



# Research on Business Model Innovation of Online Education

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## ABSTRACT

With the advent of the digital economy, Internet plus influences different industries. While embracing the Internet actively, various industries are also subverting the original business model by Internet technology. The impact of education industry in recent years is particularly obvious. In 2017, <The 13th five year plan for the development of national education> said that we should speed up the development of online education and distance education, support the new mode of "Internet plus education", and develop the new Internet plus education service, which reflects the direction of future education development to a certain extent. Nowadays, the competition among enterprises has changed from product competition to business model competition. Innovating business model and maintaining core competitiveness is one of the important reasons for the sustainable development of enterprises. This paper takes "GenshuiXue" enterprise as an example, which is one of the leading enterprises of online education. Through the analysis of its business model innovation, it concludes the law of enterprise development from 0 to 1: in terms of market, it pays attention to customer segmentation, value proposition and channel access; to achieve profitability, we must pay attention to the source of revenue, core resources and key business. Through the study of this enterprise case, we hope to provide reference for the development of other online education institutions.

## CCS CONCEPTS

• **Applied computing** → Education; E-learning.

## KEYWORDS

Online education, business model canvas, business model innovation, GenshuiXue

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## 1 INTRODUCTION

With the popularity of the Internet and the development of artificial intelligence technology, online education has become a new way of learning. In 2020, influenced by COVID-19, online education consumption was growing rapidly. Online education has become a product of parents and capital markets. All kinds of new models, new technologies and new formats are emerging in the field of online education to meet the consumption experience of parents and students. At present, there are nearly 200 million primary and secondary school students in China. With the deepening of people's cognition and use habits of online education, the scale of online education consumer market will continue to expand. The format of education industry is constantly evolving, new terms such as O2O, OMO and double teacher classroom are constantly emerging, and traditional offline education and training institutions are constantly adding scientific and technological elements. Online education and offline education are extending and integrating with each other, and the boundary is becoming blurred. The business model innovation of online education institutions is worth researching.

## 2 OVERVIEW OF BUSINESS MODEL INNOVATION THEORY

### 2.1 Overview of Business Model Innovation

The term business model first appeared in the 1950s, and was widely used and spread in the 1990s. Through the research on the definition of business model, scholars such as Morris think that business model is an enterprise in a certain dynamic environment, in order to maximize the value of the enterprise, integrate the internal and external elements that can make the enterprise run, form a complete and efficient operation system with unique core competitiveness, and meet customer needs and realize customer value through the optimal implementation form. At the same time, it is an overall solution to make the system achieve sustainable profit goals. Business model is the bridge between customer value and enterprise value. A good business model can eventually become a unique enterprise value recognized by capital and product market. Different scale, different status, different industries, different types of enterprises have different business models, but these business models abide by many common business rules. No business model is suitable for any enterprise, and no business model is ever out of date. The increasingly fierce market competition requires enterprises to innovate their business models.

In 2011, Dr. Alexander Osterwald and Prof. Yves pinier wrote the new generation of business models, in which they put forward the concept of "business model canvas". The author describes the business model with nine basic elements of the business model canvas, which include: customer segmentation, value proposition,

distribution channel, customer relationship, revenue source, core resources, key business, important cooperation and cost structure. Dr. Alexander Ostwald pointed out that enterprises can stimulate business model innovation by changing these nine factors. The general business model innovation can be divided into strategic positioning innovation, resource capacity innovation, business ecological environment innovation and mixed business model innovation.<sup>[1]</sup>

- Customer segmentation: one or more customer classification groups served by an enterprise or institution;
- Value proposition: to solve customer problems and meet customer needs through value proposition;
- Channel access: deliver value proposition to customers through communication, distribution and sales channels;
- Customer relationship: establish and maintain customer relationship in each customer segment;
- Revenue source: revenue source comes from the value proposition successfully provided to customers;
- Core resources: core resources are essential assets for providing and delivering previously described elements;
- Key business: run the business model by executing some key business activities;
- Important cooperation: some businesses need to be outsourced, while other resources need to be obtained from outside the enterprise;
- Cost structure: the cost structure caused by the above elements of business model.<sup>[2]</sup>

Based on the above factors, this paper analyzes the business model innovation of online education institutions from customer segmentation, value proposition, source of income, core resources, key business, important cooperation and cost structure.<sup>[3]</sup>

## 2.2 Business Model Types of Online Education

At present, online education business model is mainly divided into five models: B2B model, B2C model, O2O model, OMO model and "course + hardware" sales model.

- B2B Model: Business to business mode refers to the business relationship between enterprises. For example, to provide customized curriculum services to enterprises, governments, schools, organizations and other institutions.
- B2C Model: Business to consumer is a business model in which businesses sell products and services directly to users. At present, most online education enterprises in the market belong to B2C mode, such as ape question bank, 51talk and so on.
- O2O Model: O2O mode is online to offline, which combines online and offline education mode. In the Internet era, offline giant educational institutions begin to carry out online education and teaching, or the enterprises that used to do online education begin to develop offline education and get through offline and online platforms.
- OMO model: The OMO mode, namely online merge offline, integrates online and offline. The OMO mode of the education industry is to improve the teaching effect and experience as the core, through the Internet, artificial intelligence, big data and other new technologies to get through the data of each link, and deeply integrate the online and offline learning

scenarios, to achieve standardized process and personalized service. O2O focuses on the efficient and low-cost matching between teachers and students; OMO pays more attention to the whole process with teaching as the core, which can solve the main pain points of students and parents in teaching and service, as well as the problems of customers acquisition and operation. The core is to reconstruct and configure resources with users as the core and data as the engine, so as to extend online and offline services to each other and improve user experience and operational efficiency.<sup>[4]</sup>

- Course + hardware Model: "Course + hardware" sales mode, through customized education hardware equipment or teaching aids with corresponding courses for sale to enterprises or individual customers, realizes online and offline synchronous teaching and diversified teaching methods. As shown in Table 1

## 3 BUSINESS MODEL INNOVATION CASE OF ONLINE EDUCATION

Every time a big business model innovation and change occurs, a new flow pool will be generated. Institutions that can seize the new flow dividend and realize it through the appropriate business model can often stand out from the industry and become "head enterprises". "Genshuixue" is a typical online education institution that realizes curve overtaking through business model innovation.

### 3.1 "Genshuixue" Enterprise Introduction

In 2014, Chen Xiangdong, former CEO of New Oriental Group, founded the online education brand "Genshuixue". "Genshuixue" is affiliated to Beijing 100 Internet Technology Co., Ltd. and is a leading Internet education technology company in China. On March 30, 2015, the company announced a round of financing of US \$50 million, setting a new round of financing record for Chinese startups. In November 2015, it won the "Forbes 2015 China's fastest growing technology company" issued by Forbes. At present, it has products such as "Genshuixue" "Gaotu classroom" "Chengqi business school" "Jinyu school", and "Micro teacher".

At the beginning of its establishment, its business model was education O2O platform. After more than two years of operation, it was found that the model had little effect. In 2016, it began to try the innovation and transformation of business model. Relying on the "WeChat public number and the community operation, the guest + teacher's big class live broadcast" mode, attracted a large number of parents to sign up, and "Genshuixue" the scale of the official account growth. In June 2019, the five-year-old "Genshuixue" landed on the New York Stock Exchange, becoming the first listed company in the online education industry to achieve large-scale profits, and the first listed online education company in China with a market value of more than 10 billion US dollars.

### 3.2 The Road of "Genshuixue" Business Model Innovation

The business model of "Genshuixue" was the O2O platform of education. An education platform similar to Taobao. During 2014-2015, "Genshuixue" platform enrolled "more than 150000 teachers and tens

**Table 1: and Examples of Various Elements of Online Education Business Model**

Business model	B2B	B2C	O2O	OMO	Course + hardware Model
Representative of enterprises (product band)	Makeblock	Yuantiku	Genshuixue	Codemao	Makeblock
Customer segmentation	For enterprises, schools and other institutions	Individual customer	Individual customers and vertical Campus		Individual users, enterprises, schools and other institutions
Value proposition	Provide customized course services	Provide personalized education services			Provide customized course services
Revenue source	Provide course content and value-added service charges ("Course + hardware" sales mode, including hardware sales)				Online course development, hardware manufacturing capability, channel sales capability
Core resources	Online platform development and operation capability, online course development, online marketing and course management, etc		Online platform development and management capability, online course development, online marketing and course management, and offline campus management capability		
Key business	Programming custom courses	Discipline counseling course	Discipline counseling course	Programming courses and tools	Programming courses and tools
Important cooperation	Custom demand customer	Contracted teacher	Offline direct / cooperative institutions		Hardware manufacturing outsourcing
Cost structure	Online course customization cost, platform technology operation cost, online instructor teaching cost and management cost (O2O mode and OMO mode plus offline organization operation cost)				Online course customization, hardware manufacturing cost

of thousands of institutions". In 2015, "Genshuixue" tried to position its business model as "SaaS platform" rather than "e-commerce platform", and only received the membership fees of enterprises stationed on the platform without commission. In these two years, the main operating revenue came from the B-end membership fees (service B-end and teacher end). After more than two years of operation, it was found that the "SaaS" platform" model had little effect. [5] In 2016, it began to try the innovation and transformation of business model.

In 2016, WeChat-Instant messaging has become popular, "Genshuixue" try to open channels and use WeChat official account to accumulate business and gain user recognition and fans growth. Then they began to incubate their own brand business and set up business school, baijiayun and Jinyu school.

In 2017-2018 "Genshuixue" has the biggest breakthrough in business model transformation. Through the traffic + famous teacher effect accumulated by Wechat community operation in the past two years, "Genshuixue" has to start selling course products and services directly to users. In 2018, "Genshuixue" founded its own brand "Gaotu classroom", and welcomed consumer satisfaction through online large class live broadcast classes, transforming the original O2O mode into B2C self-supporting mode, "Genshuixue" business school was officially renamed as a new business school. At the end of 2018, "Genshuixue" began to make profits.

In 2019 is another year of change. With the dividend sales of "Wechat" internet flow drainage, "Genshuixue" began to rely on

external flow. Through a series of promotions such as Internet advertising, it is expected to attract consumers' attention and cognition, and the cost of obtaining customers increases accordingly. "Genshuixue" has changed from over reliance on external resources, including external famous teachers and outsourcing curriculum development to gradually trying to build and develop internal curriculum system and cultivate internal famous teachers.

From 2014 until now, "Genshuixue" adheres to the learning concept of "more efficient online learning", adheres to the value proposition of "good teachers, good courses, good service and high technology", makes every effort to create a "live + tutoring" dual teacher model, selects famous teachers and creates thousands of high-quality courses. Excellent tutors serve the whole process, have many classroom interactions, and the courses are replayed. The course services provided cover dozens of categories, such as primary school, junior high school, senior high school, University, adult English, thinking training, yoga, family education, Chinese studies, professional research and so on. Through full-time professional teaching guidance team and strong technical ability, it is committed to providing personalized, interactive and intelligent online learning experience for students and parents.

In June 2019, "Genshuixue" has only been established for five years was listed on the New York Stock Exchange of the United States, becoming the first listed company in the online education industry to achieve large-scale profits, and also the first online education listed company in China with a market value of more than 10 billion

US dollars. “Genshuixue” through the innovation of business model and overtaking in corners. From the perspective of development speed, it took only six years to learn from who to achieve a revenue of more than 5 billion yuan, far exceeding the competitors “New Oriental Education & Technology Group” and “Beijing good future group”. “Genshuixue” realizes the control of cost structure through the cognition of customer segmentation, and finally operates in the way of “famous teacher + online class”, so as to achieve better cost structure, more favored by capital and gain profits.

#### 4 CONCLUSION OF ONLINE EDUCATION BUSINESS MODEL INNOVATION

Based on the theory put forward by Dr. Alexander Ostwald and Professor Yves pinier that changing the nine elements in the business model canvas can realize business model innovation, this paper take “Genshuixue” enterprises which is in the online education industry as an example, and draws the following conclusions by analyzing the innovation and development of their business model: 1) When analyzing the business model, online education enterprises should first do a good job in customer segmentation. By understanding the market demand, do a good job in product positioning. In recent years, the scale of China’s K12 education market has grown rapidly. In 2019, the market scale exceeded 900 billion yuan, increase of 17%. Due to the rigid demand of K12 subject education and the increasingly strong demand for quality education by users under the catalysis of the transformation of educational ideas and the upgrading of educational consumption, the market scale of K12 education field continues to grow. Under such a broad market space, the online rate of k12 education is still not high. In 2019, the online rate is less than 8%, and there is still a broad market space to be developed. In the process of constantly adjusting the business model, “Genshuixue” finally divides different customer segments through the establishment of different brands: use the brand and platform of “Genshuixue” to provide services for all kinds of adult training above K12, including postgraduate entrance examination, English learning, civil service examination, etc; Distinguish the learning needs of K12 (6-18 years old) group with high way classroom; Early education in the early childhood stage is divided by the brand of “small early Enlightenment”. Finally, in the field of online education, we will achieve comprehensive product coverage and targeted differentiation of brands and services.

2) In the process of development, online education enterprises should clarify their own value proposition and meet customer needs. “Genshuixue” in the process of constantly trying to innovate the business model, we always insist on solving customers’ problems and understanding customers’ needs and pain points. The core resources of online education are excellent teacher resources and curriculum development ability “Genshuixue” has attracted a large number of learners through the famous teacher effect. At the same time, “Genshuixue” is also driven by big data, based on the data analysis of millions of students, scientifically formulate course plans for student consumers, record each student’s learning behavior trajectory, accurately analyze and customize different learning plans. 3) In the marketing process, online education enterprises should use omni-channel integrated marketing communication to convey value propositions to customers “Genshuixue” was successful in

initial marketing, which was the use of WeChat official account. Official account is built official account on WeChat. If you focus on one of them, you will be guided to pay attention to different types of public numbers. Every official account will eventually drain consumers to “Genshuixue”. Consumers will be guided to add to the community after they are concerned about the official account, followed by community administrators. Through the huge official account matrix and social matrix, the entrance of internet flow goes hand in hand, and cross drainage leads to very strong potential energy. Keep potential consumers aware of their value proposition and core courses.

4) Online education enterprises should do a good job in customer contact and customer relationship in market segments, strengthen customer satisfaction, and finally transform service satisfaction into consumer loyalty. “Genshuixue” pays great attention to the quality of teaching service in customer relationship management. At present, the “Genshuixue” platform has registered 51 million + students, opened 9000 courses, and the average praise rate of students has reached more than 95%. The company adopts the mode of “famous teacher teaching + double teacher guidance” for the trainees, and accompanies and supervises the trainees in the whole process from pre class preview, classroom interaction, after class guidance, practice correction and other links, so that each trainee can enjoy high-quality teaching guidance services.

5) If online education enterprises want to make profits, they need to provide customers with valuable products or services “The brand “ Gaotu classroom” under “Genshuixue” is to grasp the “famous teacher + counseling effect”, make use of the lectures of famous front-line teachers, give live online lectures, finely polish the course content, help students expand their learning ideas and ignite their interest in learning; After class, we use the class teacher’s guidance to urge students to complete their homework, which not only solves the problem of scarce resources of famous teachers, but also provides after-class tracking services for training and learning. It provides valuable products and services for students and parents in need.

6) Online education enterprises should know their core resources and core advantages when designing their business model. As an educational institution, the most important core is inseparable from teachers and curriculum system “Genshuixue” in the process of business model innovation, it summarizes the key of famous teacher resources. Therefore, in the process of curriculum development, it attaches great importance to the design of teachers’ reputation and teaching content, from relying on external famous teachers to attracting famous teachers to become partners of the company, operate together, and independently develop core curriculum content. At the same time, in the era of digital economy, “Genshuixue” pays attention to the use of big data and provides targeted courses for scholars through data analysis.

7) Online education enterprises should be clear about their key businesses. Only by carrying out key businesses, identifying market positioning and meeting consumer needs can they give play to their own value “Genshuixue” has always been looking for its own key business points, from the initial O2O platform to the brand products established for the to B (enterprise oriented) end, including Chengqi business school, Jinyu school, Tianxiao and u

alliance distribution; Gaotu classroom, early enlightenment and who to learn from established by to C terminal (for consumers).

8) Online education enterprises should pay attention to important cooperation in business model innovation and learn to use external resources for enterprise development and growth. “Genshuixue” was established in June 2014. It took less than a year. On March 30, 2015, it was announced that it had obtained \$50 million in round a financing, setting a new round a financing record for Chinese start-ups. In November 2015, “Genshuixue” won the “Forbes 2015 China’s fastest growing technology company” released by Forbes. On June 6, 2019, “Genshuixue” was listed on the New York Stock Exchange. It is the first profitable K12 online education company to be listed on the New York Stock Exchange. Enterprises make rational use of external resources and rely on the power of capital to become listed companies, which is conducive to expanding the popularity and influence of enterprises, better development of enterprises and attracting excellent talents. In short, enterprises should give full play to their advantageous resources in business model innovation, learn to integrate external resources, and get twice the result with half the effort through the leverage principle.

9) Online education enterprises should pay special attention to cost structure in business model design. At present, many online education institutions are crazy about investing in marketing expenses regardless of cost. Perhaps advertising does bring a little popularity, but in the end, it only makes scale and no profit, which requires the management to have a clear understanding and control of the cost. The most important profit of online education comes from three key points: first, the content and services of educational products, second, the human efficiency of institutional teachers and staff, and third, the ability to get customers. At present, there is little difference between the first two points and each online education institution. The third point is that major institutions are frantically competing for money. Customer acquisition capability includes customer acquisition cost and business scale. As long as the cost of getting customers has an advantage, there will be profits. In addition, in order to expand the scale, the traffic should keep up. The ability to obtain customers through multiple channels is also the core competitiveness of educational institutions. Online educational institutions should find professional market talents, professional tools and methodologies, and finally find customers in demand through effective channels at a lower cost.

In short, with the continuous progress of technology, the management of China’s online education industry will continue to develop in the direction of systematization and intelligence in the next few years, so as to better solve the problems of client and enterprise management. The business model cannot remain unchanged. Only the business model innovation adapting to the environment can bring core competitiveness to enterprises. For the sustainable development of online education, online education enterprises should focus on users, focus on enriching teaching content and improving quality, make full use of network drainage and big data management, continuously improve their own competitiveness and create a more scientific and profitable business model.

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