



# Strategies and Paths for Training Network and New Media Professionals in the Era of Big Data Technology

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**Abstract.** Big data has ushered in new historical opportunities for the Internet industry, and it has also put forward new requirements for the training of professional talents. Under the background of “new liberal arts construction”, in the current network and new media professional talent training program, the learning and training of big data is basically in a blank state. This requires optimization and adjustment of the training model. This article attempts to analyze the key points of training network and new media professionals under big data, and try to explore the corresponding training strategies and paths. This provides research ideas and references for advancing the talent training Internet and new media talents.

**Keywords:** Big data · Network and new media · Talent training

## 1 The Definition and Characteristics of Big Data

### (1) The Definition of Big Data

In the current social life, the Application of big data technology is quite extensive. Its emergence and development are inseparable from the development of Internet technology. In December 2012, “The Era of Big Data” by Schoen Berg officially came out, opening a new chapter in big data research. He pointed out in the book forward-looking that the information storm brought about by big data is transforming our lives, work, and ways of thinking. Big data has opened a major era transformation. People ushered in the change of thinking, business and management in the era of big data. In the virtual network world, most users can obtain a large amount of information or data through the search engine to meet the personalized needs of users [1].

### (2) The Characteristics of Big Data

1. The Magnitude of the Data is Large. The development of the Internet has laid Solid foundation for the development of big data technology. The rapid development of Internet technology and the universal application of the Internet by humans have caused a sharp increase in the scale of data. The amount of data storage has grown from GB, TB to PB, and has reached EB and ZB levels in some areas.

2. Data Diversification. In the era of big data, massive data and information show a diversified trend. In addition to text data information, pictures, audio and video also

belong to the category of important data information. With the rapid development of society, more and more data forms will appear.

3. The Data Value is High but the Density is Low. Among the massive data information, the value of the information is different. Only about 20% belong to structured data, which are mainly derived from databases such as corporate ERP and financial systems. The remaining 80% of the data belongs to unstructured data, generated in social platforms, IoT devices, search engines, e-commerce, logistics and other fields. How to mine and analyze data in multiple dimensions will be a major problem faced by all walks of life [2].

4. The Information Processing Speed is Fast. Internet technology makes information and data processing faster than ever before. At the same time, Internet technology can disseminate information in real time around the world. It breaks through the limitations of time and space, and the efficiency of information dissemination has been unprecedentedly improved [3].

In 2020, the sudden new crown epidemic has further accelerated the digital innovation of people's life and work under big data. With the advent of new development opportunities for the Internet industry, the challenges of training network and new media professionals also follow.

## **2 The Focus of Training Network and New Media Professionals Under Big Data**

Development of big data technology has profoundly affected the development of online media in terms of work mode, efficiency of collection and writing, and communication methods [4]. And it should be noted that the communication technologies, such as 5G and 6G, advances by leaps and bounds so that the big data works well [9–11]. News practitioners can connect mobile devices such as computers with digital technology, so that they can transmit news interview information more efficiently. In addition, news can be disseminated not only through newspapers, television and other media, but also through various software and networks, which has greatly promoted the development of the news industry and the increase of news influence. Therefore, in the era of big data, application-oriented universities need to pay attention to the following issues when cultivating network and new media professionals, content production, media operations, information technology and other positions:

### **(1) How Is Big Data Applied in the Network and New Media Industries**

For the network and new media industry, Collect and analyze information and data related to new media planning, editing, and operation can be used to draw objective judgments and predict conclusions through big data analysis [5]. For example, at the time when the new crown vaccine is being vaccinated for all people, under conventional experience, the safety of the vaccine and the methods of vaccination will become social hotspots and bring traffic dividends. Big data technology will actively help new media operators to figure out what information the public is still paying attention to at the same time based on data analysis, and can directly analyze the relationship between the information. Furthermore, the new media satisfies the current market reading demand in the first time and wins operational opportunities.

### (2) The Application of Big Data Technology in New Media Marketing

With the prevalence of big data and new media, today's users have become the masters of marketing. They will actively search for information through the Internet and screen products that meet their requirements, especially paying attention to feedback from other users on the new media platform and forming consumer behavior [6].; In addition to the practical value of information, they are also concerned about the user experience in the process of finding this information. Therefore, using big data technology for digital marketing can not only capture and collect fragmented user information on the Internet, but also analyze and organize the information. Then link the information to WeChat, Weibo and various short videos according to the preferences of different groups of people. This enables the information released by the new media to be more efficiently delivered to the target population. At the same time, the use of big data technology can also derive users' preferences, individual needs, reading history, purchase records, etc. [7]., so that users can enjoy better recommendation services.

### (3) How Does Big Data Play a Role in the Construction of New Media Matrix

Compared with traditional media, new media are very diverse in forms, and great changes have taken place in the organization and dissemination of information, and production process. Big data technology further helps users discover, search, understand information and purchase products through various platforms. In order to better establish a digital communication matrix based on multiple new media forms such as WeChat, Weibo, mobile clients, e-readers, online shopping malls, and short video platforms.

## 3 Strategies and Paths for Training Network and New Media Professionals Under Big Data

### (1) Construct a Modular Curriculum System with Curriculum Groups as the Unit to Quickly Adapt to Industry Needs

Combining the characteristics of network and new media majors, the first-class enterprise employment standards and competency model should be the logical starting point for the construction of the curriculum system. Through standardized processes and matrix management tools guided by OBE concepts, courses are integrated and classified according to changes in industry job requirements. Take professional knowledge, general knowledge, professional ability, general ability, professional quality, and general quality as modules to establish an integrated "module teaching". The modules are connected to each other and relatively independent, and single module research and development can be done according to changes in industry needs. In the end, it will realize the matching of the knowledge, ability and quality requirements of the professional talents in the post to achieve the goal of training service-oriented talents.

### (2) Join the Big Data Application Course System

In order to cultivate new media data mining and analysis capabilities under big data, the network and new media professional curriculum system should incorporate big data information acquisition, big data information visualization, and artificial intelligence foundations into the training plan [8]. In addition, there is currently no special teaching materials related to big data application courses for the network and new media majors. This requires various professional colleges and universities to integrate domestic

and foreign investment derived from editing school-based textbooks, introduce relevant technical standards for enterprises, and further strengthen the demand for cutting-edge changes in the network and new media industries under big data, and meet the frontier development direction and needs of the industry.

Meanwhile, By standard of “first-class courses”, focus on the construction of integrated media information communication course group, big data analysis and visualization course group, network new media technology course group, cultural tradition and value development course group, etc. The curriculum ideological and political value guidance and the characteristics of journalism and communication disciplines are closely combined to highlight the professional characteristics and training goals. Construct a multi-level, cross-platform, and rich experience curriculum teaching form. Give full play to the disciplinary attributes of the integration of learning media and technology. Through the interdisciplinary combination advantages of media and information technology, through virtual reality, intelligent teaching, etc., multimedia matrix teaching functions, online teaching resources, and enterprise remote case libraries, etc. enhance the information-based learning atmosphere and promote the improvement of training quality.

### (3) Enhance the Power of Big Data Teachers through Multiple Channels

In addition to big data-related training for existing teaching teams, we should also break professional boundaries, build teaching teams, and provide multi-channel supplies to enhance professional teachers. Through inter-professional and inter-faculty coordination, teachers are arranged to teach.; Secondly, hire enterprise big data technology experts as professional consultants and part-time teachers to participate in the formulation and teaching of curriculum plans, and strengthen exchanges and learning in a cooperative manner.

### (4) Promote the Implementation of Teaching Practice through the Cooperation Between Schools and Enterprises and between Schools and Governments

Introduce a diversified curriculum development mechanism such as the cooperation of schools and enterprises to build courses, the joint guidance of courses by schools and the government, and the interactive enhancement of courses between schools and schools. Promote students’ practical teaching close to the industry, and build a mechanism for the transformation of industry-university projects inside and outside the school. In this way, a series of school-enterprise cooperation courses are formed, and the content transformed from government projects is directly incorporated into the teaching link.; Cooperate extensively with brother colleges and universities to learn from each other in terms of mutual recognition of course credits, joint development of courses, and sharing of course resources, expand the resource pool of data courses, and make up for their own resource shortages. Make skill training run through the complete learning process, so that students can get a comprehensive exercise from target understanding, thinking analysis, data collection, data analysis and so on.

## 4 Conclusion

The network and new media industry under big data is facing unprecedented opportunities and challenges. This will inevitably bring about changes in the requirements for the

training of network and new media professionals. Colleges and universities cultivating network and new media professionals must first attach great importance to the industrial changes brought by big data, think deeply, explore and innovate, and better cultivate professionals who meet the needs of the development of the times.

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