

Talent Development of the E-Commerce Major Based on Industry-Education Cooperation

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Abstract: The rapid growth of the digital economy has made cross-border e-commerce a major driver of global trade, increasing the demand for skilled professionals in the e-commerce sector. Traditional education models can no longer meet the industry's evolving needs. This paper examines how to cultivate e-commerce talent through industry-education collaboration, focusing on areas such as curriculum design, teaching innovation, school-enterprise cooperation, and practical platform development. The study shows that this collaborative model bridges the gap between education and industry, enhancing students' practical skills, innovation, and cross-cultural communication, preparing them for digital transformation and global markets. The paper concludes with recommendations to update curricula, deepen industry partnerships, promote interdisciplinary integration, and enhance innovation and cross-cultural skills, offering theoretical and practical guidance for e-commerce talent development.

Keywords: E-commerce; Industry-education collaboration; Cross-border e-commerce; Talent cultivation

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1. Introduction

E-commerce, particularly cross-border e-commerce, has become a key driver of global economic growth. The shift in global trade models and widespread internet usage make it central to international trade^[1]. As projected by eMarketer, global e-retail sales will exceed \$7 trillion by 2025, with China leading in market size and transaction volume^[2].

However, the current e-commerce education system lags behind the industry's fast-paced evolution. There is an increasing demand for versatile talent skilled in cross-cultural communication, data analysis, innovation, and digital technologies^[3]. Traditional e-commerce programs often emphasize theory but lack practical experience, hindering students' adaptability to the rapidly changing market.

The industry-education collaborative model seeks to bridge this gap by integrating education with industry needs. Through school-enterprise cooperation, both parties can jointly design curricula, set training objectives,

and develop practical platforms, cultivating talent with theoretical expertise and real-world problem-solving skills ^[4]. This paper explores how this collaborative model can address the talent demands of the cross-border e-commerce sector in the digital economy, offering both theoretical and practical insights for the industry's high-quality growth.

2. Overview of the industry-education collaborative talent cultivation model

The industry-education collaborative talent cultivation model integrates education with industry by fostering collaboration among schools, enterprises, and governments. Its goal is to align curricula with industry needs, ensuring the development of high-quality talent that meets evolving market demands. This model enhances students' practical skills, improves teaching quality, and strengthens the talent pool for enterprises, benefiting both education and industry.

2.1. Definition and characteristics of the industry-education collaborative talent cultivation model

This model combines educational and practical resources, focusing on both theoretical knowledge and hands-on experience through internships. Its core feature is the integration of academia, industry, and research, enabling schools, enterprises, and industry associations to work together. It cultivates versatile talent that is ready to adapt to fast-changing industries ^[5]. The model includes three forms of collaboration as follows.

School-enterprise collaboration: Schools adjust curricula while enterprises provide practical platforms and contribute to course design.

Theory-practice collaboration: Enterprises offer real-world scenarios through internships and projects.

Long-term collaboration: Stable cooperation through joint training bases, faculty exchanges, and projects ensures continuous alignment between education and industry.

2.2. Necessity of industry-education collaborative talent cultivation

As industries like cross-border e-commerce grow, there is a pressing need for an education system that cultivates versatile, innovative talent. Traditional education models often fail to meet these demands, leaving students with insufficient practical experience. The industry-education model bridges this gap by providing real-world exposure and aligning curricula with industry needs. It enhances students' skills, drives technological innovation, and ensures a steady supply of skilled talent, contributing to the growth of industries like cross-border e-commerce and supporting societal development.

3. Current situation and challenges in e-commerce talent cultivation

With the rapid growth of global e-commerce, particularly cross-border e-commerce, the demand for skilled talent in the industry has become urgent. While many higher vocational colleges and technical schools in China offer e-commerce programs, they face several challenges in teaching and talent cultivation, including a disconnect between course content and industry needs, outdated teaching methods, and insufficient faculty resources.

3.1. Major problems in e-commerce education

The primary issue in e-commerce education is the lag in course content and updates. Although many institutions offer e-commerce courses, they mostly focus on traditional subjects like marketing and international trade, with limited coverage of emerging fields such as cross-border e-commerce, data analysis, and digital marketing. The traditional curriculum no longer meets the fast-evolving demands of the market, particularly with digital transformation and globalization reshaping the industry.

Another significant issue is the lack of diverse teaching methods. Many vocational schools still rely on traditional classroom teaching, emphasizing theory over practice. As a result, students often face a gap between theory and real-world application, especially in dynamic sectors like cross-border e-commerce. Traditional methods are insufficient for developing the skills needed to tackle industry challenges.

3.2. Disconnect between traditional models and industry needs

Traditional e-commerce curricula focus mainly on basic knowledge, but the rapid development of cross-border e-commerce exceeds the scope of traditional courses. Students need expertise in digital technologies, data analysis, legal knowledge, and cross-cultural communication in addition to marketing and logistics. However, current curricula lack systematic training in these emerging areas, leaving students unprepared for real-world job requirements.

Moreover, most collaborations between institutions and industry enterprises remain superficial. While some schools integrate internships and cooperative course development, the depth of cooperation is insufficient. Enterprises may participate in course design and internship arrangements, but their involvement in content updates, faculty training, and teaching innovation remains limited, perpetuating a gap between education and industry needs.

3.3. Limitations of the e-commerce talent cultivation system

In addition to curriculum and teaching method issues, the e-commerce talent cultivation system itself is limited. Traditional education focuses on knowledge transfer and skill development but neglects the cultivation of comprehensive abilities, such as innovative thinking, problem-solving, and teamwork. These skills, essential for cross-border e-commerce, are difficult to develop within traditional education frameworks.

Furthermore, the rapid technological evolution in cross-border e-commerce—driven by advances in big data, AI, and blockchain—demands constant updates to education systems. However, the lag in integrating these changes means that students often learn outdated content that is misaligned with the latest industry developments. Innovating the education system to keep pace with technological advancements and develop forward-thinking, innovative talents is a critical challenge.

4. Talent cultivation path for e-commerce majors based on industry-education collaboration

To address current issues in e-commerce education, the talent cultivation path for e-commerce majors should focus on school-enterprise cooperation, the reform of hybrid and collaborative teaching methods, and the construction of practical platforms. This path can bridge the gaps in traditional education models, ensuring students are prepared to adapt to industry changes and real-world work challenges.

4.1. Depth and breadth of school-enterprise cooperation

School-enterprise cooperation is central to the industry-education collaborative model, ensuring educational content aligns with industry needs. Currently, cooperation is mainly limited to course settings, internships, and training, hence, its depth and scope must be expanded.

Schools should invite enterprise experts to help design curricula and update content, incorporating emerging technologies, trends, and real-world applications. Enterprises can also collaborate in building practical platforms like virtual e-commerce platforms and project training bases, providing students with hands-on experience.

Additionally, the breadth of cooperation should be widened beyond internships to include the joint development of project-based courses, where students work on real-world projects during their studies. This continuous collaboration ensures that students' learning and professional skills are consistently enhanced.

4.2. Reform of hybrid and collaborative teaching methods

To meet the demands of cross-border e-commerce, teaching methods must be innovative. Traditional lecture-based methods no longer suffice for developing students' practical and innovative abilities. The hybrid collaborative teaching method, which combines traditional teaching with modern educational technologies, can fill this gap.

This method includes integrating online learning platforms, virtual simulations, and enterprise case studies to engage students in diverse learning methods outside the classroom. Enterprises should also contribute by offering industry projects and case studies, helping students apply knowledge in real-world scenarios. This approach improves students' problem-solving abilities and fosters innovative thinking.

Additionally, schools and enterprises can co-develop project-based courses, enabling students to apply theoretical knowledge to real-world problems. This method enhances students' teamwork, creativity, and professional skills, meeting the growing demand for cross-border e-commerce talent.

4.3. Joint construction of diversified training bases by schools and enterprises

Practical teaching is essential in cultivating e-commerce talent, especially in cross-border e-commerce, where hands-on skills are crucial for success. Schools and enterprises should collaborate to build diversified training bases that provide a wide range of practical opportunities.

These training bases should include not only traditional internship platforms but also virtual simulation environments, logistics platforms, and data analysis tools. These resources allow students to engage in simulated cross-border e-commerce operations, preparing them for real-world challenges.

Training bases should align closely with enterprise needs, with companies providing projects, technical support, and industry standards. This collaboration ensures that students gain exposure to cutting-edge technologies, improving their innovation and technical application skills.

5. Talent cultivation for e-commerce in the context of digital transformation

With the rapid development of global information technology, digital transformation has become a key driver of economic growth and industrial upgrading. In cross-border e-commerce, digital technologies not only enhance work efficiency but also introduce new business models and industry forms. As the e-commerce sector grows, the demand for skilled talent increases, and traditional education models must evolve to address these new

needs. In this context, the development of digital skills, innovative thinking, and cross-cultural communication abilities is essential for cultivating e-commerce professionals.

5.1. Cultivating digital skills

A core requirement for cross-border e-commerce professionals is mastering digital skills. These include proficiency in e-commerce platforms, big data analysis, AI applications, and cybersecurity. As the complexity of cross-border e-commerce increases, traditional e-commerce skills are insufficient. Students must be equipped with advanced digital tools to navigate global markets effectively.

Educational institutions should focus on integrating digital tools, online platforms, and virtual training environments into the curriculum. School-enterprise collaborations can further this by providing real-time industry data, technological applications, and innovation cases, helping students enhance their digital capabilities. This will better prepare students to handle the demands of a rapidly changing e-commerce landscape.

5.2. Cultivating innovative thinking and cross-cultural communication skills

In addition to digital skills, innovative thinking and cross-cultural communication are critical for success in cross-border e-commerce. As global market dynamics shift, companies must leverage technology, data, and innovative business models to maintain competitiveness. Cultivating innovative thinking helps students adapt to these changes and devise effective solutions to business challenges.

Cross-border e-commerce also requires communication with clients from diverse cultural backgrounds. Schools should cultivate cross-cultural communication skills by designing curricula that simulate international trade scenarios, offering cross-cultural exchange programs, and organizing international activities. These initiatives will help students interact confidently with global clients and strengthen their cross-cultural competence.

5.3. Interdisciplinary integration and cultivation of composite talents for cross-border e-commerce

Cross-border e-commerce is a multidisciplinary field, requiring knowledge not only in e-commerce but also in international trade, logistics, finance, legal regulations, and cultural understanding. Thus, e-commerce education should emphasize interdisciplinary learning, encouraging students to integrate knowledge from multiple fields.

Schools can achieve this through interdisciplinary curriculum design and project-based teaching. For example, combining international trade and e-commerce courses enables students to understand key components of cross-border e-commerce, such as trade rules, payment systems, and logistics management. Engaging in extracurricular activities and entrepreneurial practices also fosters multidimensional competencies.

In this interdisciplinary approach, school-enterprise cooperation is crucial. Enterprises can offer real-world e-commerce projects, allowing students to apply their cross-disciplinary knowledge in practical settings. This collaboration not only provides professional training but also valuable hands-on experience, helping students understand the operational complexities of cross-border e-commerce.

6. Conclusion and recommendations

With the rise of the digital economy and globalization, cross-border e-commerce has become a major driver of global trade. Traditional educational models no longer meet the fast-evolving demands of the industry.

This article explores the industry-education collaboration model as a solution for cultivating e-commerce professionals. The model includes school-enterprise cooperation to update curricula in line with industry needs, hybrid teaching methods to enhance practical skills, and multi-dimensional training bases co-built by schools and enterprises to provide real-world experience.

However, challenges remain, such as outdated curricula, shallow school-enterprise cooperation, and insufficient focus on emerging skills like digital proficiency and cross-cultural communication. The recommendations are as follows.

Curriculum updates: Schools should align curricula with the latest industry trends, adding content on digital skills, big data, and international regulations.

Deepen school-enterprise cooperation: Schools and enterprises should collaborate on course design, faculty training, and co-building training bases to offer students more practical opportunities.

Interdisciplinary Integration: Schools should encourage cross-disciplinary study to equip students with comprehensive problem-solving skills.

Cultivate innovative thinking and cross-cultural communication: Foster students' innovation and communication skills through project-based teaching and international exchanges.

In conclusion, the industry-education collaboration model bridges the gap between education and industry, producing talent that better meets market needs. Schools, enterprises, and governments must strengthen this collaboration to support the continued development of cross-border e-commerce.

Disclosure statement

The authors declare no conflict of interest.

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