# Research on Sharing Economy and E-Learning in the Era of "Internet Plus"

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*Abstract*—**The article first briefly introduces the development and characteristics of the sharing economy in the era of Internet+. Its rise has promoted the rapid development of online education, and online education has become a representative of knowledge-sharing economy. The market has expanded and evolved into a more mature business model. Then, the article puts forward corresponding suggestions and prospects for online education in this context.**

*Keywords—Sharing economy; E-learning; Internet plus*

## I. INTRODUCTION

Since Premier Li Keqiang's third meeting of the 12th National People's Congress proposed the development of "Internet+", the "Internet+" became more popular, which indicates that China has been in the "Internet Plus" era. "Internet+" is the result of the Internet industry that expanded from the traditional industries, presenting a new form of online data to optimize their allocation of production factors and to innovate its business model [1]. Under the impetus of Internet technology, sharing economy has been one of the most important business models in the social service industry, and it has penetrated the fields of transportation, accommodation, education, and life services. The sharing economy has three characteristics. The first is the temporary transfer of idle resource use rights. With the upgrading of people's consumption demand, possession is no longer the most prominent value indicator. Instead, the right to use outweighs ownership and sustainability replaces consumerism, the sharing economy advocates "renting" rather than "buying"; the second is to use the Internet as a platform to publish core information in the sharing economy through a network platform, and to become a bridge between providers and users, and to promote information efficiency. Circulation, weakening the asymmetry of information, de-intermediation makes the use of value more cheap and convenient; third is the repeated transaction and efficient use of goods as a form of expression. The core of the sharing economy is to optimize the allocation of the owner's idle resources and repetitively transfer them to other demanders to improve the efficiency of use of materials, save resources, and promote the sustainable development of society as a whole [2].

## II. THE DEVELOPMENT STATUS OF ONLINE EDUCATION

### A. Online education came into being

Traditional education and teaching are oriented to the whole and to the public. The actual situation of each student cannot be fully considered, and it is difficult to meet the need of diversification and individualization. "Internet+" provide an important opportunity on humane education, and the rise of shared economic facilitate the sharing of knowledge and skills, such as knowledge, skills, experience, etc. It's common for each student to tailor the most suitable for their own learning programs, with full respect for each student, which give each student the right to choose and decide.

Online education is a means to learn knowledge in a virtual environment created by the Internet. Also, online education can realize synchronous or asynchronous teaching of teachers and students according to different needs. Users who receive online education can learn whatever you want to learn at any time and in different electronic devices according to your own schedule.

Online education has become possible, mainly in terms of mature technical conditions and a more convenient way of conducting it than traditional methods of education. Relying on faster and faster network speed and high-quality and low-cost video technology, video-on-demand has become a key means for online education to meet customers' needs instantly. The innovative video conferencing software combined with high network speed provides the possibility for many people to discuss problems and watch live broadcasts at the same time. At the same time, the explosive growth in smart phone and tablet use has made it possible to consume knowledge and improve customer experience [3].

## B. The scale and growth situation of online education market

According to the sub-project category under "Market Scale in the "China Online Education Industry Survey Analysis and Market Forecast Report (2005-2018)", the online education market scale is primary and secondary education, academic education, pre-school education, and enterprise E. -learning, language training, and the combination of vocational education.

Between 2008 and 2018, the size of China's online education market increased by nearly 45 times, which is a breakthrough in 2000 when it reached a billion in 2018. The size of the market average growth rate between 2009-2018 was 19.38%, remaining substantially fluctuated upward trend; which peaked in 2012 grew 21.8%, while growth is expected this year and next will remain at around 25.8%.

In summary, the online education market as a representative of China's sharing economic market, the market scale has ceased to expand in recent years, and the development trend is good.

## C. Online education business model

The business model of online education is also evolving with the economic growth of China in recent years [4]. The most common ones include the following:

- Open class. The introduction of domestic and foreign universities and educational opportunities open courses free of charge, in the form of video on demand into line. Representative of such business model is Netease open class. Users can avoid fees in line to see the wonderful view of the open class video course from Harvard University and other world-class elite, Khan Academy, TED and other educational organizations. Commercial multi-site launch of the open class is free of charge, but the website users can take to win the respect and good reputation, at home and abroad pay fees in line to integrate educational resources, pay fees for their education programs with the potential to provide.

- On-demand. It's similar with open class, not through their course more exclusive sources, usually only part of a website. The course also recorded more targeted, not just like that disclosed class to a single exchange, sometimes also be embedded in the learning process in real time man-machine interaction, length is not set when the video in the video stick 45 minutes clock or a fixed duration at a small, higher resolution of the screen, was now more flexible embodiment, will be taught by the screen division Course complemented to move or diffuse short video easier interest primers user's hair. Profit model for the sale of course or to sell value-added services. A representative of the United States of course era (Coursera), which is founded in 2012 by two professors at Stanford University. Now the website reaches 15 million users in over 200 countries and regions.

- Live broadcast. With smartphones, 4G and wifi popularity, teachers and students live in the same time line has been ran into the wind. Relative to the recorded broadcast, live able to maximize restore classroom, teachers better go all out into the classroom, teachers and students can communicate enough and when YY education, classroom Tencent, Netease cloud classroom, the new line in the East, Shanghai river network is well-known integrated broadcast teaching platform.

- Platformization. Although that open class, on-demand and live need to take the load platform, but that in the said platform model in line education focused means an individual or organization through the platform to make and sell their own educational resources, platforms in its into a profitable business model, that we usually say B2C (Business to Customer) mode and C2C (Customer to Customer) mode. Representative class is Baidu pass, it will line course, live interactive classroom on its platform, taking lessons mode feedback network live and on-demand interaction.

## III. THE MAIN PROBLEMS IN THE DEVELOPMENT OF ONLINE EDUCATION

In the next few years, the sharing economy will continue to flourish, its connotation and extension will be changing, its content will continue to deepen, its extension will continue to expand, and online education is no exception. As a representative form of knowledge-based sharing economy, online education is booming in the Chinese market, and it faces many problems that have to be solved due to the existence of gaps between the old regulatory system and the new format.

## A. Social credit system is not perfect

2014 by the State Council on June 14, Kusakabe"social credit system construction plan Outline (2014-2020 years)" clearly, 2020 basically established the basic social credit laws, regulations and standards system, basically built to credit information resources Sharing-based coverage of the entire society's credit reporting system.

Although the establishment of China's social credit system has made undeniable progress, the contradictions that are not compatible with the level of economic development still occur from time to time. The main manifestations in the knowledge-sharing economy are: unclear intellectual property rights, illegal charging channels or Fraud caused by false publicity, leakage of personal information of users, etc.

## B. The lag of current institutional regulations

In terms of market access, the state is currently strictly restricting the entry of foreign capital into the online education market, but the regulation of domestic enterprises entering the market is more relaxed. From the specific point of view of the market segment, the higher online education market has stricter entry and approval, but the access system for the early childhood education and vocational and certification training market is more relaxed, and only needs to be reviewed according to the "Interim Management Measures for Education Websites and Network Schools".

Due to the low market access threshold (especially early childhood education, vocational education, etc.) of online education companies in China, the number of online education

enterprises is expanding expansively, and the quality of enterprises in vocational education is also uneven. At the same time, the auditing and hiring of teachers' groups in online education enterprises are mostly completed through internal procedures of various enterprises. The professional qualification and teaching quality assessment have not really achieved transparency, which directly leads to the guarantee of the quality of teaching output.

### C. The need for a sustainable business model

Although the cake is growing step by step, it does not mean that every company that enters the online education market can succeed. Nowadays, the competition in this industry is becoming more and more fierce. Well-known platforms with wide resources, many users and superior market share have risen. Many small and medium-sized startups that have sprung up like mushrooms have been washed by the market. If the bubble bursts, it disappears. resources, many users and high market, it is particularly important to design a sustainable business model.

Entrepreneurs should first understand customer needs, establish a pragmatic platform, and develop a viable business model that achieves profitability. The only way to focus on accumulating customers with free content is not to last. At the same time, the platform should ensure the high quality of educational content, thus creating a good reputation of word of mouth, making the online education platform invincible in social networks.

### IV. OPTIMIZATION SUGGESTIONS FOR ONLINE EDUCATION MARKET

### A. Market size and users

First of all, in view of the fact that China's online education market has maintained a high growth rate in recent years, China should encourage domestic enterprises to enter the market, and at the same time, rationally introduce foreign investment on the premise of strict review.

### B. Regulatory system

In response to the problem of imperfect credit system, the government should strengthen the connection between the existing credit reporting mechanism and the sharing of economic platforms; specifically, the supervisory means of innovative credit supervision institutions, combined with the Internet and big data thinking, develop more attention to detail. The online supervision system enables new enterprises to be included in the supervision database as soon as they enter the market. The original business operations are regularly fed back into the database to facilitate the dynamic monitoring and punishment of the bad behaviors of online education enterprises.

In response to the lag of the system, the government can continuously update the relevant systems according to the general problems and trends exposed by the enterprises in each period of the database, in order to adapt to the rapid development of the new format; specifically, the basis for strict review of foreign investment Appropriate introduction of excellent foreign online education platforms, while domestic enterprises are gradually encouraging entry barriers under the premise of encouraging development, and replacing the expansion with qualitative improvement. Among them, the market share of online education in primary and secondary schools is expected to increase in the future, and the demand for users is also on the rise. The government should pay attention to the development trend of its industry, ensure the quality of new enterprises with strict market access standards, and avoid waste of resources caused by overheating of the market; Relevant government departments such as the bureau can set up an online education practitioner qualification review team to combine the auditing standards with the database and participate in the process of hiring online teachers to ensure the quality of online teaching.

### C. Future business model

The future online education business model must be developed in a professional and intelligent direction, and must be developed in a direction that can solve the real needs of learners. First of all, the whole market will be further subdivided according to the specific consumer groups. The trend of specialization and verticalization in the market field of providing quality services and content for specific consumers around the needs of knowledge consumers is inevitable. Secondly, with the development of technologies such as cloud computing and big data, with the step-by-step accumulation of customer data and the maturity of machine independent learning and deep learning technology, learning data through user information, login frequency, online scores, and resident duration Performing systematic calculations can accurately image learners, capture their individual needs and preferences, adjust learning content in real time, and automatically push knowledge services that are appropriate to their learning ability, learning stage and level, so that"teaching students according to their aptitude" To be practical. The existing online education business models have their own advantages and disadvantages, and they are constantly evolving. Each business model has its winners and losers, and these business models are no longer just a pure face. Everything that permeates and fuses with each other happens every day. But this is not to say that the business model has not evolved, and there is no distinction between high and low. Regardless of the success or failure of a specific company, from the business model, the C2C model will eventually be replaced by the more complete B2B2C model of the industry chain, and the O2O model will eventually be replaced by the O2O2O model, which focuses more on the closed loop of complete teaching.

## V. CONCLUSION AND OUTLOOK

From the perspective of market size, the knowledge-sharing economic market represented by the online education market is huge at this stage and maintains a high growth rate for many years. The outlook is optimistic. However, education service consumption is a kind of complex consumption. Whether it is supply or demand, it has strong dependence on people. Therefore, the online education business model cannot copy the business model of Internet companies. The seven processes of traditional education, namely systematic teaching materials, peer environment, classroom explanation, teaching Q & A, homework correction, test assessment, and teaching practice, are the links that online education cannot ignore in product design. Traditional education cannot be easily subverted. The online education business model must follow the rules of teaching, people-oriented, adhere to the principle of teaching and research and content, supplemented by science and technology. Online education can give full play to its own advantages, focus on the research and development of teaching content and tools, as well as the collection and processing of student learning data, make full use of these modern technologies for teaching services, improve the pertinence of teaching, make teachers live and interesting, and let students achieve results.

Quickly improve, realistic, focus on experience and quality, and create a business model that takes traditional teaching and wins traditional teaching.

In summary, China's current knowledge-based sharing economic prospects are promising. If enterprises and governments can innovate products and regulatory systems from the perspective of the Internet, sharing new economic formats represented by the online education market will become an important driving force for China's economic development one.

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