

“Internet + Education” Strategy Under the Epidemic: Digitalization, Financialization and Integration

Bangshi Zeng

Syracuse University, Syracuse, New York, United States

Corresponding author: bzeng04@syr.edu

Abstract. In the 21st century, the Internet has invaded all walks of life, especially the traditional industries. Under the double impact of the Internet era and the Covid-19 Epidemic, the education industry must change its education model. The implementation of "Internet + Education" and digital transformation is an urgent task for education enterprises. In such an environment, online education centered on digitalization, financialization and integration will become a strategy for education enterprises to cope with the development of The Times and the impact of the epidemic.

Keywords: Internet + Education, Online Education, Digitalization, Financialization, Integration.

1. Introduction

In the past 20 years, the Internet in China has developed at an amazing speed. As an important tool for promoting economic development and social progress, Internet technology is spreading to a wider range of digital technologies. Digital transformation has been applied in various industries by using the flow of information on the Internet to drive capital flows, thereby improving production efficiency and business models. Based on the premise of "Internet +", China has integrated IT and operational technologies, and digital transformation has formed new knowledge, new models and new paths. For enterprises, digital transformation and promoting "Internet +" is an important future development direction, and it is also an enterprise transformation decision that must be made under the current social environment.

At the third session of the 12th National People's Congress in March 2015, Premier Li Keqiang put forward the "Internet +" plan - the next step in the work of the Chinese government. The Chinese government will begin to combine mobile Internet, cloud computing, big data and the Internet of things with modern manufacturing. Generally speaking, "Internet + " means "Internet plus all traditional industries". "Internet +" is not simply adding the two together, but combining them in a completely new way. Through the use of information and communication technology and Internet platform, the Internet will be deeply integrated with traditional industries to create a new development ecology, so as to promote the development of the Internet from the consumption field to the production field, accelerate the level of industrial development, and enhance the innovation capacity of all industries [1]. In this session, the Chinese government gave a clear direction for the future development of China's economy. The Internet will be the main means of production in the future, and it will be extended to all walks of life from the starting point of the Internet.

In the same year, Chinese Internet giants such as Baidu, Alibaba and Tencent established the "China Internet + " alliance in response to the call of the government. The establishment of the alliance marks a new frontier for the Chinese Internet. On the other hand, it is a difficult process for non-online entities company to change the direction of enterprise development and digital transformation. Especially for the education industry, the education model will change dramatically. The emergence and application of "Internet + Education" indicates that the future classroom is no longer students sitting in the classroom and teachers face to face learning, but with the Internet as the medium, the implementation on the network platform. China's education has been facing the development of the difficulties of uneven distribution of resources, input-output imbalance, the low level of quality-oriented education. The rise of online education is precisely because it has solved the difficult problem of Chinese education to some extent. Online education is not limited by environment, place, time and other factors, and relies on the information ability of the Internet to make educational

content more diversified. Acquire knowledge efficiently and quickly. Flexible schedules, carefully edited video content, real-time online feedback and constant access to student status all make Internet education a beneficial teaching method for both teachers and students.

With the continuous development and gradual maturity of mobile Internet technology, "Internet + Education" has become the most promising field after "Internet + Finance". For education enterprises, the use of Internet technology can greatly reduce costs, save time and improve the quality of teaching. Mobile learning and digital learning models generated by "Internet + Education" are the general trend of the development of education and training in the future, and a booming sunrise industry. The bright prospect and broad business opportunities naturally attract a large number of traditional education industry have begun to develop mobile Internet online education. For example, a number of old education companies, such as New Oriental Education & Technology Group, Tomorrow Advancing Life and XueDa Education, have taken the development of "Internet + Education" as an important strategy for future enterprises. At the same time, the non-education companies of the Internet giants in the "China Internet +" alliance, such as Baidu, Alibaba and Tencent, have also begun to expand the market in the direction of online education, and even non-Internet companies such as CMCC, Datang Telecom Technology, iFlytek and Talkweb Information have entered the market one after another. The injection of large amounts of capital has made "Internet + Education" a new step [2].

And with the continuous development of "Internet + Education", the number of people receiving online education in China has gradually increased. In China, only 77.96 million people participated in online education in 2014, but the number has increased to more than 342 million in 2020. Such growth is a signal to all education companies that Internet education is no longer just an empty talk, but a trend of future education models and interests. Four years after premier Li Keqiang first proposed "Internet Plus", he reiterated at the second session of the 13th National People's Congress the need to accelerate the development of "Internet +" in various industries and fields, including the transformation and upgrading of distance education. The emergence of COVID-19 suddenly swept the world at the end of the year forced to accelerate the pace of traditional offline education to online education. Due to the epidemic, offline education has been stopped by the government, and online education has seen explosive growth. The market size of online education in China was about 432.8 billion yuan in 2020, up 24.79% from 346.8 billion yuan in 2019. A large number of education groups and Internet groups have joined the flood of "Internet + Education". According to the 2020 China Online Education Market Data Report, the total financing of China's online education exceeded 53.93 billion yuan in 2020, with a year-on-year growth of 267.37%. In addition, the amount of financing in 2016 was about 6.25 billion yuan, down 42.29% year on year; In 2017, the financing amount was about 9.5 billion yuan, a year-on-year increase of 52%; In 2018, the financing amount was about 22.3 billion yuan, a year-on-year increase of 134.73%; The amount of financing in 2019 was 14.68 billion yuan, down 34.18% year on year. The total amount of online education financing in 2020 exceeded the total amount of financing in the four years from 2016 to 2019 [3]. Such platform competition also shows the broad market prospects of online education.

The year 2020 is an unstable and challenging year for all education enterprises. Due to the epidemic, offline education has suffered a devastating blow, which makes the education enterprises that are not prepared or difficult to transform a huge loss. Relatively speaking, for the companies that have been pushing forward online, the pressure is less. As mentioned in the 2020 annual report of New Oriental Education Group, "We must rapidly modify and refine our programs, services and products to adapt to changing student needs and preferences, while upgrading technology and continuing Internet practices to become more competitive in the online education market [6]." In 2014, New Oriental Education Group began to develop OMO standardized digital classroom teaching system, which is used to help and improve students' offline learning activities and is applied to various comprehensive education service products. Such a layout makes New Oriental Education Group look calm and prepared when the outbreak of the epidemic forced the transformation of offline education. New Oriental Education Group's K12 various online education programs achieved revenue of 1.081 billion yuan in the whole fiscal year 2020, compared with 919 million yuan in the same period of

fiscal year 2019, up 17.6% year on year; The net loss was 758 million yuan. Another early implementation of online education company Youdao, Inc. is taking advantage of this opportunity to occupy a large number of market shares, the revenue scale temporarily ranked the second position of K12 online education companies. Youdao, Inc.'s revenue in 2020 was 3.168 billion yuan, up 142.7% from 2019. Among them, the net income of learning services, mainly online courses, was 2.155 billion yuan, up 207.9% year on year; The revenue of learning products composed of intelligent hardware was 540 million yuan, up 255.1% year on year. Compared with traditional online-offline education groups, Gaotu Group integrated all its online education programs in October 2020. Its revenue for fiscal 2020 reached 7.125 billion yuan, up 236.9% year on year. Among them, revenue from K12 online courses reached 6.237 billion yuan, up 265.5 percent year on year [4].

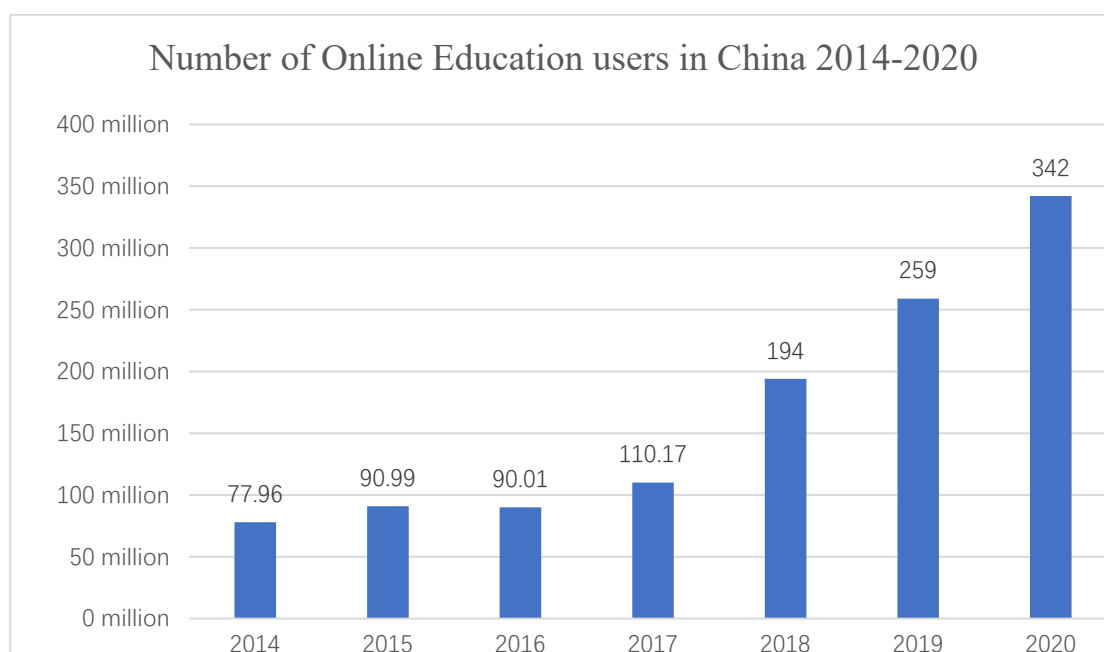


Figure 1. Number of Online Education users in China 2014-2020

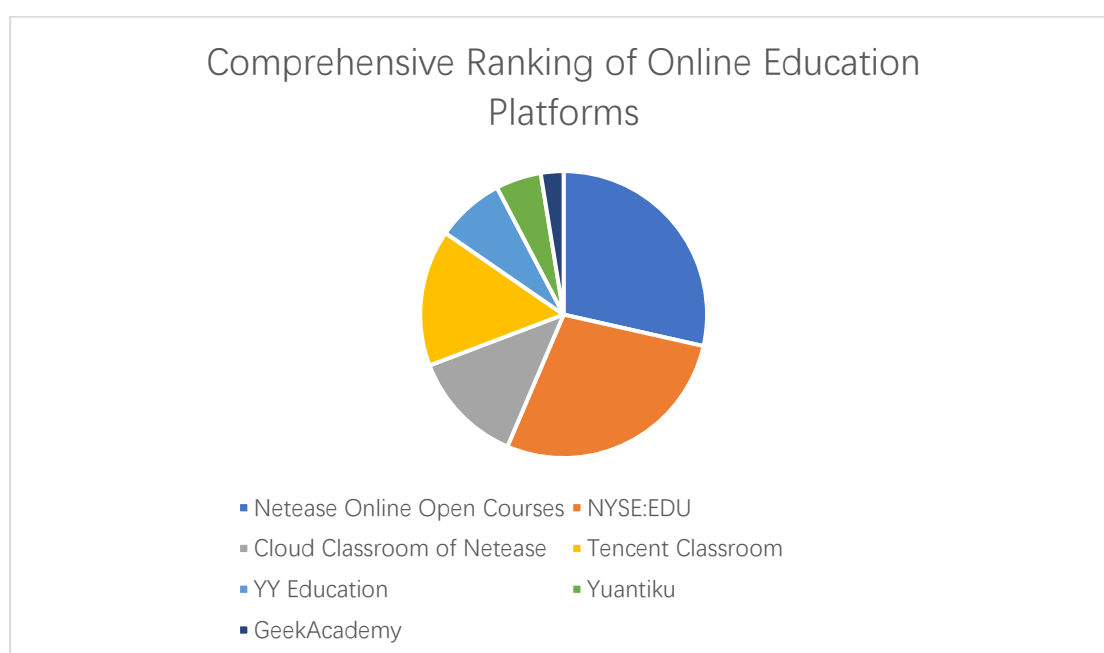


Figure 2. Comprehensive Ranking of Online Education Platforms

The enterprise transformation of "Internet + Education" is not easy to achieve. The huge number of users of online education makes the huge amount of information more difficult to deal with. For the huge amount of information, enterprises inevitably need to establish databases, as well as the teaching model, user data and enterprise management to digitize. On the other hand, the mature "Internet + Education" system has a complete industrial chain, including product value, company internal structure, partner network and relationship capital, etc. For education enterprises, the key to success is whether online education can be successfully financialized, generate product competitiveness and strengthen market share. China's online education mainly consists of higher degree online education, online language training, vocational online education, primary and secondary school online education, enterprise online learning, and preschool online education. As an "Internet + Education" enterprise, it needs to dabbled in all fields of online education, so the integration of educational resources and integration will be the challenge and goal of online education enterprises.

2. Digitalization

For enterprises entering the "Internet + Education" field, how to digitize traditional teaching content is the first challenge. The difficulties of creation and transformation are quite different. I mainly divide "Internet + Education" enterprises into three categories: Cooperation Between Schools and Internet Enterprises (O2O model); Transformation of Offline Education Group (B2B2C model); Online Education Platform (C2C model).

2.1 Cooperation Between Schools and Internet Enterprises (O2O model)

The success of Beijing No. 4 High School Online Educating School is an excellent successful case of the development of "Internet + Education" in China and the cooperation between schools and Internet enterprises under the O2O model. In 2001, the digital transformation of education content of Beijing No. 4 High School officially began, and Beijing No. 4 High School Online Educating School was approved to operate as an official project. However, in the early stage of transformation, Internet education and online teaching are completely unfamiliar fields for traditional schools that only do offline education. Huang Xiangwei, the principal of Beijing No.4 High School Online School, made the right choice at this time to let Beijing No.4 High School and Beijing Dragon Gate Network Education Technology Co., LTD to cooperate. Beijing No. 4 High School, which has profound teaching background, and Beijing Dragon Gate Network Education Technology Co., LTD, which focuses on K12 online education, have joined hands to bring Beijing No. 4 High School Online Educating School into a period of rapid development. The Online Education School use Beijing No. 4 High School as the core and trademarks. The deep and excellent education resources as the foundation, Beijing No. 4 High School Online Educating School gathered teachers from public charter school and high-quality education content, teaching resources and apply IT and software industry business model, advertising through multiple channels of social media, in the way of franchising branches school across the country. By gathering outstanding teachers from all over the country, Beijing No. 4 High School Online Educating School compiled a large number of textbooks and curriculum systems, and thoroughly digitized traditional education. On the other hand, with 2C and 2B business as the core, the Online Educating School develops on two fronts, integrating online education and offline education, and elevating "Internet + Education" to a new level.

Another period of explosive growth of Beijing No. 4 High School Online Educating School was in 2003, a year very similar to today, when the global epidemic of SARS broke out in China. Factories and shops have been shut down, the normal teaching schedule of many universities has been disrupted, primary and middle schools have all been closed, and the whole of China's basic education has come to a standstill. Under such circumstances, online education has become the only choice for students, teachers, schools and education enterprises, and it is also a key node to promote the digitalization of traditional education [5]. Because Beijing No. 4 High School Online Educating School has been

running for a year, its teaching methods and teaching quality have accumulated a good reputation and reputation. In this epidemic period, Beijing No. 4 High School Online Educating School has become an online classroom for tens of thousands of students. One year later, the school has more than 70,000 students and more than 240 branch schools nationwide. In the same year, Beijing No. 4 High School Online Educating School became the only network education institution in the category of distance basic education in the "Top Ten Network Education Institutions in 2003", and in 2005, Beijing No.4 High School Net School won the "Top Ten Network Education Institutions in 2004".

When we look back at Beijing No. 4 High School Online Educating School, the decisive factors for its success are the visionary digital transformation of traditional education and cooperation with Internet enterprises. From a traditional offline education to online education, the most important thing is how to move the classroom to the cloud. The success of Beijing No. 4 High School Online Educating School has inspired other traditional universities to cooperate with Internet enterprises, start O2O digital transformation and carry out MOOC classroom. The convenience brought by "Internet + Education" enables traditional courses to break through the limitations of time and space of traditional courses. Moreover, through the Internet, online education has more diversified learning tools and richer course resources, and a large number of social network tools and digital information provide convenience for online education. John L. Hennessy, former president of Stanford claims that: "Small classes taught by academic gurus remain high standards, and online courses are also a more efficient way to learn than online classes, especially if you compare it to a big class." The success of online education has made more and more people recognize the digital transformation of traditional education. In 2013, three of China's top universities - Tsinghua University, Peking University and Fudan University, as well as the Hong Kong University of Science and Technology and the Chinese University of Hong Kong - all entered into partnerships of varying degrees with Internet education companies led by Coursera, Udacity and edX. Separate MOOC projects to move traditional teaching content online. Former president of Tsinghua University, Jining Chen also expressed his views on online education. He believes that the emergence and development of online education will change the education model of global higher education, and online education provides a new channel for knowledge dissemination and learning. Online education is not only the innovation of educational technology and education mode, but also a bigger change that makes people have a new understanding of education concept, education system, teaching methods and personnel training. According to Coursera, there were 130,000 registered Chinese users on Coursera in 2013, taking more than 100 courses. In 2014, Coursera had 650,000 users and more than 1,500 courses in China, far outpacing growth in any other country. At this point, the digital transformation of education in China has achieved initial results, and a large number of new "Internet + Education" enterprises are on the right track and developing rapidly.

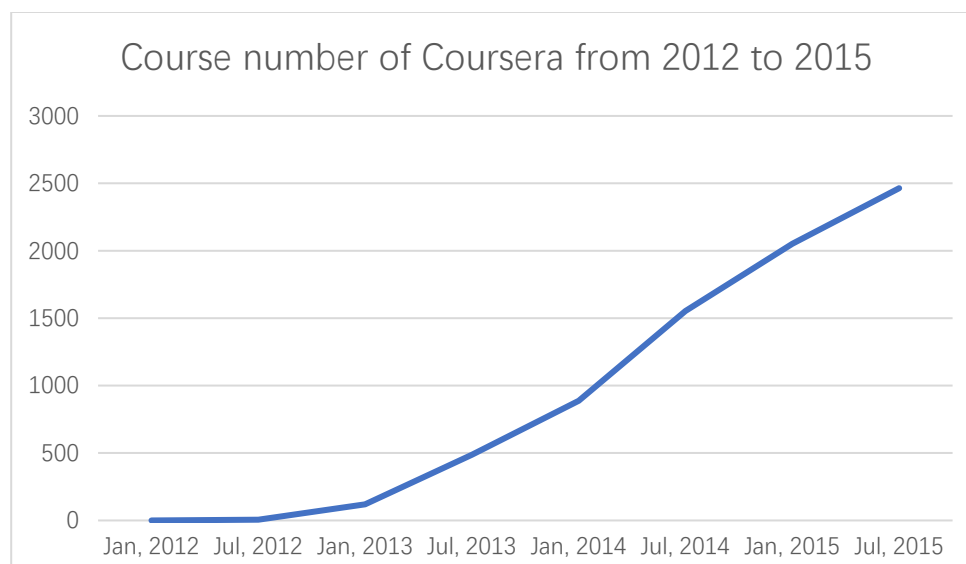


Figure 3. Course number of Coursera from 2012 to 2015

2.2 Transformation of Offline Education Group (B2B2C model)

The second category of "Internet + Education" enterprises undergoing digital transformation is changing from offline education to online education. In the changing environment of education mode, it is necessary for all education enterprises to plan to open up online education market so as to broaden the means of enterprise profit. As an old and well-known offline education enterprise, New Oriental Education Group's brand awareness, teacher resources, educational resources and research and development strength have laid a foundation for the development of online education. K-12 education, as the main profitable project in the education industry, has a simple education structure and easy data resources, which naturally became the first target of New Oriental Education Group's development toward "Internet + Education". In 2014, it independently developed OMO system. In 2020, under the impact of the COVID-19 pandemic, New Oriental Education Group also closed its offline teaching and replaced all teaching content with OMO. It is digital online education that helps New Oriental overcome the difficulties of the epidemic. During this period dominated by online education, New Oriental Education Group's after-school tutoring business of K-12 subjects unexpectedly achieved a year-on-year revenue growth of about 37%, precisely because the application of OMO made it still occupy the position of the education market in such a bad situation.

The benefits of digitizing traditional education go beyond moving books online. In order to ensure the practicality of OMO, New Oriental Education Group has developed a series of "after-sales service" to escort online education. For example, the data insight of OMO system can ensure the consistency of teaching quality of all courses; Quality Assurance Development (QAD) system to monitor and evaluate teacher performance; Visible Progress System (VPS) standardizes and maintains the teaching quality of education services, and these tools have helped New Oriental Education Group become an "Internet + Education" enterprise giant [6]. The digitalization of traditional education has led to rapid improvement of education efficiency. Big data is used to understand students' learning needs and help teachers prepare lessons through standardized and structured processes. The learning data generated by students and teachers on the platform will be uploaded to the OMO system. Through continuous accumulation, the database can provide us with new directions. This virtuous circle makes online education perfect, so that students can always learn the latest knowledge, so that teachers can enjoy the best service.

Digital education brings advantages that traditional offline education cannot match. B2B2C education model will also break the barriers of traditional education, empower the education industry, and become a new education model with a dominant position in the future. The example of New Oriental Education Group not only illustrates the benefits of "Internet plus education" for enterprises, but also shows the advantages of digital education. By capturing the behavior of students and teachers, combined with a variety of digital tools, a huge educational database has been generated, which embodies the educational model and educational content in a digital way, and reacts to optimize the teaching quality and teaching experience. It is with its own advantages that New Oriental Education Group successfully transformed itself and became a giant of "Internet plus education" during the pandemic. Its success is the best example of the transformation of the traditional education industry into online education. It also points out the future direction of education and encourages more education enterprises to pursue "Internet + Education".

2.3 Online Education Platform (C2C model)

The rise of another type of "Internet + Education" enterprises depends on their own technological power and influence. At present, Alibaba's e-commerce services and products have covered the global market and become the world's largest online trading market and business communication community. Since its establishment, Alibaba has been adhering to the concept of technology-driven development of commercial infrastructure in the era of digital economy, facilitating the prosperity of the consumer market, and promoting the development of all walks of life towards digital and intelligent

development. Jack Ma, the chief founder of Alibaba Group, has always had a passion for education. "We must reform education and think about what schools will be like in 20 years," Ma said of the future of education. "The further development of China lies in the reform of education." Therefore, Alibaba Group began to layout the education industry from 2017. In addition to investing in and setting up private schools, Alibaba is also expanding online education. Benefit from Alibaba Group's strong technical support, successful experience and corporate influence, DingTalk quickly gained a foothold in the "Internet + Education" sector.

Compared with other online education companies, DingTalk does not provide education services itself, but serves as a bridge between users and education service providers. DingTalk uses the enterprise's own digital technology to integrate a variety of tools to provide users with SaaS software to help education enterprises achieve digital transformation. Alipay, a subsidiary of Alibaba Group, provides a strong centralized user, financial capability and credit capability to provide an online platform for education enterprises. New Oriental Education & Technology Group, Tomorrow Advancing Life, VIPKID and other large education institutions have become a firm customer [7]. During the COVID-19 pandemic in 2020, DingTalk provided online education channels to universities and primary and secondary schools in more than 300 cities in 30 provinces, covering more than 600,000 teachers and 50 million students. This also enables Alibaba Group to see the future business opportunities of online education. By cooperating with its subsidiaries, such as Alipay and AliCloud University, Alibaba Group has helped DingTalk deeply explore the education circuit, and developed functions such as educational administration, payment and payment, home-school services and payment solutions.

DingTalk provides a successful case for other enterprises that want to enter "Internet + Education". Even if you are not an education business, you can bring in an education business to become a bridge between students and schools. By taking advantage of the enterprise's own digital advantages and providing customer acquisition, transformation, marketing, operation, payment and other links, it can achieve the process of promoting the reform of educational means and transforming offline education into online education. As an online platform builder and developer, it can help enterprises save a lot of costs through various technical components and resources.

3. Financialization

In "Discovering Business Model", Wei Zhu established The Six Elements Business Model. This theory tells us that a perfect, mature and qualified business system consists of six elements: Positioning, The Business System, Critical Resource Capabilities, Profit Model, Cash Flow Structure and The Enterprise Value [8]. By analyzing one by one, we can conclude how education enterprises take financialization as the main strategy to transform traditional education digitally and help enterprises to promote "Internet + Education".

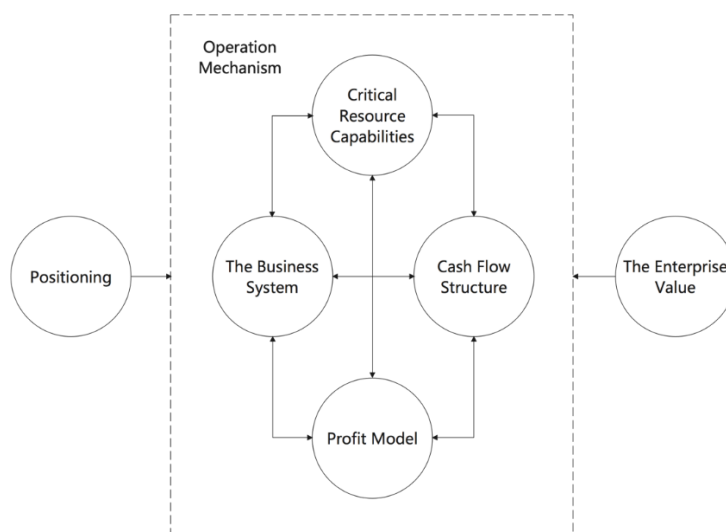


Figure 4. The Six Elements Business Model – Wei Zhu

3.1 Positioning

For education enterprises, the target of traditional education and online education is people, which is beneficial for Chinese education enterprises, because the world's largest education market is in China. As of May 2022, 240 million people in China had received higher education, and the total number of people in higher education reached 44.3 million. China's higher education enrollment rate increased by 27.8 percentage points from 30 percent in 2012 to 57.8 percent in 2021, making it the world's largest higher education system.

Compared with traditional offline education, "Internet + Education" focuses on fast, convenient and efficient learning mode in terms of products and services, and minimizes the cost of time and capital required by students and teachers. In addition, combined with Internet technology, online education can get more resources and promotion than traditional education. Collette proposed STP model, Segmentation, Targeting and Positioning in Marketing Management published in 1967. Online education enterprises classify students by region, age group, family income level, student ability level and other ways to match corresponding teaching services. Different market segments are faced with users with different needs. In this way, the market division can accurately deliver products to the target population, and the marketing strategies of first-tier cities and third-tier cities need to be treated differently. In economically developed cities, the competitiveness among students is naturally strong. Relatively speaking, the students' family income is relatively high, so the parents are willing to provide the education cost for their children. On the other hand, enterprises can divide the educational products according to the school period. For the enlightenment education and primary education and training products, students are the users, while parents are the decision makers and payers. Setting the marketing target as parents can maximize the product revenue. The users and decision-makers of junior high school education and college education are all students. At this time, the marketing means need to be changed and should be pushed according to the learning needs and preferences of students.

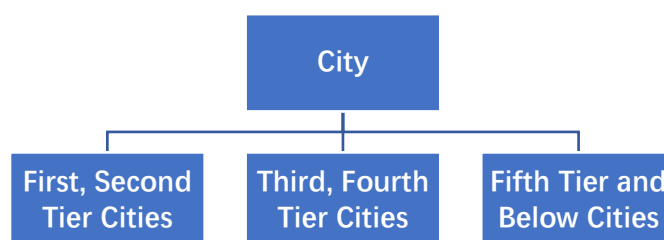


Figure 5. Education Market Segmentation (1)

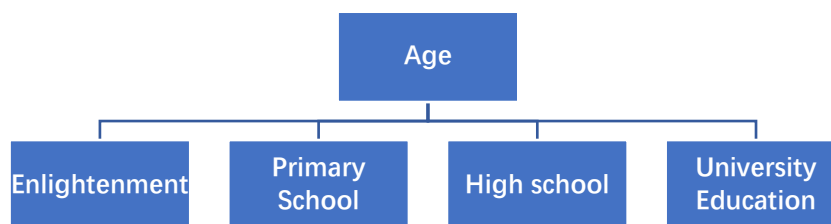


Figure 6. Education Market Segmentation (2)

3.2 The Business System

Take New Oriental Online Education as an example. Its business system is simple but efficient. Some shareholders will provide online educational textbooks, combined with the Internet technical support provided by the holding company and the third-party video playing platform to provide online course delivery channels, and the edited educational products will be provided to students. In the whole process, relying on strong teachers and rich student resources, New Oriental Online Education has attracted numerous partners, including the investment of Internet giants such as Tencent and Huawei, supporting the implementation and promotion of "Internet + Education".

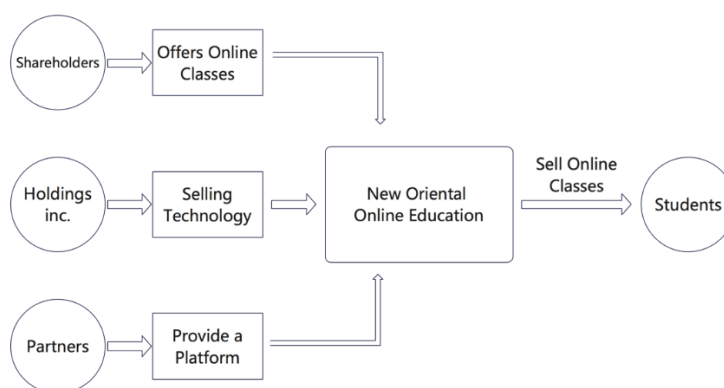


Figure 7. New Oriental online education business system model diagram

3.3 Critical Resource Capabilities

The critical resource capabilities of "Internet + Education" enterprises are mainly composed of three aspects: brand awareness, teacher resources, education resources and R&D strength. First of all, it is important for students to choose an educational institution with high brand awareness, reputation and good reputation. This is also the purpose of the cooperation between schools and Internet enterprises (O2O model), or the transformation of offline education groups (B2B2C model). Whether it is a century-old school or an outstanding enterprise in the education industry, it can attract millions of students by virtue of its reputation. The second is teacher resources. An excellent teacher can turn a poor student into a top student. At the same time, the teacher's words and actions will affect students, which is often said that "good teachers make good students". Compared with the traditional teaching mode, the advantage of online education is that students can choose their teachers. Conversely, an excellent teacher can attract students to attend his class. Therefore, teacher resources are very important for education enterprises. "Internet + Education" to record the course of the excellent teacher, provided to the students at any time via the Internet, without the need to like traditional offline teaching students in teaching, the teacher must face that is online education for the quality of traditional

education, online education enterprise reasonable use of resources teachers will bring huge benefits. The last point is the educational resources and R&D strength of education enterprises. A review of the successful "Internet + Education" enterprises this year, with years of teaching experience and teaching resources for the O2O model of Beijing No. 4 Online schools to bring a huge market; Under the B2B2C mode, New Oriental Online Education relies on independent research and development and employs a number of senior teachers to compile teaching content, thus gaining its own territory in the "Internet + Education" section.

3.4 Profit Model

The profit model of online education company is built on business system. Using financialization, education companies can attract investors by dividing the company's ownership structure and allocating some of the equity to incentivize shareholders who provide technology and educational material. By studying the ownership structure of New Oriental Education Group, we can know that the core factor of the success of New Oriental Online Education is the technical support of a large number of Internet software companies. New Oriental brand publicity, through the form of franchising, subsidiaries, software development, education services, education management services bind together, finally after all platforms and technology in place, the new east will integrate good lesson pushed to users via online channels, sales revenue accounted for an absolute share net class. The perfect profit model, sales and business means have created such an "Internet + Education" enterprise giant, which is also one of the few profitable enterprises in China's online education.

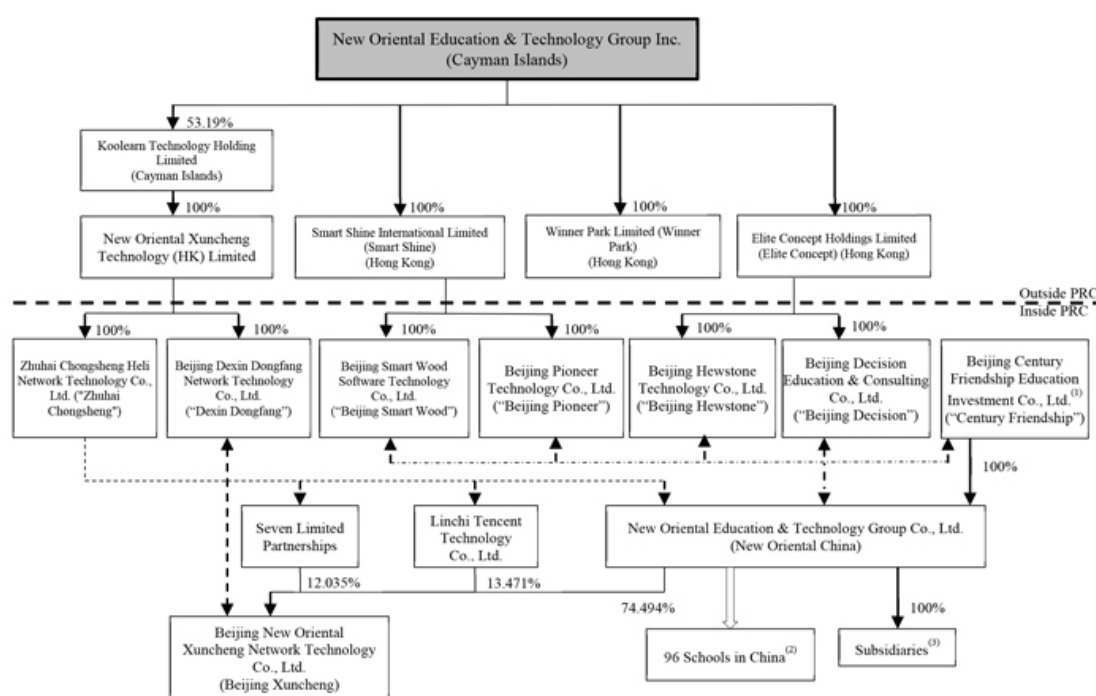


Figure 8. Organizational Structure of New Oriental Education & Technology Group Inc.

3.5 Cash Flow Structure

For general education enterprises (such as New Oriental Education Group), the cash flow structure is mainly composed of net income, operating costs, other income and taxes. According to New Oriental's financial report for the fiscal year 2020, New Oriental did not suffer a huge blow under the impact of the epidemic, but its revenue made a leap, with its net income reaching \$354.859 million, an increase of 55.745% compared with 2019 [6]. With stable cash flow, New Oriental promoted its online education products through multiple channels and marketing teams during the pandemic. Compared with the revenue cost of traditional education (mainly composed of teacher salary,

classroom rent and textbook cost), the marketing cost of online education is higher, but the revenue brought by online education is huge.

(in thousands of US\$ except share and per share data)	For the Years Ended May 31,				
	2016	2017	2018	2019	2020
Selected Consolidated Statement of Operations Data:					
Net revenues:					
Educational programs and services	1,309,339	1,608,954	2,165,152	2,785,254	3,230,378
Books and other services	169,009	190,555	282,278	311,237	348,304
Total net revenues	<u>1,478,348</u>	<u>1,799,509</u>	<u>2,447,430</u>	<u>3,096,491</u>	<u>3,578,682</u>
Operating cost and expenses: ⁽¹⁾					
Cost of revenues	(614,364)	(749,586)	(1,065,740)	(1,376,269)	(1,588,899)
Selling and marketing	(197,897)	(232,826)	(324,249)	(384,287)	(445,259)
General and administrative	(471,010)	(554,948)	(794,482)	(1,034,028)	(1,145,521)
Total operating cost and expenses	<u>(1,283,271)</u>	<u>(1,537,360)</u>	<u>(2,184,471)</u>	<u>(2,794,584)</u>	<u>(3,179,679)</u>
Gain on disposal of a subsidiary	3,760	—	—	3,627	—
Operating income	<u>198,837</u>	<u>262,149</u>	<u>262,959</u>	<u>305,534</u>	<u>399,003</u>
Other income, net:					
Interest income	66,861	61,445	84,838	97,530	116,117
Interest expense	—	—	—	(1,615)	(4,627)
Realized gain from long-term investments	—	7,086	7,366	26,379	407
Impairment loss from long-term investments	—	(2,338)	(980)	(5,919)	(31,750)
Loss from fair value change of long-term investments	—	—	—	(104,636)	(18,451)
Miscellaneous income (loss), net	1,586	2,367	2,841	(1,424)	27,137
Provision for income taxes:					
Current	(39,467)	(51,142)	(72,785)	(103,031)	(142,992)
Deferred	1,936	518	13,377	17,317	8,630
Provision for income taxes	<u>(37,531)</u>	<u>(50,624)</u>	<u>(59,408)</u>	<u>(85,714)</u>	<u>(134,362)</u>
(Loss) gain from equity method investments	<u>(4,425)</u>	<u>(3,289)</u>	<u>(379)</u>	<u>(2,289)</u>	<u>1,385</u>
Net income	<u>225,328</u>	<u>276,796</u>	<u>297,237</u>	<u>227,846</u>	<u>354,859</u>

Figure 9. Selected Consolidated Financial Data of New Oriental Education & Technology Group Inc.

On the other hand, customer flow is the most important factor for "Internet + Education" enterprises. Compared with the traditional education model, online education enterprises have more channels to realize cash through advertising and brand effect. In the three fiscal years of 2018, 2019 and 2020, New Oriental Education Group, Net revenue from K-12 AST, test preparation and other courses accounted for 82.7%, 84.2% and 85.0% of our total net revenue, respectively. Cost of revenue grew from \$1,128.4 million in fiscal 2019 to \$1,304.2 million in fiscal 2020, with sales and marketing expenses increasing by only 3.1%, from \$212.2 million in fiscal 2019 to \$218.7 million in fiscal 2020 [6]. These figures also tell us that the marketing cost of online education is not as huge as we imagined. On the contrary, "Internet + Education" reduces the cost of education and creates more profits for online education enterprises.

(in thousands of US\$)	For the Years Ended May 31,		
	2018	2019	2020
Net revenues of the reportable segment:			
K-12 AST, test preparation, and other courses	2,022,978	2,605,829	3,040,741
Total net revenues of the reportable segment	<u>2,022,978</u>	<u>2,605,829</u>	<u>3,040,741</u>
Total net revenues of our company	<u>2,447,430</u>	<u>3,096,491</u>	<u>3,578,682</u>
Operating cost and expenses of the reportable segment:			
Cost of revenues:			
K-12 AST, test preparation, and other courses	(869,012)	(1,128,355)	(1,304,239)
Selling and marketing:			
K-12 AST, test preparation, and other courses	(193,851)	(212,170)	(218,739)
General and administrative:			
K-12 AST, test preparation, and other courses	(504,985)	(675,315)	(729,125)
Total operating cost and expenses of the reportable segment	<u>(1,567,848)</u>	<u>(2,015,840)</u>	<u>(2,252,103)</u>
Total operating cost and expenses of our company	<u>(2,184,471)</u>	<u>(2,794,584)</u>	<u>(3,179,679)</u>

Figure 10. Net Revenues and Operating Cost and Expenses in K-12 Education Segment of New Oriental Education & Technology Group Inc.

3.6 The Enterprise Value

Not only to help students grow and transfer knowledge to students, the enterprise value of "Internet + Education" enterprise is to combine traditional industries with the Internet, take advantage of the network, bring a new learning mode to students, and help students save time, energy and money. For online education enterprises under different modes, "Internet + Education" can bring reform to traditional schools and open up a new track for education enterprises. Under the influence of the epidemic, the "value" of every education enterprise is to provide courses for students whose schools are closed, and ensure the normal operation of education of whole nation.

4. Integration

For education enterprises, resource integration is also an important work and a strategy to help enterprises develop. Personally, I divide resource integration into two aspects: educational resource integration and educational product integration. It is precisely because of their absolute advantages in these two aspects that "Internet + Education" enterprises will gradually replace the traditional offline education model with rapid development.

4.1 Integration of Educational Resources

For "Internet + Education" enterprises, it is possible to bring together excellent teachers from all over the country through the Internet, overcome the constraints of traditional education time and space, and assemble a strong teaching force. New Oriental Education Group, for example, currently has about 54,200 active teachers, who come from different regions, even foreign teachers who are not in China, and can teach students through online classes. "Internet + Education" enterprises should use this unique resource integration ability as a means of enterprise development.

4.2 Integration of Educational Products

Another means of integration of "Internet + Education" enterprises is the integration of educational products. Prior to the development of "Internet + Education", a good future in the offline specializing in mathematics education plates, new Oriental education group specializing in English and go abroad to study the content, but in the "Internet + education" mode, the education enterprise can integrate many class teaching resources, through the cooperation with other education enterprises, schools, different subjects of development and sale of a variety of education products, They are no longer limited to what they are good at. New Oriental Education Group, for example, currently teaches science, art, robotics, math, English, Chinese, physics, chemistry, biology, history, geography and political science in its K-12 curriculum. In terms of overseas study, we also carry out TOEFL, IELTS, PTE, SSAT, SAT, ACT, IGCSE, AP, SAT2, A-level, IDBP, GRE, GMAT, LSAT and other programs to help domestic college students take CET-4, CET-6 and other tests [6]. As an "Internet + Education" enterprise, the integration ability of educational products is incomparable to that of traditional education enterprises. Conversely, it is this integration ability of educational products that helps the development of "Internet + Education".

5. Conclusion

"Internet + Education" is undoubtedly the future of education method, but also the way out for education enterprises, and it is also the strategy and direction for education enterprises to tide over difficulties in the face of the epidemic. Through the means of digitization, financialization and integration, education enterprises can give full play to the advantages of "Internet" and "education", and the results are not only $1+1=2$. For education enterprises, there are unlimited business opportunities in front of "Internet + Education", or the future direction of Internet enterprises and traditional education enterprises, which is also the shortcut to success. At the moment of the epidemic, online education can be said to be the only choice and hope of students. In the era of the wide application of the Internet, online education is the way out for the education industry as a traditional industry. In the context of the rapid development of human society, science and technology, "Internet + Education" is bound to be the leading education model in the future, is the direction of all schools and education enterprises.

References

- [1] Qian Zhongbing. Government Work Report. The Xinhua News Agency, 2015.Fangfang. Research on power load forecasting based on Improved BP neural network [D]. Harbin Institute of Technology, 2011.

- [2] Min Yaqin. Study on the construction of financial management system transformation of online education business Internet plus era – a case study of CM-EDU company. Jiangxi University of Finance and Economics, 2018.
- [3] 2020 China Online Education Market Data Report. Net economic and social e-commerce research center united net economic and social education desk, 2020.
- [4] Tunny. New Oriental Online posted a revenue of 1.081 billion yuan in fiscal 2020 and 295 million yuan from its K12 business. The lighthouse EDU, 2020.
- [5] Tunny. New Oriental Online posted a revenue of 1.081 billion yuan in fiscal 2020 and 295 million yuan from its K12 business. The lighthouse EDU, 2020.
- [6] Yang Zhihui. NEW ORIENTAL EDUCATION & TECHNOLOGT GROUP INC. UNITED STATES SECURITIES AND EXCHANGE COMMISION ANNUAL REPORT RURSUAUNT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934, 2020.
- [7] He Man. Deep education track nail speed full link digitization. Meeting Reports, 2020, 2020(9).
- [8] Wei Zhu, Zhu Wuxiang. The Six Elements business model. Discover the business model, 2009.
- [9] Tang Xinyuan. Research and Implementation of Wideband High-Resolution Frequency Synthesizer. University of Electronic Science and Technology of China, 2019.
- [10] Ma Min. New Oriental online business model innovation research. Northwest University, 2019.
- [11] He Wei, Zhang Weidong, Wang Chaoxian. Strategic Updating of Internet Plus Considering Digital Transformation. Policy and Economics Research Institute, China Academy of Information and Communications Technology, Beijing 100191, China, 2018, 2018-ZD-02.
- [12] Haoyu Wang, Jiayi Liang, Jianyi Ma. The Economic Impact of COVID-19 on Study Abroad Service Agents in China. Frontiers in Economics and Management, 2020, Volume 1 Issue 11, 2020 ISSN: 2692-7608 DOI: 10.6981/FEM.202011_1(11).0001.
- [13] Peng Wei. Analysis of Corporate Competition Strategies and Marketing Strategies in English Training Market in China Taking New Oriental Education and Wall Street English as Examples. Advances in Economics, Business and Management Research, volume 185, Proceedings of the 1st International Symposium on Innovative Management and Economics (ISIME 2021).