

# *Research on the Cultivation Model of Innovation and Entrepreneurship Ability for Accounting Majors in the Context of Big Data*

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**Abstract:** "Mass entrepreneurship and innovation" (hereinafter referred to as "mass entrepreneurship and innovation") is an important support for China's economic development. Relying on greater stimulation of market vitality and social creativity, it can withstand the downward pressure of the economy and maintain the long-term fundamentals of China's economy. On the other hand, it is also an important measure to enhance students' employment ability and expand the scope of employment. Enhancing students' awareness and ability of "innovation and entrepreneurship" is an important driving force in supporting the country's "growth and employment stability". Taking this as the starting point, the article first analyzes the problems in innovation and entrepreneurship education in the accounting profession under the current education system. Then, starting from the background of big data, it fully studies the impact of big data on the accounting profession, and analyzes the problems from three aspects: curriculum system construction, talent team construction, and teaching assessment method construction that meet the requirements of "innovation and entrepreneurship". Finally, a reform strategy for innovation and entrepreneurship teaching in accounting majors under the background of big data was proposed.

## 1. Introduction

The arrival of the big data era has made enterprises face a more intense market competition environment. In order to ensure the long-term stable development of enterprises, accounting professionals need to extract reliable information from the complex and massive data information that enterprises need. Although the development of big data has improved the accuracy and scientificity of data to a certain extent, compared with traditional accounting work, it greatly expands the scope of accounting personnel's work, increases the difficulty of accounting personnel's work, and brings a certain impact on the development of enterprises. At the same time, the increase in the number of students majoring in accounting has greatly intensified competition among each other. These situations require universities to quickly change their original teaching models and

content, adapt to the arrival of the big data era, cultivate more competitive and innovative college students, help students increase their competitiveness, and expand their employment scope. The purpose of "mass entrepreneurship and innovation" is to fully stimulate the innovative and creative vitality of billions of people, eliminate various policy and environmental obstacles, make "mass entrepreneurship and innovation" a new trend of the times, and provide strong new momentum for achieving national prosperity, people's prosperity, and economic and social development. Through practical testing, 'entrepreneurship and innovation' plays an extremely important role in expanding students' employment and enhancing their comprehensive abilities.

## 2. Current research status at home and abroad

Zhou Fuyuan (2022) believes that in order to cultivate and enhance students' innovation and entrepreneurship abilities, it is necessary to deeply integrate innovation and entrepreneurship education with professional education. Starting from the characteristics of the accounting profession, this study proposes a reform approach for innovation and entrepreneurship teaching in the accounting profession based on patterned innovative thinking. Mainly targeting innovation at the business level, it emphasizes imparting a framework and tools of innovative thinking that can be followed and operated. By improving the innovation and entrepreneurship curriculum system and revising the curriculum syllabus, it achieves the interconnection of professional teaching objectives and innovation and entrepreneurship teaching objectives, as well as the integration of teaching content, thereby improving the effectiveness of innovation and entrepreneurship education and the quality of professional talent cultivation.<sup>[1]</sup>

Li Nan and Ni Minghui (2021) conducted a survey on the reform opinions of the integration of industry and education in the accounting major of the School of Economics and Management of Heilongjiang University of Engineering. From the analysis of the survey results, it can be seen that employers' job requirements for accounting talents are gradually transitioning from basic business, financial, and tax processing abilities to data processing and analysis, big data thinking, and other aspects. At the same time, accounting personnel are required to have high moral character Ability in communication and collaboration, continuous learning, innovative practice, and other aspects. Research has found that strengthening cooperation between schools and enterprises, promoting the construction of internal and external training bases, encouraging students to start their own businesses, innovating teaching in the classroom training process, strengthening practical training for teaching staff, and paying attention to the needs of regional financial positions are important measures to enhance the innovation and entrepreneurship abilities of accounting students.<sup>[2]</sup>

Zhang Chunming and Lu Limin (2019) believe that the arrival of the big data era is changing people's lifestyles and thinking patterns, and also opening up a new pattern of innovation driven by mass entrepreneurship and innovation. Accounting major college students' innovation and entrepreneurship education also needs to leverage the advantages of big data to reform their own development imbalance. This study analyzes the impact of the big data era on accounting majors and the value of innovation and entrepreneurship for college students, summarizes the promoting effect of the big data era on innovation and entrepreneurship education for accounting majors, and proposes ideas for the reform of innovation and entrepreneurship education for accounting majors in the big data era.<sup>[3]</sup>

Sledgianowski, D. et al. (2017) provided an example of integrating big data and information systems into teaching resources from the perspective of applying the accounting education ability integration framework. This study used accounting course subjects as decomposition units and loosely constructed these teaching resources.<sup>[4]</sup>

Yingying Zhou; Hequn Zhou. (2022) believes that evaluating the quality of innovation and

entrepreneurship education for college students is very important. Based on the analysis of the current research status of innovation and entrepreneurship education quality evaluation, this study constructs a quality evaluation index system for college students' innovation and entrepreneurship education, including innovation and entrepreneurship education courses and activities, innovation and entrepreneurship education conditions, innovation and entrepreneurship quality, innovation and entrepreneurship ability, innovation and entrepreneurship skills, innovation and entrepreneurship spirit. An evaluation model based on extension theory was established for 21 sub indicators, including innovation and entrepreneurship awareness, innovation and entrepreneurship education channels, independent innovation and entrepreneurship, and the effectiveness of innovation and entrepreneurship education. Empirical research was conducted using 8 universities in Ningbo as samples, and corresponding suggestions were proposed. [5]

### **3. Problems in Innovation and Entrepreneurship Education for Accounting Majors in the Era of Big Data**

#### **3.1 Students have deficiencies in their understanding of big data and have not yet realized the significant impact of the big data era on accounting**

Big data is the future development trend of society, covering all aspects of various industries. In the analysis of massive data, big data technology plays an irreplaceable role. However, our survey found that a considerable number of students only recognize big data as "multi data" or believe that big data is very close to their daily lives, such as analyzing health codes, travel codes, and other data related to the epidemic, as well as analyzing consumer behavior and habits on shopping platforms. However, they feel that the impact on their accounting major is still far away. When we ask some students about the current level of big data analysis in our country, which famous big data platforms do we have in the world, what impact do you think big data will have on accounting majors, and what impact it will have on accounting students' employment? Many students either do not know, or their statements are too simplistic and one-sided. This indicates that the current teaching environment has reduced the use of big data by students, and students have insufficient attention to the development and prospects of big data. Of course, there are also quite a few students whose one-sided cognition is influenced by the experience of "old accountants" among family and friends. Students lack the cultivation of this ability, which is not conducive to improving their professional and innovative learning abilities, and it is difficult to enhance their core competitiveness in the accounting profession in the current era of big data.

#### **3.2 There are shortcomings in the teaching team's adaptation to the big data environment, some curriculum implementation is unreasonable, and there is a lack of training plans for innovation and entrepreneurship abilities**

In the past, good accounting teachers in the minds of students were "experienced" and "experienced" accountants with practical experience. The traditional accounting education philosophy also tended to cultivate staff in related positions. However, with the advent of the big data era, good accounting teachers must know how to use various information methods to collect, organize, analyze, and process massive amounts of data, to provide better decision-making for investors and managers. However, in general, the accounting education received by the existing teaching staff is traditional. Some teachers, due to their age and fixed habits, do not have a deep understanding of emerging things such as cloud computing and big data. They are not familiar with some big data software, data analysis, data warehouse, data storage, and other software, which affects their understanding of big data accounting and will inevitably affect accounting students. On

the other hand, there is an unreasonable situation in the curriculum of some big data accounting courses. The curriculum still focuses on traditional accounting teaching, while for courses that combine big data, cloud computing, and traditional accounting, either the total class hours are too few, or there are no designed practical links or class hours, which affects the learning effectiveness of students.

### **3.3 Insufficient teaching facilities to meet the requirements of big data for accounting majors, making it difficult to cultivate innovation and entrepreneurship abilities**

In the era of big data, teaching requires massive amounts of data, with high requirements for databases and analysis software, especially for storing and analyzing a large amount of unstructured data. Purchasing large database analysis software is expensive, and universities are facing financial difficulties in purchasing software that fully meets the requirements and building standardized laboratories. However, small-scale database analysis software can only meet the needs of general structured data analysis for small and medium-sized enterprises. This current situation clearly affects students' learning outcomes. Some teachers' courses simply add content on innovation and entrepreneurship to meet school requirements, without linking the course content well with innovation and entrepreneurship education. This not only fails to increase students' interest in learning, but also dampens their enthusiasm for innovation and entrepreneurship.

## **4. Suggestions for Improving Innovation and Entrepreneurship Education in Big Data Accounting**

### **4.1 Strengthen education and guidance for students**

Strengthen education and guidance for students, enabling them to fully understand the impact of big data on the accounting profession, and plan innovation and entrepreneurship practices reasonably based on their own reality. On the one hand, it is necessary to cultivate students' enthusiasm for innovation and entrepreneurship through education, so that they are not afraid of entrepreneurship, are willing to start a business, and have the courage to do so; On the other hand, through various forms such as internships, visits, lectures, etc., students are guided to understand entrepreneurship and learn how to start a business.

### **4.2 Emphasize the combination of professional knowledge and innovation and entrepreneurship practice, so that students can apply what they have learned**

The accounting major has strong professionalism and practicality, and innovative practice also has strong professionalism and practicality. It combines accounting with innovation and entrepreneurship, guides innovative practice with professionalism, and tests professionalism in innovative practice. For example, in specific teaching, typical, recent, and widely concerned cases are introduced into practical teaching to help students understand the concepts and principles of the textbook. Meanwhile, during the teaching process, teachers use big data technology to continuously enrich teaching resources and improve teaching methods, enabling students to naturally combine big data with teaching methods and innovation and entrepreneurship. This not only improves teaching effectiveness, but also enhances practical abilities in innovation and entrepreneurship.

### **4.3 Building a comprehensive big data teaching platform**

The construction of big data platforms determines the teaching level of big data majors. The

construction of a big data platform should not be limited to the scope of our school. We can collaborate with relevant companies to build and utilize the company's advanced technology and practical conditions to enhance the teaching ability of our teachers and students. On the other hand, it is necessary to cooperate with relevant departments, guide and encourage teachers and students to participate in various types of teaching training and competitions, so as to enhance students' innovation and entrepreneurship awareness and abilities in practice.

## 5. Conclusions

The arrival of the big data era has brought opportunities and challenges to the development of various industries, and accounting majors are no exception. How to leverage the advantages of big data in data processing and analysis, enhance students' learning and analysis abilities, and better serve enterprise decision-makers, achieving a dual enhancement of student value and enterprise value, requires continuous research.

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