

Marketing Innovation and Management Reform Driven by Emerging Technologies

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Abstract: The first part of this paper defines the concepts of marketing innovation and management reform, the four fulcrums of marketing innovation, as well as the necessity and modes of management reform. The second part summarizes the theoretical basis of this paper, and the third part analyzes the marketing environment of educational products under the background of the internet. Following that, the paper then discusses the problems existing in the marketing of education enterprise under the background of the new era, along with the countermeasures of enterprise marketing and management optimization. The last part of this paper is a summary of the content of the whole article.

Keywords: Emerging technology; Marketing innovation; Management reform

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1. Introduction

With the increasingly complex market environment, the intensity of competition among enterprises is not what it used to be. In order to affirm a place in the fierce competition, enterprises must innovate their own marketing means and change their management methods. In this process, the role that emerging technologies may play in the aforementioned two activities cannot be neglected. Therefore, an in-depth discussion on enterprises is carried out using emerging technologies to innovate marketing methods and change management methods.

2. Definition of related concepts

2.1. Marketing innovation

2.1.1. Concept of marketing innovation

Innovation signifies breakthrough. Marketing innovation is the breakthrough of enterprises. Enterprises innovate their own marketing elements in a certain aspect according to their own actual situation and the changes of the external marketing environment.

In the process of innovation, there are no clear requirements, and there is no need for specific invention or creation. The "index" of innovation is to adapt to the needs of the environment and obtain the support of consumers within the scope permitted by the law. At the same time, it must be noted that the index to measure the success of marketing innovation is not the realization of the final marketing goal. Therefore, enterprises do not need to put marketing objectives in an overly important position ^[1].

2.1.2. Four fulcrums of marketing innovation

Schumpeter is a representative of American management. He proposed that enterprises must have five tangible elements in the process of innovation, but marketing innovation is an intangible element. In the process of innovation, whether the elements are tangible or not, there must be support in thought or power. According to the current marketing practice in China, the international environment will have an impact on domestic marketing. Internationally, well-known large enterprises will face great difficulties in the marketing process. The marketing means used by these large enterprises are too traditional to adapt to the environment. These large enterprises have attempted marketing innovation, but the progress is generally slow, and even some enterprises are in trouble. The main reason is the lack of ideological support. According to the analysis of the current marketing situation in China, enterprises can refer to four different methods in the process of marketing innovation.

2.1.2.1. Establishing the correct concept of innovation

People's subjective understanding of objective things is ideas. Ideas belong to subjective things and play a guiding role in people's practice. Innovative concept is a kind of innovative consciousness, which is summarized by enterprises in the unpredictable marketing environment. In the process of marketing innovation, this consciousness plays an important role. Without the guidance of innovation consciousness, the process of marketing innovation will be difficult, and it is easy to return to the old way of traditional marketing. In order to succeed in marketing innovation, enterprises must place the guiding ideology of innovation in a prominent position, so that enterprises can always maintain a clear direction on the road to marketing innovation. In terms of marketing innovation, Haier Group's "Slope and Ball Theory" enjoys high popularity in the industry. In this theory, Haier mainly promotes OEC management, which is also the main embodiment of Haier's innovation concept and has made great contributions to Haier's innovation. This theory is also a typical representative of China's enterprise modernization management [2].

At the same time, China's innovative achievements in the field of marketing have emerged one after another, such as family marketing, which improves the brand image of enterprises and significantly increases the brand affinity. It can be seen that there is a close relationship between marketing innovation and innovation consciousness. The prerequisite for the success of marketing innovation is to have innovation consciousness. First, enterprises must have the awareness of marketing. Only under the guidance of correct marketing concept can enterprises provide the correct direction for innovation activities. At the present stage, small and medium-sized enterprises in China basically do not have the correct marketing concept. With the further opening of China's market, large enterprises in the international market will eventually join the competition in the domestic market. In this case, if enterprises do not form their own marketing concept, it will be difficult to survive. Second, enterprises must have a sense of competition. Competitive consciousness is the internal driving force of enterprise innovation. Only with competitive consciousness can enterprises survive.

2.1.2.2. Cultivating marketing thinking

Only human beings think. This is a high level cognitive activity. Thinking is a rational cognition and a reflection of human beings on the appearance and internal relationship of things. For example, Archimedes discovered buoyancy from the overflowing water from a bathtub. The overflowing water is the appearance, while buoyancy is the internal connection. However, not all ancient Greeks were able to discover the existence of buoyancy from this life phenomenon. This is thinking. Archimedes had scientific thinking, while other ancient Greeks did not have scientific thinking. This scientific thinking prompted Archimedes to discover buoyancy and made an important contribution to the initial development of natural science.

From this anecdote, it is possible to appreciate the importance of thinking, especially marketing thinking, to enterprise marketing activities.

In the process of marketing innovation, enterprises can begin with the marketing target – consumers. If enterprises lack marketing thinking, they will turn a blind eye to these entry points of marketing innovation, and it will be difficult to achieve the follow-up marketing innovation. For example, in the process of real estate project marketing, project marketers use innovative thinking to connect the location of the real estate project with a scenic spot. Although the distance between the two is far, through ingenious innovative thinking, the two can be connected to create a successful marketing example. Connecting things that are not originally connected together reflects innovative thinking, which is a kind of thinking out of nothing [3].

In the training of marketing personnel, enterprises should pay attention to the establishment of marketing consciousness, so that marketing personnel can always immerse themselves in the working state of marketing. Marketers must have rich theoretical knowledge to bring this theoretical knowledge to life, gradually develop marketing ability, and form their own unique marketing thinking in a natural state. In addition, it is important to perform well in observation, whether at work or in daily life, focus on observing things with consumer behavior, and explore the breakthrough of marketing innovation through these things.

2.1.2.3. Having indomitable spirit

The marketing environment faced by enterprises is extremely complex and unpredictable, especially the enterprises in China, which are located in such a land with profound cultural heritage. They have to be careful of various potential risks in the process of marketing innovation. Once innovation fails, enterprises will have to bear a huge price, and many of their innovation activities will have to cease at this stage. In this case, the innovation spirit and enthusiasm of enterprises will be seriously affected, and the negative impact on future development will persist for a long time.

In order to break the shackles of this negative impact, enterprises need an indomitable spirit to ensure that they can persevere through difficulties and set sail on the road of marketing innovation. The innovation of enterprises will never be 100% successful, so it will not have a completely positive impact on enterprises, but the spirit of enterprise innovation is precious. Only by adhering to this innovative thinking, enterprises can lay the foundation for the success of marketing innovation. As marketers, it is essential to pay attention to exercise one's internal character, gradually form this indomitable spirit, bravely face failures, and innovate confidently [4].

2.1.2.4. Having strict system guarantee

The rules and regulations of enterprises are the basis for all staffs. Only perfect rules and regulations can help enterprises form excellent teams. In other words, the rules and regulations of enterprises are not only important support for the combat effectiveness of the teams, but also the necessary basis for the formation of corporate culture. The construction of rules and regulations can virtually infiltrate the thoughts of employees. Good rules and regulations along with excellent operations are the necessary prerequisites to ensure that enterprise marketers internalize marketing innovation thinking; they are the basic guarantee for marketers to understand innovative thinking. In the process of marketing innovation, enterprises need to transfer their marketing thinking to the thinking of marketing personnel with the help of rules and regulations, so that marketing personnel can flexibly use it in marketing activities ^[5].

After the completion of the institutionalized, there is a basic guarantee for the formation of innovative thinking and the shaping of innovative spirit. When the basic guarantee is met, the innovation enthusiasm of marketing personnel will be improved unprecedentedly. Marketing personnel will also regard marketing

activities as their own duty and consciously take the initiative to complete them. When marketing personnel have high fighting spirit, even in a complex and unpredictable environment, enterprises will be able to select the most appropriate marketing activity to resonate with the changing market. The importance of rules and regulations can be seen from various theories in management. In management, many theories explain the importance of management to people. Therefore, there is no doubt about the practical feasibility of enterprises to improve the system management of marketing personnel. Although rules and regulations play an important role, it is not always easy to internalize a company's culture and innovative thinking into rules and regulations. In order to formulate rules and regulations, lay the foundation, and provide guarantee for marketing innovation, it is imperative to give full play to the soft power of enterprise culture. Researchers in related fields have pointed out that only appropriate rules and regulations can ensure that the marketing personnel of enterprises will spontaneously invest in the process of marketing innovation. For example, pertaining to the incentive system, enterprises tend to combine the results of marketing innovation with the treatment and future development of marketing personnel, which plays an unexpected and huge effect in marketing innovation activities.

2.2. Management reform

2.2.1. Concept of management reform

The reform of the management level is the key to enterprise reform. In order to successfully realize management reform, enterprises must make more efforts in reform management. The success rate of enterprise reform can never reach 100%, sometimes even 50%. This reality causes many enterprises to have a wrong perception – enterprises will succumb whether they reform or not. Shrouded in this wrong idea, enterprises tend to be more conservative and complacent, and eventually be eliminated in the market. At present, the pressure from the market is gradually increasing, and technologies are emerging one after another. Enterprises must renounce the misconception. They should recognize that change may bring success, achieve bright prospects, or fall into the abyss of failure. However, without change, they will inevitably move toward the latter. Therefore, enterprises do not need to focus on the need for change; instead, they should focus on how to change so as to reduce the time of ineffective thinking.

If an enterprise needs change management, it means that there are problems within the enterprise, which hinders the further development of the enterprise. It may also indicate that it is difficult for the enterprise to adapt to the changing and unpredictable business environment. It is necessary to carry out changes within the enterprise, adjust the internal level of the enterprise, reshape the work process, form a new enterprise culture, and boost enterprises to complete change in the shortest time ^[6].

2.2.2. Necessity of management reform

Peter Drucker is a world-renowned management scholar. He once said that it is impossible to control reform, but it is possible to go ahead of it. Reform itself cannot be avoided. From this point of view, it can be seen that the business environment faced by enterprises has been in a state of dynamic change. Enterprises must follow the trend of the dynamic business environment and make changes at the same time in order to obtain opportunities for survival and development. A famous case is the Kodak film. Before the emergence of digital cameras, Kodak film occupied an important position in the field of photography. However, after the introduction of digital cameras, Kodak film did not seize the opportunity to make rapid changes. Instead, it remained complacent and despised digital cameras. Therefore, its status plummeted, and it was difficult for it to make a comeback.

Another typical case is the Swiss watch industry. The acclaimed Swiss watches are well-known all over the world. The Swiss watch industry has no complacency. While improving mechanical watches, it

ventured into electronic watches. Through reform management, the Swiss watch industry has made Japan's Casio electronic watches encounter many obstacles in entering the world market. From the above two cases, it can be seen that the premise for enterprises to gain a broader market space is to thrive in reform management. The urgency of this task should be placed before any management work ^[7].

2.2.3. Modes of management reform

Through the above analysis, it can be seen that the management reform of enterprises is in a dynamic state of development, which includes three main modes.

2.2.3.1. PDCA

The main feature of this mode is circulation. Therefore, this mode is also known as the Deming cycle. In this cycle, there are four processes: planning, doing, checking, and acting. Specifically, it is to finalize the action objectives and work plans at the beginning, and then to complete all works accordingly. When the work is completed, the corresponding inspection work shall be done. Finally, the inspection results should be dealt with, followed by the final summary and problem-solving. On this basis, the next cycle begins ^[8].

2.2.3.2. BPR

Michael Hammer, a famous American scholar who works at Massachusetts Institute of Technology (MIT), proposed the business process re-engineering (BPR) mode. In this mode, enterprises must reduce costs while improve the quality of their products in order to meet the requirements of clients and occupy a place in the intensely competitive market. In regard to that, process reengineering is necessary, and through the operation of this mode, the competitiveness of enterprises will be significantly improved.

2.2.3.3. Value chain

The activities of enterprises are similar, including product technology research and development, raw material procurement, production and sales, as well as subsequent service work. This is a complete industrial chain. Under the influence of the value chain model, these seemingly independent links have become closely related activities, creating economic benefits for enterprises. In the business activity chain, the changes of these business activities must be carried out at the same time because the changes of any business activity will have an impact on other business activities. This dynamic change of enterprises is continuous and needs to be carried out continuously over a period of time. The existence of the value chain mode improves the competitiveness of enterprises and lays a foundation for other changes of enterprises [9].

3. Overview of the theoretical basis

3.1. 6 P's of marketing

Western scholar, Jerome McCarthy, was the first to put forward the 4 P's of marketing in 1960 to fully control various factors in the process of enterprise marketing. However, when enterprises actually enter the market, they will inevitably be affected by external factors, such as competitors, macro policy changes, and so on. Therefore, Philip Kotler, another scholar, put forward the big marketing theory and the 6 P's of marketing on the basis of the 4 P's of marketing, which mainly covers six aspects: product, price, place, promotion, public relations, and political rights. Compared with the 4 P's, the 6 P's of marketing focuses on internationalization and globalization, which is more in line with the actual needs of marketing in the new era. In the process of actually participating in market competition, operators need to fully analyze the changes of the market environment and macro policies in time as well as make correct marketing decisions

on this basis ^[10]. Its policy features are shown in **Figure 1**.

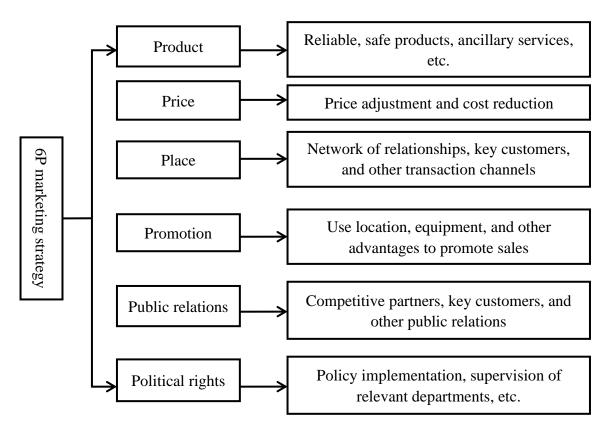


Figure 1. 6 P's of marketing

3.2. 4V marketing mix theory

Since the early 1990s, high-tech enterprises, products, and services have gradually sprung up, and the high-tech industry has entered a stage of rapid development. The development of new technologies, such as internet and mobile communication tools, has driven the society into the information age, and the connectivity between regions and countries has improved. At the same time, this situation has also effectively reversed the information asymmetry between enterprises and consumers, and the information exchange channels are showing diversified development trends. Multinational enterprises with rich resources and high technical ability have begun to carry out resource integration activities all over the world. Under the influence of this background, enterprise marketing methods and ideas have been innovated and developed accordingly, and a more unique marketing theory, namely the 4V marketing mix theory, has been proposed. It includes variation, versatility, value, and vibration. The more important aspect is differentiation, which mainly covers customer differentiation, product differentiation, image differentiation, and market differentiation [11].

In the context of the internet, a single marketing mix theory may not fully adapt to the impact of the internet. Due to the continuous improvement and popularization of internet technology, it has completely broken the limitations of education in the traditional sense. Time has changed from fixed time to any time, and place has changed from fixed point to anywhere. As long as there is a network, mobile phones and computers can be used to take classes. Therefore, in the context of the internet, consumers are paying more attention to product quality, price, service, and satisfaction. The cost performance of products is highly paid attention to, whereas the limitations of distance and time have become past tense. Therefore, the single

marketing mix theory is insufficient to satisfy all the requirements of present consumers. Enterprises should take the essence of various marketing mix theories, such as strengthening service, teaching students according to their own aptitude, making differentiated education, and charging differentiated fees according to consumers' own situation. Enterprises can remove the outdated factors of several marketing combinations, such as whether to consider cost, convenience, and other factors. In the new era and new background, enterprises should respond flexibly and learn from each other, so as to walk in the forefront of the times and provide strong support as well as guarantee for the implementation of enterprises' long-term development goals [12].

4. Marketing environment of educational products under the background of the internet

4.1. Analysis of external marketing environment based on PEST

4.1.1. Population and environmental factors

In the context of the new era, affected by employment pressure and the continuous expansion of higher education, the enthusiasm of fresh graduates and previous graduates for continuing education continues to increase. Taking the postgraduate entrance examination as an example, according to the data released by China's education department, the number of postgraduate candidates has shown an increasing trend year by year in the recent five years. In 2018, the number of candidates for the postgraduate entrance examination exceeded 2.9 million, and the number continued to increase at a frequency of about 500,000 per year. In 2019, the total number of postgraduate candidates in each province reached to over more than 3.4 million. **Table 1** shows the number of candidates and the trend of change in each region in recent three years.

Table 1. Number and trend of change of postgraduate candidates in each region in recent three years

Region	The class of 2020	The class of 2019	The class of 2018	Trend of change
North China	716,012	581,536	500,454	+43.07%
Northeast China region	299,059	270,387	237,535	+25.90%
East China	1,077,695	892,394	727,586	+48.12%
Central China	519,247	432,488	374,374	+38.70%
South China	247,854	197,138	151,246	+63.87%
Northwest China region	228,734	202,461	164,325	+39.02%
Southwest China region	365,839	283,362	231,561	+57.99%

The data in **Table 1** effectively reflect the "postgraduate entrance examination fever" in China in recent years. Therefore, in the actual development process, the education industry should pay attention to fully understand the current market trend, grasp the group of postgraduate entrance examination personnel, and carry out corresponding marketing activities according to its huge base. At the same time, the industry should also pay attention to the in-depth analysis of the market trend of change. It can be inferred from the data in **Table 1** that the number of candidates taking the postgraduate entrance examination will further increase over the next few years, and various postgraduate entrance examination training needs will surface in this process. Therefore, the education industry should pay attention to strengthening the research on relevant strategies.

4.1.2. Economic factors

In the context of the current information age, the development and progress of internet technology has had a great impact on the business mode of traditional industries. Coupled with the impact of the pandemic in

recent years, the traditional offline education has suffered a devastating blow, where the bankruptcy and reorganization of offline training institutions are common. Therefore, as a new technology, the online education mode based on the internet is encountering great opportunities, requiring operators to actively innovate their own marketing and management mode to meet the new requirements of enterprise management in the new era. The marketing research of internet products in the education industry began in 2017. Affected by the development of self-media such as live broadcast and short videos, the education industry began to develop and explore internet education products. At the same time, the application of artificial intelligence in internet education products also effectively improved the interest of these products. From the perspective of marketing, this feature will become the main channel and selling point of online education product marketing in the new era [13].

From the perspective of market development, China's education market has shown a steady expansion trend in recent years, which is mainly due to the continuous improvement of people's recognition of knowledge payment. According to a report released by Zhiyan Consulting, the receivable of China's education market exceeded 200 billion yuan in 2018, reaching 251.7 billion yuan, with a growth rate of 15.7%, and this momentum is still growing. At the same time, those paying users of online education also showed an annual growth trend. In 2018, the number of market consumers reached 130 million, with a growth rate of 23.3%. This situation shows that under the background of the continuous development of internet education, the acceptability of people's payment continues to improve.

From the perspective of practical development, under the background of the continuous improvement of internet and 5G technology, the limitations of time and space in traditional knowledge acquisition methods have been broken. Online education has gradually become one of the new trends in the development of the education industry, and its scale will further expand. It provides favorable conditions for the formulation of marketing strategies.

4.1.3. Social and cultural factors

Under the background of the new normal in China's development, the national socio-economic conditions have been continuously optimized, and the people's income level has also improved, thus promoting the constant change of people's consumption habits. While meeting basic needs such as clothing, food, housing, and transportation, people are more inclined to invest their disposable income in education to obtain greater economic benefits. Taking college students as an example, as far as students themselves are concerned, their willingness to apply for graduate programs may be low, but most parents want their children to have more academic qualifications. At the same time, affected by their children's self-discipline and learning ability, parents tend to send their children to training institutions and utilize teachers' professionalism to supervise their children's learning as well as provide corresponding guidance. As for on-the-job candidates, the reason for their participation comes from work demand and income pressure, requiring them to improve in terms of education to obtain higher remuneration. In addition, due to the difficulties faced by them in grasping the knowledge points of the postgraduate entrance examination, comparing with students and their own inertia, on-the-job candidates are more dependent on training institutions, which provides the source for enrollment in the education industry [14].

In the actual development process, the education industry should pay attention to formulating targeted marketing strategies according to the actual characteristics and needs of different groups, so as to improve the attraction and popularity of enterprises.

4.1.4. Political factors

Government policies are great support to the development of education and training industry. In September

2015, the government issued the *Guidance on Comprehensively and Deeply Promoting Educational Informatization during the 13th Five-Year Plan Period (Draft for Comments)*. The document clearly points out that it is necessary to further popularize and apply the network learning space, strengthen the hypothesis of comprehensive coverage of broadband network and network teaching environment, strengthen the extensive and in-depth use of information technology in teaching, form a group of targeted information-based teaching and management innovation forms, enhance the awareness of network security in the field of education, improve standards and norms, enhance the level of protection, as well as form a network security system that is compatible with the development of education reform. This does not only provide an opportunity for the education industry to run schools, but also bring attention to the hidden dangers brought by network security [15].

4.1.5. Technological factors

Under the background of the current era, the development speed of optical fiber technology continues to improve, and the commercial scope of 5G technology is also in the stage of rapid expansion. Under the background of the continuous improvement of information transmission speed, the integration of intelligent mobile terminals into the field of education has become an inevitable development trend of online education. With the support of high and new technology, remote on-site teaching interaction has become a reality and has been gradually popularized. Students can use smartphones or tablets for learning anytime and anywhere. The dependence of online education on computer equipment has reduced, thus improving the convenience of online education.

At this stage, the development of internet technology mainly focuses on big data. The application of big data not only changes the social production and lifestyle, but also has a great impact on its development upon its integration into the field of education. Viktor Mayer-Schonberger, a western scholar, studied the relationship between big data technology and education. His book, *Learning with Big Data: The Future of Education* clearly points out that education based on big data can provide support for highly flexible, personalized education and family learning as well as provide convenient conditions for its implementation. At the same time, the application of big data in the field of education can provide corresponding course content for students' ability improvement and a strong guarantee for teachers as well as institutions to improve their teaching ability and effectiveness [16].

Therefore, in the actual development process, the education industry should pay attention to strengthening the research on the integration of new technology and education as well as carry out targeted marketing innovation and management innovation.

4.2. Analysis of the internal marketing environment based on Porter's Five Forces Model

From the perspective of practical development, the rapid development of internet technology gave birth to the emerging model of internet education. The emerging 5G technology and the development of multimedia platform are important cornerstones of the rise of this model. Therefore, internet education can be classified as an information technology industry. In the actual research process, this study uses Porter's Five Forces Model to analyze the environment faced by educational enterprises in the whole industry, so as to clarify various competitive environment problems that enterprises need to deal with in the market.

4.2.1. Bargaining power of suppliers

From the perspective of industry competition, the bargaining power of suppliers directly affects the competitiveness of the whole industry. It means that suppliers provide the resources needed by enterprises and their competitors in the actual development process, including raw materials, equipment, labor, etc. In

terms of educational institutions, the main resources provided by suppliers include teachers, online education platform development teams, teaching materials, etc. Among them, teachers are the core resources for the development of educational institutions. In actual operation, well-known teachers themselves have certain student resources, which can greatly improve the course effect of institutions, attract more students to sign up, and eventually achieve the purpose of promoting economic growth. However, while enhancing the attractiveness of institutions, teachers ought to be paid higher, thus increasing the cost bore by institutions. According to relevant data survey and comparison, the difference in class remuneration between well-known teachers and ordinary teachers can reach up to 1,000 yuan per hour. Therefore, some institutions with insufficient financial strength can only hire teachers with relatively low remuneration requirements in order to reduce costs, and the attraction of such teachers cannot be compared with well-known teachers; this results in a situation where the economic benefits brought by students cannot reach a balance with the employment cost of teachers. This contradiction is also one of the main problems faced by educational institutions. Under the condition of integrating various factors, high cost-effective teachers who can attract customers and reduce cost investment are selected. Due to their relatively strong bargaining power, such teachers are popular in the industry [17].

In addition, the development team of teaching materials, books, and online education platforms is also one of the main providers of education and training companies.

Although there are several well-developed institutions in the industry, the research and development of education platform still needs to cooperate with Tencent and other network companies. Relatively speaking, the cost for this cannot be saved. In terms of publicity, the use of internet publicity can only expand its popularity through the search engines of major websites, in which the cost for this has become the fixed cost of many companies. For teaching materials and books, they need to be published by publishing houses or printing houses, so the cost can be negotiated through exclusive cooperation.

4.2.2. Bargaining power of buyers

Taking the postgraduate entrance examination counseling education as an example, in this environment, educational institutions mainly face two types of customers: college students and on-the-job candidates. When seeking postgraduate entrance examination counseling services, they tend to seek better services to achieve the goal of maximizing their own performances, while controlling the price within a low or acceptable range. This is the bargaining power of buyers. In regard to this, the ability is directly related to the organization's own comprehensive ability; the buyer's bargaining ability will change with the organization's comprehensive ability. If the quality of courses and services provided by educational institutions and their reputation in the industry far exceed the average level of the industry and are widely praised as well as recognized by consumers, even if their prices are relatively high, they are well-received by consumers. The agency has proved that its ability matches the fees charged. Consumers have the idea of "good value for money"; therefore, even if the fees are more expensive, they tend to feel relieve and still seek the counseling services offered at that place.

In the actual development process, institutions with relatively poor comprehensive ability and reputation mainly aim at making profits. In terms of operation and management strategies, they mainly adopt price strategy and reduce the charging standard of similar costs to attract consumers. Although this method can achieve certain results in short term, with the continuous decline of reputation of such institutions in the industry, the consumers' recognition of these institutions will continuously fall, and the final result can only be marketing failure. Therefore, the buyer's opinion ability is relatively limited in the whole education and training [18].

4.2.3. Industrial competition

In the analysis of internal marketing factors based on Porter's Five Forces Model, the role of industrial competition is the most significant. Only when the enterprise occupies a greater advantage, its business strategy can achieve the expected effect in marketing. At present, the main competitors faced by educational institutions in online and offline education are shown in **Table 2**.

Table 2. Main competitors in online and offline education

Organization	Introduction	Establishment	Main area
Wendu	Its headquarters is in Beijing, and its business covers	1996	30 provinces and cities.
	university education, school-enterprise cooperation, and		
	other education and training fields.		
Haven	Its headquarters is in Beijing, and it is the postgraduate	1993	20 provinces and cities.
	entrance examination brand of Wanxue Education. Its		
	main mode involves offline courses + online courses.		
Kuakao	Its headquarters is in Beijing, and it focuses on cross	2004	Beijing, Shanghai, Shenyang,
	school and cross professional postgraduate entrance		Dalian, Changchun, Tianjin,
	examination, combining online (free learning, live		etc.
	broadcasting, and recording) and offline training.		
Xuefu	It has two headquarters, which are located in Beijing and	2006	Beijing, Xi'an, Nanjing,
	Xi'an. Its business integrates postgraduate entrance		Chengdu, Wuhan, Tianjin,
	examination training, online education, and book		and other 30 provinces and
	publishing. The courses mainly focus on small class		cities.
	teaching, full-time intensive training, and online small		
	classes, as well as multi-level tutoring, such as large class		
	teaching and one-to-one tutoring.		
Wendeng	Its headquarters is in Beijing. Its business includes	1996	19 provinces and cities.
	postgraduate entrance examination education and		
	training, research and development of teaching		
	technology for postgraduate entrance examination, and		
	publishing postgraduate entrance examination books. The		
	course model includes postgraduate entrance examination		
	training, closed training, and online education.		

In the field of online education, the main competitor faced by educational institutions is the New Oriental Education. According to relevant data, the business revenue of New Oriental Online reached 631 million yuan in 2019, with a year-on-year increase of 36.6%.

In the actual development process, educational institutions should pay attention to strengthening the research on competitors, fully recognize their own advantages and disadvantages, promote the effectiveness of enterprise marketing strategy, as well as enhance their core competitiveness.

4.2.4. Potential competitors

Under the background of the increasing development speed and popularity of the internet industry, offline education institutions have also begun to strengthen the development of online education; that is, the traditional education and teaching mode based on internet technology. For new education and training institutions, since they began with online education, their offline cost in terms of teaching venue is close to

zero. With the support of internet technology, the limitations of time and space have been effectively broken, and the flexibility and convenience of consumers' learning methods have been effectively improved. In the actual development process, new education and training institutions have fully combined network technology with teaching content to effectively realize the purpose of innovating educational forms. The defects of singleness and rigidity of traditional educational forms have been effectively reversed. The novelty and brilliance of classroom forms and course contents have been greatly improved, thus enhancing their attraction to consumers. The consumers' desire to sign up for courses has shown a significant growth trend. It can be analyzed that at this stage, the danger faced by education and training institutions is mainly due to the breaking of the limitation of time and the improvement of the flexibility of learning methods. However, while occupying such advantages, new education and training institutions also face several problems, such as the difficulty of comparing teachers' qualifications with old educational institutions, the relatively low degree of discipline and specialty, the neglect of long-term development strategy and pursue of one-time consumption, etc. Based on the analysis of the current actual development situation, the main potential opponent faced by education and training institutions is still the online business of traditional training institutions. Its advantage lies in its high brand appeal and strong capital chain, which provide strong guarantee for the development of horizontal integration [19].

4.2.5. Threat of potential substitutes

The reasons why educational substitutes are selected by consumers are as follows: low price, high quality, and high-cost performance. With the rapid development of the internet and the gradual maturity of 5G technology, there are many more substitutes for educational products managed by education and training institutions. One substitute is audio and video recording, which is generally divided into two forms: first, since most of the teachers in education and training institutions are part-time teachers, they can sell their own videos directly on the internet to add to their income; second, when institutions record a video of teachers teaching in class, due to poor supervision or safekeeping, the video stream lands on Taobao, thus selling them to consumers at a lower price; this situation has always existed. Another substitute comprises of online applications developed by new internet institutions entering the industry. These apps are mainly used to introduce traffic in the early stage and are generally free of charge. Although there may be some technical reasons that they are not particularly perfect, they can still attract the attention of many consumers. In summary, under the current market background, the main competitors of education and training institutions are still concentrated in the same industry. Although the training institutions mentioned above account for a large market share, there is no monopoly of a certain institution. The threat of potential substitutes to current education and training institutions is limited. In addition, the bargaining power of buyers has also not reached a high level. Therefore, the initiative is still controlled by education and training institutions, and the threat from potential competitors is still within an acceptable range. In terms of the bargaining power of suppliers, they have reached a consensus for a mutually beneficial partnership and a win-win situation between the two [20].

5. Marketing problems of educational enterprise A in the new era

5.1. Unclear target market positioning

5.1.1. Lacking analysis of the specific needs of future potential customers

During the period when enterprise A provides professional education and training courses for college students, it is necessary to focus on the differences in various aspects, such as purchase needs, behavior habits, and learning preferences of the students, so as to formulate appropriate marketing strategies for this purchase group, rather than promoting courses based on different courses and teaching services provided

by the group. At present, enterprise A has formulated a marketing strategy focusing on the local college student market, but the formulation of the strategy mainly depends on the products and services provided by the group, rather than the actual development of the market. Although the measures and strategies direct marketers to arrange and manage activities uniformly according to the products and services, the lack of market research makes the final marketing results unsatisfactory.

5.1.2. Lack of division of the target market in the college student market

At present, enterprise A has a good starting price for customers who need education and training in the college student market. The enterprise needs to carefully consider the differences in consumers' needs in the early stage and consider different groups to convey valuable products as well as provide the services and products they need. For these potential consumer groups with training needs, the factors affecting their purchasing power include two aspects.

First, customers with basic or zero knowledge. They include students with relevant majors and those who need to obtain relevant certificates across majors. Second, college students in local and surrounding areas.

In addition to the above two aspects, other factors such as the expected preparation time for the exam, the expected time to obtain the certificate, the purpose and reason of obtaining the certificate, as well as the way of learning will also affect customers' purchase preference. In this way, considering the customer groups with different needs in the existing target market and using the product itself to attract, this marketing strategy is obviously not enough to support the long-term development of the enterprise.

Furthermore, from the perspective of the current management of enterprise A, during the period of facing different grades and professional customer groups, the business personnel of the marketing port who design marketing strategies and sales scripts are very unified, and they are all faced with the content, price, and class time of some training courses provided by customers. However, in the face of specific learning content, existing questions, and planning, some hidden factors are not fully considered. If only unified scripts and strategies are used, professional answers cannot be realized according to differences of customers, and customers will not have a high degree of recognition. In the long run, the issue of customer loss will become more and more serious.

5.2. Unreasonable marketing strategy

5.2.1. The structure of training products has been adjusted

Based on the current structure of training products of enterprise A, the existing problems can be analyzed from three aspects.

- (1) In the training service provided by enterprise A, the course consultant simply uses the "spoon-feeding" method to design learning plans and make examination arrangements for customers through the existing course arrangement, so as to achieve the purpose of a full class. With such a plan, due to the differences in the customers' learning foundation and ability, some will be disjointed with the training process, which will affect their mentality and eventually the progress of preparing for the overall examination, thus resulting in refund and other issues.
- (2) Learning materials are the most intuitive service carrier that customers can contact. However, enterprise A does not have the ability to independently develop and modify teaching materials and test sites. It only relies on the headquarters to send such teaching materials. However, such teaching materials are confidential documents and can only be modified, printed, and distributed by the headquarters. The whole process takes a lot of time and cost, so the paying students can only use

the old teaching materials for review and learning, thus resulting in reduced satisfaction.

(3) Teaching contents are intangible products that rely on customers' feelings and experience. During the provision of relevant training courses, enterprise A has relatively flexible offline teaching methods, and the teachers have a large degree of freedom. In the course of teaching, there is a lack of measures to supplement students' learning and their mastering of knowledge during their spare time. However, the learning manager will supervise the progress of students' learning and the completion of after-class contact. For partially paid students, the practical arrangements are lacking in addition to frequent changes in teaching classrooms and relatively few after-school counseling sessions. There is a need for enterprise A to strengthen its efforts in these aspects.

5.2.2. The price of training products has been adjusted

The value of a product is reflected by the willingness of customers to pay equivalent value during the period of purchasing products or services. According to a survey data from enterprise A, its single charge per capita can reach up to 33,780 yuan, which is at a disadvantage compared with those of the same industry. In the follow-up survey, it was found that more than 50% of the respondents felt that the current product price of enterprise A is unreasonable, and the cost performance is low. Therefore, it can be inferred that the price of its products must be adjusted according to the price set by the headquarters, and based on regional differences, the consumption capacity and level of each region are different. On the one hand, enterprise A did not conduct any in-depth market research, resulting in the lack of rationality of its product pricing; on the other hand, on the basis of referring to the pricing strategy of the headquarters, enterprise A needs to consider taking measures in line with the local market conditions at the region where it is located and formulate some promotion adjustments to offer satisfactory prices, so as to initiate effective competitiveness and meet the psychological needs of consumers.

5.3. Insufficient application of network marketing strategy

Based on the analysis of the shortcomings of enterprise A in network marketing, they are mainly reflected in several aspects.

5.3.1. Flawed social media marketing

Under the development background of the existing mobile internet era, using interesting and attractive content to retain customers is not only the key consideration of each education and training enterprise, but also the key point for these enterprises to realize social media marketing. At present, although enterprise A has opened subscriptions and platforms such as WeChat, microblog, and QQ on the network marketing platform, the source of its release is only the content framework formed by employees' self-forwarding. There is little forwarding by students, and the amount of reading is also minimal. Moreover, most of the articles by enterprise A are monotonous, such as the popularization of professional knowledge, the answers to examination, and the advantages brought by the acquisition of certificates. Although they can provide some assistance to the employment and other types of learning, the content accounts for a large proportion in the layout, which seriously affects students' reading time and experience. Many articles lack aesthetic sense in their arrangement and interaction with customers. They do not reflect the vitality of younger generations and lack the status of substantial value in modern college students. The result of this kind of network socialization marketing is unsatisfactory.

5.3.2. Lacking optimization and management of the search engine

In today's environment, people are no longer passively influenced by advertisements in choosing their products. Compared with college students who prefer exploration and discovery, they are more active in finding the content, products, and services they want. Therefore, from the perspective of consumers, enterprises should explore how to screen valuable content from complex and diverse information.

At this stage, enterprise A only relies on the network operation department of the headquarters to make unified national arrangements for keyword search and online publication of articles. Although the professional degree of the article itself has a high standard, the article does not consider the customers' interest. For enterprise A in face with college students, the search entrance on the mobile terminal is also very important. Designing high-quality content suitable for mobile reading on WeChat and QQ terminals is the key. The search based on the product port is only applicable to find relevant courses on the official website; it is rarely used on platforms, such as Taobao and JD. This is also a major problem that enterprise A should pay attention to in regard to its search engine.

6. Countermeasures of enterprise marketing and management optimization under the background of the new era

6.1. Clarify the target market positioning of the enterprise

6.1.1. Customer group with zero basis and market positioning

At present, among the customer groups that enterprise A are facing, some of them are students without basic knowledge. These students desire to land a job with a relatively good future development prospect after excluding postgraduate entrance examination, going abroad, and applying for civil service. For example, students majoring in finance. The financial industry itself have excellent labels in many aspects, such as "high salary," "white-collar," and "decent," which are relatively attractive to college students. Therefore, many students will prioritize obtaining international financial certificates, such as the Certified Forensic Accountant Exam (CFA) or Association of Chartered Certified Accountants (ACCA) exam with high grades to venture into the financial industry and complete their professional transformation. However, due to their professional background, the subjective accumulation of knowledge, and the objective factors of the harsh requirements of the examination, many students suffer great obstacles in obtaining these certificates [21].

While designing training courses and related services for this group of students, enterprise A should formulate comprehensive learning contents and a full set of exercises for the needs of some students. The knowledge points and examination contents should be mastered through the combination of teaching and learning. In the development of relevant learning products, the most basic professional knowledge can be learned in combination with leading courses; the learning and mastery of the whole learning framework can be realized according to basic courses and intensive courses; following that, sprint courses can be supplemented to help students successfully pass the exam. On the other hand, enterprise A can integrate appropriate workplace skills training resources into the training links to help students achieve employment by vocational skills training and interview guidance. The specific process is shown in **Figure 2**.

6.1.2. Customer group with professional basis and market positioning

At this stage, among the potential customer groups faced by enterprise A, some customers already have professional foundation. Majority of them can strengthen the accumulation and consolidation of professional knowledge as well as enrich their understanding and cognition of the industry through the learning process of textual research. At the same time, the combination of professional systematic learning and examination certificates can lay a certain foundation for graduate students in their future examinations

at home and abroad.

Therefore, during the course training and service provided by enterprise A for these professional customer groups, the knowledge framework should be improved and strengthened for some candidates, while the key and difficult points of the examination should be trained on, so as to achieve the effect of having a clear understanding of all the contents. In the development of relevant training products, first, the basic course video recording can be improved, and an amateur practice can also be used to quickly consolidate and review basic knowledge. Secondly, systematic training for strengthening can be carried out in view of the key points and difficulties in the examination to reduce the rate of incorrect answers. Finally, enterprise A can combine the training resources of various workplace skills borrowed from the headquarters to promote students' employment and help them achieve stable employment [22].

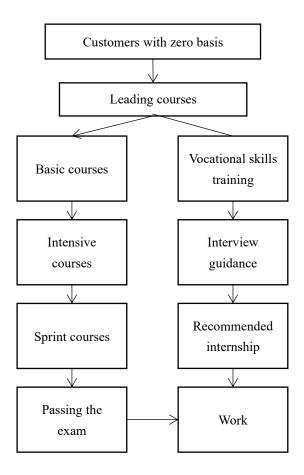


Figure 2. The product flow diagram of students with zero basis in enterprise A

6.2. Optimize enterprise product and service quality

6.2.1. Improve the teaching quality to build the product portfolio

First of all, it is essential to improve the teaching quality guided by the examination, communicate with the headquarters, and appropriately modify the teaching content, learning materials, and courseware according to the local market demand and the feedback of students, so as to ensure the continuity and logic of teaching as well as meet the actual requirements of local students.

Secondly, it is necessary to create high-quality courses with internet thinking. The breakthrough of "Internet Plus" education is deeply integrated with training courses and the internet. Therefore, enterprise A needs to focus on creating good quality online courses. A place for professional video recording can be set up to ensure the fineness and clarity of the video and audio. It can also realize the modular decomposition

of the course and record it in the form of a conventional 40- to 50-minute class, so as to ensure the concentration of students without affecting the efficiency of the uploading process ^[23].

Finally, it is imperative to create a product portfolio based on the thinking of users. During the training course, enterprise A can help students to establish the goal of passing the certificate examination as the core, guarantee the teaching quality, and expand the product line with the thinking of users. Enterprise A can also be ordained with the responsibility and obligation of teachers to fill the gaps in the design, so as to give full play to students' learning initiative as well as improve the efficiency of learning and teaching [24].

6.2.2. Improve the professional ability and service level of business personnel

First of all, during the marketing period, the front-end marketers need to be familiar with the product categories and examination requirements as well as understand the psychological needs of different customers.

Secondly, the middle-end curriculum consultants need to help students to perform well in the examination and planning, assist students in decomposing the examination into stage goals, link the planning of learning content and after-school exercises, help the students with their psychological issues encountered in each stage, combine the small goals completed in each examination, and then complete the big goal of the examination [25].

Finally, the back-end learning manager needs to have a standardized workflow. When managing students' learning, the manager should grasp the students' learning progress and the completion of exercises in a timely manner as well as plan the students' actual arrangements before the examination [26].

6.3. Promote the diversified development of marketing methods

6.3.1. Market promotion combined with experiential marketing

Experiential marketing focuses on customers' experience and feelings about the enterprise's products and services. It is possible to integrate experiential marketing and offline marketing, combine on-site campus publicity and marketing personnel to attract customers, and direct customers to pay attention to and experience the brand image of enterprise A via telephone invitation. Then, by combining experiential marketing with the internet and forwarding posters through mobile phones, computer software clients, as well as various e-commerce platforms, students can experience HD video courses for free, which helps potential users learn about the product content of enterprise A in fragmented time [27].

6.3.2. Build and form a marketing platform for social media

Under the background of "Internet Plus," social media is particularly important for the transmission methods of enterprise A. Enterprise A needs to optimize and adjust the existing content by establishing a social media marketing team. At the same time, the production of new content needs to conform to the habits and interests of college students, so as to control the transaction transformation [28].

On the one hand, it is necessary to show the content of the product and trendy internet events, important financial-related contents, and events highly related to students' life and learning in the form of words, images, and videos. This can trigger the value recognition of the target customer group and promote forwarding [29].

On the other hand, enterprise A needs to attract the attention of the target customers through output content or online activities. This can stimulate them to forward and promote interest exchange. For example, some high-end, classy content that can make the target group look "compelling" or may be highly in line with the customer's image, temperament, or values can be introduced; in addition, coupons, gifts, or learning materials can be given to those who participate by forwarding or liking a certain content [30].

7. Conclusion

In conclusion, the fierce competition in the current education and training industry has prompted the formulation of competitive strategies between training companies and institutions to better meet the needs of consumers. It is an important factor affecting the teaching quality of face-to-face courses with large performance and income of their own companies and the class experience of students. Based on the analysis of enterprise A's education and training, this study has pointed out its main problems and suggested several strategies that can help enterprise A comprehensively improve its training and sales performance, such as clarifying its customer group and market positioning, optimizing its product and service quality, as well as promoting the diversified development of marketing methods in hope that the content of this paper can also help relevant enterprises achieve their development goals of improving their products, services, economic, and social benefits.

Disclosure statement

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