Reflections on the Transformation of Accounting Talent Cultivation Mode in Colleges and Universities in the Intelligent Era

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Abstract: This study aims to explore the necessity and feasible paths for transforming the accounting talent cultivation mode in colleges and universities under the background of the intelligent era, so as to meet the new requirements of social and economic development for accounting professionals. the research adopts methods such as literature review, comparative analysis and theoretical deduction. Firstly, it combs the impact of intelligent technologies such as big data, artificial intelligence and blockchain on the accounting industry, and clarifies the new skills and quality requirements for accounting talents. Then, it analyzes the current problems of the existing accounting talent cultivation mode in colleges and universities, including the disconnection between curriculum setting and intelligent technology, the backwardness of teaching methods, and the lack of teachers' intelligent literacy. On this basis, it constructs a transformation framework of accounting talent cultivation mode from the aspects of curriculum system optimization, teaching mode innovation, teacher team construction and practice platform improvement. the research concludes that the transformation of accounting talent cultivation mode in colleges and universities in the intelligent era should take the cultivation of compound and innovative accounting talents as the core, integrate intelligent technology into the whole process of talent cultivation, and establish a multi-subject collaborative cultivation mechanism to enhance the adaptability and competitiveness of accounting talents in the intelligent environment.

Keywords: Intelligent Era; Colleges and Universities; Accounting Talent; Cultivation Mode; Transformation

1. Introduction

1.1 Research Background and Significance

The rapid advancement of intelligent technologies has triggered profound changes in the global economic landscape, with the accounting industry undergoing unprecedented transformation. Intelligent tools such as machine learning algorithms, robotic process automation, and cloud-based accounting systems have gradually replaced manual operations in traditional accounting, shifting the industry's focus from transaction recording to data analysis and strategic decision support. This paradigm shift has created an urgent demand for accounting professionals equipped with both specialized knowledge and technological proficiency. Colleges and universities, as the primary institutions responsible for cultivating accounting talent, face the critical task of adjusting their educational frameworks to align with the evolving needs of the intelligent era. Failure to address this demand may result in a widening gap between graduate competencies and industry requirements, hindering the sustainable development of both the accounting profession and the broader economy. Exploring the transformation of accounting talent cultivation modes in this context is therefore essential for enhancing the quality of accounting education, improving graduates' employability, and promoting the integration of accounting discipline with emerging technologies.

1.2 Review of Domestic and Foreign Research Status

International research on accounting education in the intelligent era has focused on integrating technological content into curricula and

redefining professional competencies. Scholars have emphasized the importance of data analytics and digital literacy, proposing frameworks that combine accounting principles with computational thinking. Studies have also highlighted the role of interdisciplinary collaboration, advocating for partnerships between academic institutions and technology enterprises to bridge the skills gap. Domestic research, while, has rapidly expanded to address localized challenges. Researchers have analyzed the impact of intelligent technologies on China's accounting industry, pointing out deficiencies in traditional education models such as outdated curricula and insufficient practical training. However, existing studies often lack systematic exploration of holistic transformation pathways, with most focusing on single aspects such as curriculum reform or teaching methods. There is a notable absence of integrated strategies that encompass curriculum design, teaching innovation, faculty development, and industry collaboration, creating a research gap that this study aims to fill.

1.3 Research Ideas and Methods

This study adopts a multi-dimensional research approach to systematically explore the transformation of accounting talent cultivation modes. First, it conducts an extensive review of academic literature, policy documents, and industry reports to clarify the theoretical foundations of intelligent accounting and talent cultivation. By synthesizing concepts from accounting, education, and information technology, the study establishes a theoretical framework for analyzing the impact of intelligent technologies on accounting education. Second, comparative analysis is employed to examine successful practices in accounting education reform both domestically and internationally, identifying transferable experiences and localized adaptations. Third, theoretical deduction is used to develop a transformation model based on the identified industry demands and educational deficiencies. This model is validated through logical reasoning and alignment with current industry trends, ensuring its feasibility and practical relevance. the research process follows a logical sequence: starting with an analysis of the intelligent era's impact on accounting talent requirements, proceeding to diagnose

shortcomings in existing cultivation modes, and finally proposing targeted transformation strategies.

2. New Requirements for Accounting Talents in the Intelligent Era

2.1 Intelligent Transformation Direction of Accounting Functions

Intelligent technologies are reshaping the core functions of accounting, driving a shift from a focus on financial reporting to value creation. Routine tasks such as journal entry, ledger maintenance, and financial statement preparation are increasingly automated through robotic process automation and artificial intelligence, reducing reliance on manual input and minimizing errors. This automation allows accounting professionals to redirect their efforts toward more strategic activities, including financial risk assessment, cost optimization, and business performance analysis. the application of big data analytics enables accounting functions to expand beyond historical data interpretation to predictive analysis, providing enterprises with actionable insights for decision-making. Additionally, blockchain technology enhances the transparency and security of financial transactions, transforming auditing practices from sample-based verification to continuous real-time monitoring. These changes require accounting functions to integrate technological tools seamlessly, emphasizing agility, accuracy, and strategic relevance in supporting organizational goals.

2.2 Core Competencies Accounting Talents Should Possess

Accounting talents in the intelligent era must master a diverse set of competencies that combine professional expertise with technological proficiency. Proficiency in intelligent tools such as data analytics software, cloud accounting platforms, and automation tools is essential, enabling efficient processing and interpretation of complex financial data. Strong analytical skills are required to identify patterns, trends, and anomalies in large datasets, transforming raw information into meaningful business intelligence. Cross-disciplinary knowledge, including elements of information technology, management, and economics, facilitates holistic understanding of business operations and enhances collaboration with

non-accounting departments. Ethical awareness and data security literacy are also critical, as intelligent technologies raise issues related to data privacy, algorithmic bias, and regulatory compliance. Communication and critical thinking skills enable effective presentation of analytical results and informed decision-making in dynamic business environments. These competencies collectively define the modern accounting professional, ensuring adaptability and value contribution in an increasingly technology-driven industry.

3. Existing Problems in the Cultivation Mode of Accounting Talents in Colleges and Universities

3.1 Disconnection Between Curriculum System and Intelligent Needs
Current accounting curricula in many colleges and universities remain centered on traditional accounting knowledge, with insufficient integration of intelligent technology content. Core courses primarily focus on basic accounting principles, financial reporting, and auditing standards, while topics such as data analytics, artificial intelligence applications in accounting, and blockchain technology are either absent or covered superficially. Elective courses related to information technology are often limited in scope and fail to connect technological concepts with accounting practices. the curriculum update cycle is slow, failing to keep pace with rapid technological advancements in the industry. This disconnection results in graduates lacking the skills required to operate intelligent accounting systems or leverage data analytics tools, reducing their competitiveness in the job market. the overemphasis on theoretical knowledge at the expense of technological application further widens the gap between academic education and industry demands.

3.2 Backwardness of Teaching Methods and Means
Teaching methods in accounting education remain predominantly traditional, relying heavily on lecture-based instruction and textbook learning. Interactive teaching techniques such as case discussions, problem-based learning, and collaborative projects are underutilized, limiting students' ability to apply knowledge in practical scenarios. the use of

educational technology is also inadequate, with few institutions leveraging intelligent teaching platforms, simulation software, or online collaborative tools. Classroom activities focus on knowledge transmission rather than skill development, neglecting the cultivation of analytical thinking and technological proficiency. Assessment methods are similarly outdated, emphasizing memorization and standardized testing over creative problem-solving and practical application. This reliance on conventional teaching approaches fails to simulate the dynamic, technology-driven environment of modern accounting practice, hindering students' adaptability to real-world challenges.

3.3 Weakness in Practical Teaching Links
Practical teaching in accounting programs suffers from multiple deficiencies that impede the development of applied skills. On-campus laboratories are often equipped with outdated software and hardware, lacking access to the latest intelligent accounting systems and data analytics tools used in industry. Off-campus internship programs are limited in scope and depth, with many students engaging in routine tasks rather than meaningful participation in intelligent accounting processes. Partnerships between colleges and enterprises are insufficiently developed, resulting in a lack of real-world project opportunities for students. Practical training modules are often disconnected from theoretical courses, failing to integrate technological applications with accounting principles. This weakness in practical teaching prevents students from gaining hands-on experience with intelligent tools, leaving them unprepared to handle the practical challenges of the modern accounting workplace.

3.4 Insufficient Intelligent Competence of Teaching Staff
Faculty members in accounting departments often lack sufficient proficiency in intelligent technologies, limiting their ability to deliver high-quality education in this area. Many educators possess extensive knowledge of traditional accounting but have not received systematic training in data analytics, artificial intelligence, or other relevant technologies. Professional development opportunities focused on intelligent accounting are scarce, and

institutions rarely provide incentives for faculty to update their technological skills. the gap between faculty competencies and industry requirements is further widened by the rapid pace of technological advancement, making it difficult for educators to stay current with emerging tools and practices. This deficiency in faculty expertise hinders the effective integration of intelligent content into curricula and limits students' exposure to cutting-edge accounting technologies, ultimately undermining the quality of talent cultivation.

4. Transformation Paths of Accounting Talent Cultivation Mode in Colleges and Universities

4.1 Optimize Curriculum System and Integrate Intelligent Content

Reforming the curriculum system involves systematically integrating intelligent technology content into accounting education. Core courses should be revised to include modules on data analytics for accounting, intelligent auditing, and the application of blockchain in financial reporting. New elective courses focusing on programming for accounting, machine learning basics, and cloud accounting systems can provide students with specialized technological skills. the curriculum should emphasize the integration of accounting principles with technological applications, ensuring that students understand not only how to use intelligent tools but also their underlying principles and limitations. Cross-disciplinary courses, combining accounting with information technology, business analytics, and cybersecurity, can foster holistic thinking and problem-solving abilities. Regular curriculum reviews, involving input from industry professionals and technology experts, are essential to ensure alignment with evolving industry needs.

4.2 Innovate Teaching Modes and Adopt Intelligent Means

Teaching innovation requires the adoption of student-centered approaches that leverage intelligent technologies to enhance learning experiences. Flipped classroom models, where students engage with online lectures and materials outside class, can enable in-class time to be focused on interactive discussions, case analyses, and practical exercises using

intelligent tools. Educational platforms incorporating adaptive learning algorithms can provide personalized learning paths, allowing students to progress at their own pace and receive targeted feedback. Simulation software and virtual reality tools can create realistic accounting scenarios, enabling students to practice using intelligent systems in a risk-free environment. Collaborative learning projects, facilitated by online platforms, can develop teamwork and communication skills while addressing complex accounting challenges using data analytics and automation. Continuous assessment methods, including project-based evaluations and real-time performance tracking, can provide a more comprehensive measure of students' technological and professional competencies.

4.3 Strengthen Practical Teaching and Build Intelligent Platforms

Enhancing practical teaching requires the development of intelligent platforms and partnerships that connect classroom learning with real-world practice. On-campus intelligent accounting laboratories should be equipped with the latest software, including data analytics tools, robotic process automation systems, and cloud-based accounting platforms, to simulate industry environments. Virtual internship programs, leveraging technology to connect students with enterprises, can provide access to real accounting projects and mentorship from industry professionals. Collaborative research initiatives between colleges and businesses can involve students in solving actual accounting problems using intelligent technologies, fostering innovation and practical experience. Industry certification programs, integrated into the curriculum, can provide students with recognized credentials in intelligent accounting tools and practices, enhancing their employability. Regular workshops and competitions focused on intelligent accounting applications can further strengthen students' practical skills and technological proficiency.

4.4 Strengthen Faculty Construction and Improve Intelligent Literacy

Faculty development programs are crucial to enhancing educators' intelligent literacy and teaching capabilities. Institutions should provide systematic training in data analytics, artificial intelligence, and other relevant

technologies, ensuring that faculty members are proficient in the tools and concepts they teach. Visiting scholar programs and industry secondments can allow faculty to gain practical experience with intelligent accounting systems in real-world settings, bringing valuable insights back to the classroom. Recruitment of new faculty with expertise in both accounting and information technology can diversify departmental competencies and drive curriculum innovation. Collaborative teaching initiatives, pairing accounting professors with technology experts, can facilitate knowledge sharing and the development of interdisciplinary courses. Incentive mechanisms, such as recognition for innovative teaching methods and research on intelligent accounting education, can encourage faculty to invest in updating their skills and contributing to educational reform.

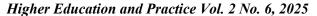## 4.5 Construct a Multi-Agent Collaborative Cultivation Mechanism

Establishing a collaborative cultivation mechanism involves engaging multiple stakeholders to create a comprehensive educational ecosystem. Partnerships between colleges, accounting firms, technology companies, and regulatory bodies can ensure that educational content reflects industry needs and regulatory requirements. Advisory boards composed of industry leaders and academic experts can provide guidance on curriculum design, technological integration, and skill development priorities. Joint training programs, where enterprises participate in course development and deliver guest lectures, can bridge the gap between academic theory and practical application. Resource-sharing initiatives, such as access to enterprise data (with appropriate privacy protections) and technological tools, can enhance the realism of teaching and learning activities. Government support, through funding for educational innovation and policy incentives for industry-academia collaboration, can further promote the development of effective cultivation mechanisms. This multi-agent approach ensures that accounting education remains responsive to technological advancements and market demands, fostering the development of highly qualified talent.
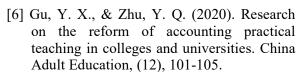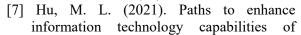
5. Conclusion

The intelligent era has fundamentally transformed the accounting industry, creating new demands for professional competencies and reshaping the role of accounting professionals. This study highlights the necessity of transforming accounting talent cultivation modes in colleges and universities to meet these evolving requirements. By analyzing the impact of intelligent technologies on accounting functions and identifying core competencies for modern accounting talent, the research reveals critical deficiencies in existing educational frameworks, including outdated curricula, traditional teaching methods, weak practical training, and insufficient faculty expertise. the proposed transformation paths, encompassing curriculum optimization, teaching innovation, practical platform development, faculty training, and multi-agent collaboration, provide a comprehensive strategy for aligning accounting education with industry needs. Implementing these paths will enable colleges and universities to cultivate compound accounting talents equipped with both professional knowledge and technological proficiency, enhancing their ability to contribute to organizational success in the intelligent era. Future research could focus on empirical studies to evaluate the effectiveness of specific transformation measures and explore region-specific adaptations to address diverse educational contexts.

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