

# Research on the Reform of Talent Training for Business and Management Majors in Vocational Colleges in the Era of Artificial Intelligence

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**Abstract:** With the development of digitalization and intelligence in the social field, the practical application of artificial intelligence has gradually affected the work and personal needs in the field of management. The cultivation of talents in vocational and management majors should meet the actual needs of the market and technological innovation, with a focus on cultivating composite management talents with artificial intelligence analysis and investment capabilities, providing necessary talent reserves for the digital development of the management industry. This article mainly explores the value of artificial intelligence in cultivating talents in the field of economics and management in the era of artificial intelligence. It deeply analyzes the practical application of artificial intelligence in the field of economics and management at present, and analyzes the optimization path for cultivating talents in vocational colleges in the era of artificial intelligence, in order to improve the quality of talent cultivation.

**Keywords:** Artificial intelligence; Business management majors; Personnel training

## 1. The Value of Artificial Intelligence in Cultivating Talents in Business and Management Majors in Higher Vocational Education

### 1.1 Enhance students' deep understanding of the field of economics and management

Based on the development background of the new era, the management industry has gradually become a very important economic pillar. With the continuous development of the social economy, the practical application of artificial intelligence in the field of management is also becoming increasingly popular. Therefore, in order to cultivate more innovative and practical talents in the field of economics and management, it is particularly important to help students deepen their understanding of the field. The practical application of artificial intelligence in the management industry can promote the healthy development of this field. By combining artificial intelligence, students can better understand and manage related knowledge and skills, explore how to use artificial intelligence to achieve technological innovation, and also participate in the learning and practice of management knowledge, gaining a deeper understanding of the mechanisms and general laws of operation in this industry. By learning and engaging in practical activities related to the field of management, students can better enhance their practical and innovative abilities. In the practical process, students can have a deeper understanding of the practical scenarios and technical requirements in the field of management, so as to better use artificial intelligence to solve various problems encountered. Innovation ability can enable students to better achieve innovation in management, actively explore new business models and business opportunities, help enhance their competitiveness in the market, and promote students' deep understanding and cognition of knowledge in the field of management.

### 1.2 Strengthening the competitiveness of the student market and employment prospects

The application of artificial intelligence technology mastered by students in vocational colleges in the field of management can not only help them better understand the operational mechanism of this industry, but also enhance their practical operation ability and professional literacy, creating good employment prospects for students. Mastering the practical application of artificial intelligence in the field of economics and management can improve students' practical operational abilities. For example, using machine learning algorithms to predict stock prices, reducing transaction costs, and so on. If students can master relevant technologies in the practical operation process, it can deepen their understanding of artificial intelligence, as well as deepen their practical level and ability, enabling them to have the ability to solve problems. On the other hand, to strengthen students' professional qualities. The management industry has a highly concentrated and complex nature, and requires personnel with a solid foundation and practical experience to participate. Students can also master the application of artificial intelligence in the field of management, which facilitates a deeper understanding of its operating mechanism and general laws, further enhancing their professional literacy and understanding of the industry. Mastering the practical application of artificial intelligence in the field of economics and management can enhance students' competitiveness and employment prospects. With the healthy development and digital transformation of the management industry, more and more industries are using artificial intelligence to improve work efficiency and reduce risks.

## 2. The current application status of artificial intelligence in the field of economics and management

### 2.1 Application in the field of international trade

One of the biggest challenges for enterprises in international trade is to comply with legal norms. Enterprises must be clear about who their trading partners are and be careful to avoid customers, suppliers, or business partners violating trade rules. Currently, although there

are relevant applications available to assist enterprises in complying with regulations, manual review is often required to avoid errors. By utilizing artificial intelligence deep learning, it is possible to improve and assist compliant applications by reducing the number of errors, thereby reducing additional manual review. In terms of trade financing, about 80% of enterprises engaged in international trade have a demand for borrowing and financing from banks, but whether banks issue loans has many considerations. The traditional corporate loan process requires review by multiple qualified senior personnel, which will increase financing costs and time. Artificial intelligence can undertake compliance analysis to ensure compliance with regulations. Some regulatory agencies have utilized AI platforms for credit risk assessment, assisting in simplifying the review of large amounts of global trade transaction data and highly relying on manual processes. As the time and cost of compliance review gradually decrease, artificial intelligence can provide international enterprises with more financing options.

### 2.2 Application in the e-commerce field

Firstly, regarding intelligent inventory forecasting. In e-commerce, a very important issue is how to conduct multi-channel inventory management. If there is insufficient inventory, it will cause a large number of customers to lose, leading to a decrease in consumer experience, while long-term restocking will cause losses for businesses. However, if there is too much inventory, it not only requires a larger inventory space, but also brings operational risks, thereby increasing the demand for capital. Therefore, accurate inventory forecasting for enterprises is crucial for their operations. Intelligent inventory prediction can analyze the main factors affecting inventory quantity and turnover time, and make it have a high level of intelligence, thereby improving the accuracy of inventory prediction. Secondly, intelligent sorting of goods. While China's logistics industry is developing rapidly, it is also expanding rapidly. In terms of package types, there are mainly large, small, live, medical, and other items. Currently, the number of parcels in China is constantly increasing, and there are also more and more distribution stations, which exhibit the characteristics of small batches and multiple varieties. Due to the use of traditional manual classification methods, fast and accurate classification cannot be achieved, which affects the efficiency and service quality of logistics. Intelligent robots are not only flexible but also highly adaptable, with low environmental requirements. The number of robots can be adjusted according to customer needs. Intelligent classification makes product classification more timely and accurate. At the same time, during the classification process, it can reduce the number of loading and unloading, ensuring the safety and integrity of the product.

## 3. The Cultivation Path of Talents in Business and Management Majors in Higher Vocational Education in the Era of Artificial Intelligence

### 3.1 Integrating artificial intelligence related courses

The cultivation of talents in vocational and management majors needs to keep up with the pace of the current era of rapid development of artificial intelligence, introduce courses related to artificial intelligence, and provide students with necessary theoretical knowledge and practical skills. Firstly, introducing courses related to artificial intelligence can help students gain a deeper understanding of the concepts, principles, and applications of artificial intelligence. In these courses, students will learn the basic concepts, algorithms, models, and other theoretical knowledge of artificial intelligence, and master commonly used artificial intelligence tools and software through practical operations, such as Python programming language, TensorFlow, etc. At the same time, students will also learn how to apply artificial intelligence to the field of business management, such as risk control and credit evaluation. This will help students have a comprehensive understanding and in-depth understanding of artificial intelligence, and improve their ability to apply artificial intelligence in the field of economics and management. Secondly, introducing courses related to artificial intelligence can help students cultivate innovative thinking and problem-solving abilities. The continuous updating and iteration of technology and the emergence of new application scenarios require talents to have innovative thinking and problem-solving abilities. Understanding the latest research progress and trends in artificial intelligence is beneficial for students to master innovative thinking and problem-solving methods, thereby better responding to various problems and challenges in practice. Finally, introducing courses related to artificial intelligence can enhance students' competitiveness. Mastering knowledge and skills related to artificial intelligence will become an important guarantee for students to obtain excellent employment opportunities, and will also help them better cope with future challenges in their career.

### 3.2 Building an Artificial Intelligence Experiment and Simulation Platform

Building artificial intelligence laboratories and simulation trading platforms is an important measure for cultivating talents in the field of economics and management in higher vocational education. Firstly, the construction of an artificial intelligence laboratory can help students learn and practice AI related technologies and tools. The laboratory should be equipped with necessary hardware and software equipment, such as high-performance computers, data storage devices, development tools, etc., to support students in practical operations related to artificial intelligence, such as data processing, algorithm debugging, and model optimization. Secondly, the construction of a simulated trading platform can provide students with a real trading environment, helping them understand the basic operating laws of the market. Through the practice of simulating trading platforms, students can learn the investment characteristics and risks of management products, and can master trading skills and risk control abilities through practical operations. Finally, building artificial intelligence laboratories and simulation trading platforms can also promote deep cooperation between schools and the management industry. Schools can invite professionals from the management industry to give lectures and exchange ideas in the laboratory, provide practical guidance and suggestions, and provide students with richer learning and practical opportunities. Schools can also cooperate with institutions and enterprises in the management industry to provide students with internship and employment opportunities, so that students can better

understand the actual operation and needs of the management industry and be fully prepared for future employment.

### 3.3 Setting up interdisciplinary practical cooperation activities

Interdisciplinary cooperation and practical activities are a very important part of cultivating talents in the field of economics and management in higher vocational education. Through communication and cooperation with other professional fields, students can better understand the knowledge and applications in the fields of economics and artificial intelligence, and improve their practical and interdisciplinary thinking abilities. Specific measures include: firstly, conducting interdisciplinary courses and projects. By inviting teachers from professional fields such as computer science and human resource management to give lectures, knowledge from different fields can be integrated and students' comprehensive subject abilities can be enhanced. In addition, students can also be organized to participate in relevant interdisciplinary projects, such as research projects on the application of artificial intelligence algorithms in the field of economics and management, so that students can better grasp the application of artificial intelligence through practice. The second is to carry out interdisciplinary competitions and competitions. By organizing artificial intelligence application innovation competitions and other competitions in the field of management, students can be stimulated to have innovative and competitive awareness, and their artificial intelligence application level and practical ability can be improved. The third is to carry out interdisciplinary practical activities. By organizing students to participate in practical activities in the field of management, such as enterprise internships, social research, etc., students can better understand the practical applications and industry development trends in the field of management, and improve their practical abilities and comprehensive qualities. By communicating and collaborating with other professional fields, we aim to enhance students' practical and interdisciplinary thinking abilities, and cultivate high-quality management talents with innovative spirit and practical abilities.

### 3.4 Strengthen the integration and internship opportunities in the artificial intelligence industry

Strengthening the integration of the artificial intelligence industry and providing internship opportunities is crucial for the career development of vocational college students majoring in economics and management. Strengthening the integration and internship opportunities in the artificial intelligence industry can not only improve students' practical abilities and competitiveness, but also increase their awareness and understanding of artificial intelligence. Firstly, in order to enhance students' understanding and awareness of the artificial intelligence industry, industry experts or practitioners can be invited to the school for exchange and lectures. Through face-to-face communication with experts in the field of artificial intelligence, students can gain a deeper understanding of the development and application of the industry. In addition, it is also possible to establish partnerships with artificial intelligence companies to provide students with internship and employment opportunities. These practical opportunities can allow students to be exposed to real work scenarios, understand the needs and trends of the industry, and improve their practical abilities and professional qualities. In order to improve students' vocational skills and market competitiveness, more artificial intelligence related courses and training opportunities can be provided for students. For example, practical training courses can be offered to allow students to personally practice the application of artificial intelligence in the field of management. Through practice, students can gain a deeper understanding of the application of artificial intelligence in the field of management and improve their skills.

## Epilogue

Starting from the application value of artificial intelligence in the field of economics and management, this paper explores the specific methods for cultivating talents in the field of economics and management in vocational colleges under the background of artificial intelligence. The introduction of artificial intelligence related courses, establishment of laboratories and simulation trading platforms, interdisciplinary cooperation and practical activities, strengthening industry docking, and internship employment opportunities are all effective methods. The cultivation of talents in higher vocational economics and management majors needs to keep up with the trend of the times and market demand. Continuously innovating teaching content and methods to provide more high-quality and diversified talents for the economics and management industry.

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