

# The Online Education Industry in China

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## ABSTRACT

Covid-19, a worldwide epidemic, has strived the global economy in early 2020 and forced most people to stay at home for a significant long time. This research will utilize online resources to analyze the profitability and feasibility of online education and hopefully be able to predict remote learning in China. The research methodology for this paper is qualitative analysis. The result comes out that the popularity of online education has reached an unprecedented height with the outbreak of the epidemic, which means almost every school has applied that method to teach, but the explosive growth in online education during an epidemic is a short-term phenomenon. This paper focuses on the online education in China.

**Keywords:** Online Education, Covid-19, short-term phenomenon

## 1. INTRODUCTION

Offline education usually is the traditional model of education in China. However, with the outbreak of the epidemic, offline education has to stop for a while. Meanwhile, online education has become the mean stream model of education, and the economy of online education companies has increased rapidly. With this paper, we seek to answer the following questions: what is the epidemic's impact on the online education economy, and what is the future trend of online education in China.

## 2. MOTIVATION

With the development of society, the online education user is increasing continually. However, from 2019 to 2020, the number increases dramatically, approximately about 3.01 hundred million people. Why has this phenomenon happened? We realize that 2020 is quite a peculiar year, a year surrounded by the epidemic. We were then curious about will the epidemic influence the online education industry? In addition, the changing proportion of Chinese parents' preference for online education from 2017 to 2021 is changing dramatically [1]. It is clear that online teaching has been accepted by more people, especially the parents. It means that after experiencing the maladjustment of the pandemic, parents can now fully realize the advantages of online education

[2]. I think this phenomenon is pretty essential because parents usually are the person who directly choose the educational platform for their children. Their satisfaction and acceptance towards online education raises, especially during the epidemic year.

## 3. LITERATURE REVIEW

The previous scholar has created an equation that shows the revenue of the online education industry. Zhuang (2021) has created an equation that equals paying user times per customer transaction. Zhuang (2021) future illustrates that the paying users can be separated into old customers and new customers. The cost of the online education industry can illustrate as marketing expenses add professor's salaries add research and development expense add administrative expenses and other expenses [3]. Under the influence of the epidemic, new customers for online education have increased dramatically, and old customers may probably stay the same, which led to a significant increase in revenue. The cost may have a slight increase for the industries may need to hire more professors. But it can ignore compared with the increase in revenue [3]. The profit is equal to revenue minus cost. Thus, online education is a positive industry case during the epidemic. However, whether new customers will become old customers after the epidemic is still questionable. The crucial point for the online education industry is to figure

out how to ensure the customer retention rate. Otherwise, their profit will suddenly decrease when everything goes back to normal.

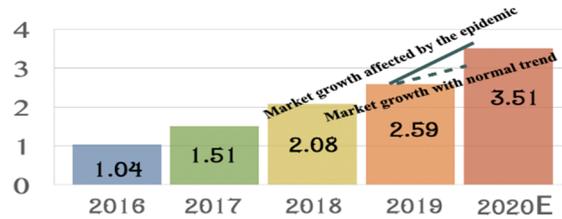
The previous scholar has the PEST Model, which was presented by Johnson and Scholes in 1999, to analyze the future trend of online education industries. From a political side, the development of information technology provides the necessary conditions for education reform [4]. From an Economic side, with the development of society, traditional books are not the only tool for people to gain knowledge. More and more online education platforms have attracted people's attention. With the increase of per capita disposable income of Chinese residents, people are willing to spend more money on their education to improve themselves. China's current economy is still in the stage of steady development, and the market demand is still expanding. From the social side, China is a country with a large population, and it has the maximal education market in the world. From the technical side, with the development of the smartphone, the mobile system is becoming mature. Based on the PEST Model, the development trend of China's online education industry has been predicted. Firstly, the epidemic has promoted the reform of the education industry and helped improve the quality of education in China. Secondly, AI technology is a long-

term trend in an increasingly competitive industry. However, if the infrastructure were ready, learning motivation would become the biggest challenge for online education [5]. Thirdly, the penetration rate of the online education market is increasing, blending into in new development opportunities for the industry. In this case, the further policy interventions of online education can be taken from technological, organizational, environmental, as well as individual aspects, to help improve the outcome of online learning [6].

4. DATA SOURCE

We find three charts on iiMedia that we believe can effectively illustrate the epidemic's impact on the online education industry. The first chart is *The Scale and Forecast of Online Education users in China from 2016 to 2020*. The broken line represents the number of people increasing according to a normal trend, and the full line represents the growing number of people affected by the epidemic. Driven by the epidemic, in 2020, the demand for online education has surged, and the number of users is expected to reach 351 million, which is far more than the number that originally should be. In this case, the popularity of online education has become extremely popular in China with the outbreak of the epidemic.

The Scale and Forecast of Online Education Users in China from 2016-2020 (Unit: 100 million people)



Data Source: data.iimedia.cn

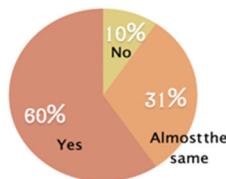
Figure 1 The Scale and Forecast of Online Education Users in China from 2016-2020 (Unit: 100 million people) [7]

The second chart is *A Survey on the growth of user fees for online education in China during the epidemic in 2020*. 59.5% of respondents said they had increased their spending on online education during the epidemic. Due to the spread of the epidemic, offline education and training activities have been limited. Schools and offline

education and training institutions have postponed the resumption of school and work, and the public's offline education has been shifted to online [7].

In recent years, the growth rate of China's online education market has slowed down.

The growth of user fees for online education in China during the epidemic in 2020



Data Source: data.iimedia.cn

Sample Source: Strawberry Pie

Figure 2 The growth of user fees for online education in China during the epidemic in 2020[8]

Both these two charts have influenced the Chinese online education market scale and forecast. In recent years, the growth rate of China's online education market has slowed down.

The third chart that we found on iiMedia is *research on the future prospects of Chinese online education among users in the post-epidemic era*. According to the data, 56.2% of respondents are optimistic about the prospects of online education in the post-epidemic era. In comparison, 41% of users said they continued to wait and

see the prospects of online quality education development, and 2.8% are not optimistic about the prospects of online education. The chart shows that almost half percent of the population in China will still support offline education. The previous scholars have found that users' personal factors had no direct impact on their satisfaction, but platform availability had the greatest impact [9]. That means online education may still have some problems or limitations that cannot convince the customers of choosing it.

### Research on the prospects of Chinese Online Education among users in the Post-Epidemic Era



Data Source: data.iiimedia.cn

Sample Source: Strawberry Pie

Figure 3 Research on the prospects of Chinese Online Education among users in the Post-Epidemic Era [8]

## 5. RESEARCH METHODOLOGY

Qualitative analysis is a research methodology that we apply. We used the SWOT model, which was presented by Andrews in 1971, to do the research. As talked about the strength of the online education industry, firstly, online education provides a more convenient learning environment. Secondly, online education enriches the learning resources. Thirdly, the cost of online education, time cost and money cost are relatively low. Fourthly, during the epidemic situation, online education allows students to learn safely and efficiently.

On the opposite, the industry also contains some weaknesses. The interaction between professors and students cannot be guaranteed. In addition, the development of online education is unbalanced. Some places are very developed, but some places do not have the opportunity for online education. Lack of marketing experience is also a problem because online education doesn't have a long history. Moreover, the hardware facilities are not complete. Some students will face some technical problems, such as flashback problems and log-in problems.

There are also some opportunities and threats in this industry. For the opportunities, the development of information technology provides the necessary conditions for the reform of education. People are willing

to spend more money on their education. Also, China's current economy is still in the stage of steady development, and the market demand is still expanding. China is a country with a large population, and it has the maximal education market in the world. Moreover, the mobile system is becoming mature.

As talked about threats, its main opponent, offline education, has been dominated for so many years, which are more likely to gain customers' attention. So, the number of online education users is difficult to retain.

On July 29, 2021, the Chinese government released Opinions Issued to Further Alleviate Homework Burden and Off-campus Tutoring for Students Undergoing Compulsory Education, which largely prevented off-campus tutoring from happening and thus caused a market crash in the field of private supplementary tutoring. Online education, our main research question, is used mostly in this area. However, it is also noticeable that the Chinese government did not tend to regulate the education model within private education institutions. Now we assume that, before July 29, 2021, the private education market in China is a perfect-competitive market, and it has reached its long run equilibrium. Now the supply chain decreases, and we know that, since private education institutions will not be affected, students who still need extra off-campus training will shift to the private education institution, which indicates

that the demand curve will remain the same. In other words, it is foreseeable that there will be a surge in the market of private education institutions. However, there are not yet any data to confirm that.

## 6. CONCLUSION

The model of online education has shown an increasing trend in recent years. Affected by the epidemic, schools all over the world have implemented the online teaching model [10]. Thus, the popularity of online education has reached an unprecedented height with the outbreak of the epidemic. The explosive growth in online education during an epidemic is a short-term phenomenon. The epidemic will stop someday. However, the problems of online education still exist. In this case, I believe after everything goes back to normal, offline education will again become the main model of the educational system. However, with the development of the Internet, the growth rate of online education will decrease while the growth momentum will remain steady. The limitation for this paper is the SWOT Model analysis is based on the current market situation. In other words, it is static. However, the world environment and business opportunities are constantly changing. Therefore, this analysis may not be accurate in the future.

## REFERENCES

- [1] Analysis of the market status and development trend of China's online education industry - third and fourth tier cities will become the power source of development in the future, (2021) [online] Available at <https://wenku.baidu.com/view/dd29ee93f042336c1eb91a37f111f18583d00cb3.html>
- [2] Wang, & Wang, J. (2021). Online Education Optimization Based on Edge Computing under the COVID-19 Pandemic. *Scientific Programming*, 2021, 1–7. <https://doi.org/10.1155/2021/3667252>
- [3] Zhuang, S., (2021). *In-depth analysis of the unit economic model of the online education industry, the future of how?* <https://baijiahao.baidu.com/s?id=1695379506773614085&wfr=spider&for=pc>
- [4] Wang, (2020). SWOT Analysis and Countermeasure Research on the Development of New Oriental Online Education. <https://www.doc88.com/p-28247330409270.html?r=1>
- [5] Wang, Yu, R., Liu, Y., & Qian, W. (2021). Students' and Teachers' Perspective on the Implementation of Online Medical Education in China: A Qualitative Study. *Advances in Medical Education and Practice*, 12, 895–903. <https://doi.org/10.2147/AMEP.S323397>
- [6] Li, Wu, H., Xie, A., Ye, X., Liu, C., & Wang, W. (2021). Students' initial perspectives on online learning experience in China during the COVID-19 outbreak: expanding online education for future doctors on a national scale. *BMC Medical Education*, 21(1), 1–584. <https://doi.org/10.1186/s12909-021-03005-y>
- [7] iiMedia advisory|2020 Chinese Online Education Innovative Trend Research Report (with download) - iiMedia network. (2020, December 18). <https://www.iimedia.cn/c400/75879.html>
- [8] iiMedia advisory|Chinese Online Education Industry Research Report in the Post-Epidemic Era (with download) - iiMedia network. (2020, July 31). iiMedia. <https://www.iimedia.cn/c400/73148.html>
- [9] Chen, Peng, L., Yin, X., Rong, J., Yang, J., & Cong, G. (2020). Analysis of User Satisfaction with Online Education Platforms in China during the COVID-19 Pandemic. *Healthcare (Basel)*, 8(3), 200–. <https://doi.org/10.3390/healthcare8030200>
- [10] Xia, L.P. (2020). Inspiration of COVID-19 epidemic on online education and teaching in colleges and universities. *Journal of Changji University*, (02), 113-115. doi: CNKI:SUN:CJXY.0.2020-02-023.