# Research on the integration mode of production and teaching of digital marketing talents training in application-oriented universities

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Abstract: The integration of industry and education is the fundamental way for application-oriented universities to improve the adaptability of digital marketing talents supply and industrial demand and to cultivate high-quality, innovative and application-oriented talents. This paper takes an undergraduate university as an example, from the construction of digital marketing industry think tank, to enhance the practical ability of university teachers, to carry out the "Double tutors" co-education inside and outside the university, to build a digital marketing personnel training system, and probes into the mode of integration of industry and education in the aspects of multi-mixed teaching, co-constructing teaching resources, co-directing students' practical activities, scientific research and technical service.

**Keywords:** Application-oriented, digital marketing talents, integration of industry and education

#### 1. Introduction

Digital marketing is the application of the Internet, network communication technology and digital media and other technical means to achieve marketing precision, visible results, intuitive data marketing activities. The digital marketing relies on the digital media to be prosperous day by day, has realized the entire network domain, the multi-scene, the full coverage scale reaches the target consumer. In recent years, the normalized prevention and control of Covid-19 pneumonia has also promoted the network operation of all kinds of enterprises and promoted the new development of digital marketing.

In the new economy, the technology of big data, artificial intelligence and cloud computing is becoming more and more mature, therefore, the new trend of marketing development is also reflected in network connection, digital description, intelligent production, integrated development, mobile services. With the widespread use of new media technology, data has become a new factor of production, and marketing activities rely more and more on the digital age.

## 1.1 Digital marketing talent needs

With the rapid development of digital marketing industry, there is a serious shortage of talents, and the talent gap is increasing. It is estimated that there will be a talent gap of about 40 million in 2025.

On December 8, 2020, the China Digital Marketing Trends report in 2021 released by the Second Hand Academy of Marketing Sciences in conjunction with the Global Digital Marketing Summit (GDMS) and Media 360 shows that, at present, there is a general lack of practical experience in digital marketing, and the ability of digital marketing is far from the talent needs of enterprises.

The demand of digital marketing talents is mainly manifested in the needs of user insight, content creativity, experience interaction, communication efficiency, cross-media interaction and advertising effectiveness evaluation, etc., and the data class, the planning class and the effect optimization class post gap is the biggest. According to the pulse data shows that the market demand for digital marketing talent is rising, especially in the post-epidemic era, digital marketing in corporate marketing status further improved. In the "2021 China Digital Marketing Trends Report" shows that the current year's marketing graduates generally lack a certain degree of digital marketing actual combat, especially in the market experience of digital marketing ability is obviously insufficient, there is a serious mismatch between supply and demand in digital marketing talent market and digital marketing talent demand[1-2].

### 1.2 The ability of applied digital marketing talents

According to the China Digital Marketing Talent Competency Assessment Standards in 2021, digital marketing talent should have the following competencies, as shown in Table 1:

	Level 1 capability	Level 2 capability
1	General ability of marketing	Marketing professional knowledge, industry insight ability, customer management
		ability, program planning ability
2	Digital marketing professional	Product understanding, data ability, creative ability, delivery management ability,
	ability	effect optimization ability
3	Marketing compliance ability	Basic knowledge of advertising law, creative compliance ability,
		data security ability
4	General skills in the workplace	Communication ability, office ability, project management ability

Table 1: The ability of applied digital marketing talents

In recent years, digital marketing-related job demand is mainly reflected in data analysis, digital promotion, new media operations, e-commerce marketing, senior marketing management and so on. In addition to the traditional marketing management and creative skills, computer application skills, data analysis skills, digital application technology and other skills are particularly required. Through the description of digital marketing job requirements of major recruitment websites, and interviews with employers of graduates, the author believes that the specific requirements of digital ability mainly reflect:

- 1) Computer skills. Includes office software applications, Python language, SQL language, Graphic Design Foundation, web production, SEO, HTML5 operation skills, audio and video editing technology.
- 2) Ability of data analysis. Including data capture, cleaning and visualization, data monitoring and mining, network data processing and analysis capabilities.
- 3) Ability to apply digital technology. Including web user insight, e-commerce system operation, network community management, social media experience interaction, customer experience design, social media promotion and operation, web content design and production[3].

# 2. The main problem of digital marketing talents training in application-oriented universities

# 2.1 The mechanical combination of "Traditional marketing + digital marketing"

Under the change of new business environment, the training of marketing talents in colleges and universities in our country is being innovated and transformed to digital marketing, Big Data Marketing and new media marketing. Many colleges and universities have realized this trend, and have also innovated the mode of personnel training, such as setting up orientation classes, optimizing the program of personnel training, adding relevant courses, and setting up digital marketing laboratories, purchase relevant training software, training students of new media applications and big data marketing thinking.

However, most of these innovations belong to the low-level mechanical combination of "Traditional marketing + digital marketing", and have not formed a systematic teaching framework, the cross-integration of mathematical ability, economic management ability, information dissemination ability, computer technology application ability, artificial intelligence and data science is very limited. Due to the inertia of teaching management and operation at all levels, and the limited level of marketing teachers, it is difficult to completely break the original teaching model.

### 2.2 The limitations of teachers

Most of the teachers are "School-to-school" master or doctor graduates, theoretical knowledge and scientific research level is more solid, but less practical experience. In the teacher's knowledge and ability structure. Compared with traditional marketing knowledge, digital marketing knowledge and skills belong to a new field, and with the rapid iteration of artificial intelligence, big data marketing technology and multi-channel information access, teachers gradually lost the authority and monopoly of knowledge dissemination, and in some aspects, teachers' reception and understanding of new media information will lag behind the post-00s college students. Most of the teachers are not good at data thinking, application of computer technology and data analysis, so the relevant courses cannot be offered. In addition, the teaching background of marketing major is mainly liberal arts, most college

teachers lack of data thinking, and not good at all kinds of computer technology applications, data analysis ability, as a result, there are some difficulties in offering relevant courses. The limitation of professional teachers and the hindrance of the efficient combination of teachers in various disciplines have brought some obstacles to the cultivation of digital marketing talents.

# 2.3 The forms and effects of school-enterprise cooperation are limited

There are still many inadequacies in the current practices and effects of school-enterprise cooperation in promoting talent development. First, "Hot School, Cold Enterprise." There is a lag in the process of enterprise demand and personnel training, and the phenomenon of "Two skins" often appears in the cooperation between school and Enterprise. Second, enterprises need to spend a lot of costs to participate in the university collaborative education, input and output have greater uncertainty. The goal of the enterprise is to maximize the benefits, students are not regular employees of the enterprise, marketing posts are often evaluated by performance, it is difficult for students to quickly change roles, so mobility is greater, the students trained may not be easy to use, can be used, can continue to use.

The marketing major of Shouyi College in Wuchang, China, has been recruiting students in the direction of Internet new media since 2017 and digital marketing since 2022. The school-enterprise cooperation base group of "Traditional industry base + Internet industry base" has been established. They include Zhou Black Duck International Holdings Limited, unique flavor food (Hubei + Shanghai) branch, Wuhan Zhongshang Fair Supermarket Chain Co. , Ltd. , Hubei Liangpin Shop Co. , Ltd. , Wuhan Golden Arch Food Co. , Ltd. , Wuhan Weisidun Network Technology Co. , Ltd. , Walmart (Hubei) Commercial Retail Co. , Ltd. , Wuhan Hengnuo Market Research Co. , Ltd. . However, due to the influence of economic environment and the epidemic situation in recent years, the effect of cooperation is limited, so it is necessary to explore new ways to improve students' practical ability, in order to adapt to the rapid development of digital intelligence technology era of new demand for marketing personnel[4].

# 3. The integration of industry and education is the inevitable choice for the training of digital marketing talents in colleges and universities

Enterprises and schools through education and teaching activities to jointly carry out the work of personnel training, this model is known as "Integration of industry and education", similar expressions are "Industry-university cooperation", "Industry-education integration", "School-enterprise cooperation" and so on, "Industry and education integration" more reflects the main body of the university to industry, industry extension and integration. The essential requirement of the integration of industry and education is to combine "School education" and "Enterprise Education" organically, thus to achieve the school and enterprise "Dual" education goal.

The general rules of talent cultivation in colleges and universities are as follows: social (employer) demand investigation-graduate tracking investigation-peer colleges investigation-setting training goal-optimizing talent cultivation scheme-carrying out teaching reform-exporting talents. However, the changes in the market are always faster than the reform of higher education. The demand for digital talents has been rapidly updated and iterated when undergraduate talents enter the society after four years of university, after the reform of higher education, there is still a certain gap between the trained talents and the needs of social employment. The integration of industry and education has the congenital advantage of the same direction. To cope with the rapid development of the digital economy era, it is undoubtedly a good choice for the new business application-oriented talents.

# 4. The exploration of the mode of integration of industry and education in digital marketing personnel training

From the current domestic and foreign relevant experts and scholars and their research status quo, mainly focused on the integration of industry and education in the analysis of the existing problems, on this basis, deepen the improvement of the integration of industry and education strategies and methods, in the context of integration of industry and education, the training course evaluation and research. Compared with the innovation of the integration of industry and education, how to realize the two-way connection between the goal of talent training and the requirements of industry and enterprise, and how to use the "Double tutor" system to carry out teaching, there are few researches on the mode of "Combination of learning and training" in talent training.

It is of great significance to break through the bottleneck of the old school-enterprise cooperation and set up the idea that the integration of production and education drives the reform of personnel training. For example, Shouyi College in Wuchang has explored and built a "One-base, two-teacher, multi-dimensional" model of integration of industry and education, namely, to build a digital marketing industry think tank, where students choose two-way corporate and academic tutors, to realize the multi-integration of industry and applied undergraduate digital marketing talents training.

On the one hand, by building a platform for the integration of industry and education, the school gives students more opportunities to participate in various projects of enterprises, such as the account operation and self-media operation of Douyin Group, and the research projects of market research companies, live broadcast base operation and so on. At the same time, the students provide marketing plan and creative support for the enterprises by taking part in various disciplines competitions named by the enterprises. On the other hand, through the school-enterprise co-education to build a suitable personnel training system for the development of digital marketing industry, business and social incubation is more adaptable and competent high-quality application-oriented personnel. We can also select good students who are interested in order-based enterprise training. On the one hand, teachers learn the marketing practice of the industry, on the other hand, they provide scientific research support for enterprises by horizontal projects, research projects and so on. Thus to achieve the integration of industry and education, multi-subject participation in the multi-development of multi-benefit purposes, as shown in Figure 1.

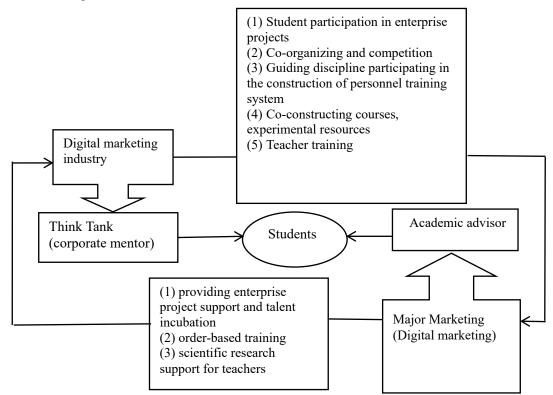


Figure 1: The mode of integration of industry and education

# 4.1 Build a digital marketing industry think tank, enhance the practical ability of university teachers

Practice is not only the ultimate goal and test standard of theory, but also the power source of theory development and integration. Through close contact with the industry, we can further improve teachers' sensitivity to market changes, and then constantly improve and develop the professional-related theoretical knowledge, to promote the practical ability of university teachers.

# 4.2 Carry out co-education of "Two tutors" inside and outside the school

The teachers in the school pay attention to guiding the students to establish their three views, to cultivate the spirit of diligent and independent study and the habit of life-long study; To set the direction of study, plan the course of study and urge students to complete their study plans on time; to

stimulate students' interest in scientific research, to cultivate students' spirit of innovation and creativity, and to teach scientific research methods, guide students to participate in related research projects. With the help of the teachers in the school, the teachers outside the school focus on providing the students with guidance on subject competition, innovation and entrepreneurship, part-time employment and employment, etc., and through cooperative teaching, information sharing, to attract teachers and students to participate in enterprise projects and other forms of enterprise resources and social resources and university education resources integration, the real realization of knowledge and practice, school-enterprise co-education.

## 4.3 Industry and education conspire to construct the personnel training system of digital marketing

The major of marketing needs to reform from the aspects of application of big data technology, intelligent optimization of effect, integration of new media resources, etc., focus on information collection and processing, data statistics and analysis, the application of digital marketing technology for product operation and planning, social media platform maintenance and management capabilities.

Colleges and universities should fully investigate the needs of digital marketing industry and enterprise employment, absorb enterprise tutors to participate in the optimization of Talent Training Scheme and redesign of teaching system, update and transform some traditional courses, add and improve the digital transformation of the urgent need for courses, digital marketing enterprises to truly integrate the requirements of talent into the teaching system. It can integrate information technology, artificial intelligence, VR, prediction technology, internet thinking, data thinking and technology application into professional curriculum system. At the same time, focus on the application of digital technology in the field of marketing, for example, the marketing department of Shouyi College in Wuchang has added a series of courses including Digital Marketing, introduction to Big Data Marketing, business data analysis and application, digital product operation, new media marketing theory and application, live broadcast marketing theory and practice, digital marketing case analysis, New Media Copywriting, new retail management training, short video shooting and editing training, e-commerce digital operation training, etc.

## 4.4 Industry and education should adopt a multi-dimensional and mixed teaching approach

According to the updated training plan of digital marketing talents, we should construct relevant courses, update course contents, reform teaching methods and reorganize teaching process. Teachers closely track the development of the industry, design the syllabus for the relevant courses, and involve business managers in the review and revision of the syllabus, at the same time, the teaching outline and curriculum design are fine-tuned according to the development of relevant marketing activities of enterprises and industries.

Enterprise teachers and school teachers cooperate to build professional courses, through the curriculum information sharing platform to carry out multi-mixed teaching. Through on-line and off-line participation in teaching, the formation of course groups, assisted practice teaching and other forms of joint curriculum construction. Students and even teachers can choose the enterprise courses they are interested in as optional courses or advanced courses according to their learning ability and interests. Enterprises train teachers to provide students with real-time online guidance, and cooperation with teachers in the school to build teaching resources.

# 4.5 Jointly develop teaching resources, guide students' practical activities

Teachers and business experts to develop with the times high-quality digital marketing teaching materials and so on. The teaching material absorbs the frontier research results, the enterprise management real case, the new technology new method and so on, applies the audio and video technology insertion, the virtual simulation and so on digitization technology, pays great attention to the case and the chart, improve the visual, digital and vivid level of teaching materials. At the same time, we can co-develop such as loose-leaf, manual, e-textbook and other special teaching materials to guide students to participate in practical activities.

The key to the ability of digital marketing talents in application-oriented colleges and universities is the cultivation of digital application ability. Enterprises can work with schools to promote digital marketing or big data marketing laboratory construction, development of relevant intelligent marketing software for application-oriented universities. Such as the construction of the school live studio, hire

live training companies for students and teachers of professional guidance and training. Schools and enterprises may co-organize subject competitions, with the participation and guidance of enterprise teachers. For example, the National Marketing Survey and Analysis Competition for college students, the national e-commerce "Innovation, creativity and entrepreneurship" challenge competition for college students, College Short Video Contest, Hubei College Marketing Planning Challenge, etc., in order to achieve the goal of Isaiah to promote teaching.

### 4.6 Scientific research collaboration and technical services

Both the university and the enterprise can realize the scientific research coordination through many kinds of ways, with the scientific research back-feeding teaching. For example, college teachers provide technical services and management consulting to enterprises, and provide marketing decision-making and guidance in the form of horizontal subjects; The teacher integrates the enterprise project resources into the teaching case to serve the course teaching, instructs the student graduation design or the graduation thesis to provide the marketing plan, the advertisement design, the investigation research for the enterprise and so on.

#### 5. Conclusion

With the development and rapid change of new technology, new thinking, new media and new business forms, colleges and universities should insist on the train of thought of personnel training of digitization, intelligentization and technicalization, constantly optimize the teaching team, update the personnel training, multi-party coordination and other education layout. The application-oriented universities should persist in serving the local economy and promoting the transformation and development of traditional enterprises. Adhere to the school-enterprise co-education, according to the school situation, innovative ideas of integration of production and teaching, and continue to promote high-quality digital marketing personnel education reform.

### Acknowledgement

The 2022 teaching and research project of Wuchang Shouyi University: Research on the integration model of industry and education of provincial-level first-class undergraduate major in marketing in the digital age (2022Y13).

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