club.

4.3. Derivatives

The development of China's e-sports derivative industry mentioned above is very single[9]. Only Internet cafes have developed well throughout the country, and almost every city has dozens of Internet cafes for players to experience. So Internet cafes will no longer be stated. This paper mainly puts

forward suggestions for peripheral products and related industries.

For e-sports peripheral products, I think the most important guarantee of product uniqueness. This means that products should be designed independently by the company to ensure that the quality of products is high and creative. Because in the current Chinese market, the quality of peripheral products is uneven, and many goods of poor quality are flooded with Taobao and other websites. However, consumers' ability to distinguish is not high, and it is difficult to guarantee profits if they only produce similar homogeneous products, so it is very important to ensure the originality of products. In addition, special attention should be paid to protecting the patents of commodities. Although China has not yet formed a good patent protection system, it is still necessary to protect its rights and interests through laws when the rights are infringed.

In view of the development of e-sports related industries, I think we should mainly ensure that the role of e-sports industry is not weakened. Take e-sports and the real estate industry as example. With the support of Chinese government policies, many real estate companies have begun to invest in the new concept of e-sports real estate. But many companies do not really want to develop e-sports industry, but take e-sports as an excuse to win projects, and then make money through real estate. But we can not blindly blame these enterprises, because some e-sports projects do not have enough profitability. Therefore, in the development of e-sports related industries, we must take high-quality e-sports content as the core, and promote the development of other industries through e-sports events. Take the real estate industry as an example. Through high-quality e-sports content, enterprises attract players to stay and spectators to watch the competition. On this basis, it will make profits in the way of hotels.

4.4. Content dissemination

In view of the problem of e-sports content dissemination, it can be solved from two aspects of media and quality.

The first is to get the right to broadcast on TV stations as much as possible. Although in China, TV stations currently do not allow live broadcast of e-sports events, the popularity of smart TV has created many opportunities for e-sports. Because smart TVs can connect to the Internet to watch many programs on the Internet, they are welcomed by many families. e-sports events can seek cooperation with smart TV companies to accelerate e-sports content into smart TV channels, which can not only increase the audience of e-sports events, but also meet current legal requirements.

Secondly, the professional quality of game anchors is not high, and the quality of e-sports broadcasting content is not good[10].

In view of these problems, I think that the game live broadcasting company should first train every anchor in professional skills, and reduce the incidents in which the anchor induces minors to consume. Because if the parents of children can be convinced that watching live e-sports will not affect their children, then e-sports can enter people's daily life to a greater extent.

On the other hand, I think we must design a rating system for live games. Because there are some game content, such as shooting, the murderous elements are indeed not suitable for children to watch, but adults are attracted to these elements, so they cannot be all positive and negative. Set the level in the live game, minors can only watch ordinary games, but can not watch bloody live games. It is beneficial for the theses company focus on the game quality and don't need to worry about the bloody content will hurt children's mind.

4.5. Government and Society

I think government regulation and social attitudes towards e-sports are the most difficult to change. Because Chinese society has different characteristics from Western countries, that is, China's rapid development and change, social change is also very rapid. This has led to great differences in the values of people in different generations. Most of the Chinese born in the 1960s and 1970s adhere to the concept of hard work to become rich and become officials. In their view, e-sports practitioners are just opposite to their values. They think that e-sports is unstable and has no future career.

Although it is difficult to change the attitude of society towards e-sports in the short term, I think there are still several points that can promote the change of people's perception. First of all, I think the media should publicize to the public that playing games is different from e-sports. Playing games is a hobby, while e-sports is a profession. When the media reports that some children are not learning well

because they play games, they must remain objective and not put all the responsibility on the game.

From my point of view, the government has a key role in the development of e-sports in China. Because of the government's dominant position in China's economy, I think China's e-sports industry to healthy development, the government should do the following aspects.

First of all, the policies of the central and local governments should be unified. Although many provinces and municipalities have issued policies to support the development of e-sports in recent years, the central government has never had a clear document to support the e-sports industry. Therefore, the central government should introduce e-sports industry guidance as far as possible to ensure that local governments can rest assured of the development of e-sports industry, without worrying about policy changes.

Second, appropriate relaxation of restrictions on e-sports industry, especially on television. I think local TV stations can properly broadcast the content of e-sports. Because through the content of e-sports, local TV stations can have more profitable choices. In addition, it can also meet the needs of many people.

5. Conclusion

Through data analysis, this paper finds that China's e-sports industry has many problems such as uneven spatial distribution of labor force and large salary gap. In addition to these problems, suggestions for improvement are given from the levels of game developers, game clubs, content dissemination and the government.

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