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The Impact of Artificial Intelligence Technology on Labor Demand in the Accounting Industry and Pathways for Adaptation

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Abstract: The digital economy strategy is being advanced in an all-round way, and artificial intelligence (AI) technology is penetrating deeply into traditional service industries. As a comparatively standardized professional field, accounting and finance is undergoing continuous structural change in its working models, job structure, and talent standards. The Ministry of Finance's Accounting Reform and Development Plan for the 15th Five-Year Plan Period (Draft for Comment) sets out the direction of the digital-intelligent transformation of accounting; the 2025 Central Economic Work Conference deployed the task of deeply integrating AI with the real economy; and the 2026 Annual Academic Conference of the Accounting Society of China identified the trend toward reconstructing professional competencies. Taking changes in labor demand in the accounting profession as its research object, this paper draws on authoritative findings in Chinese Social Sciences Citation Index core journals and combines them with recruitment big data, policy documents, and frontier views from academic conferences. It reviews AI application scenarios in accounting, analyzes the adjustment characteristics of the industry's labor demand structure, summarizes practical problems at the levels of university talent cultivation, enterprise job design, and student capability adaptation, and proposes detailed and actionable solutions for these three parties. The study offers a theoretical reference for the employment of accounting students, teaching reform in higher education, and enterprise talent allocation in the new era.

Keywords: *Artificial Intelligence; Accounting Profession; Labor Demand; Job Structure; Talent Cultivation*

I. INTRODUCTION

A. Research Background

The construction of the national digital economy continues to deepen, and intelligent tools are gradually replacing traditional repetitive labor. Accounting work has long relied on fixed standards and standardized processes, and the pace of digital transformation in the industry ranks among the fastest in the fields of economics and management. Financial software vendors such as Kingdee, Yonyou, and Jiuqi have continued to iterate intelligent finance systems, and basic accounting tasks such as invoice recognition, voucher generation, intelligent reconciliation, and batch tax filing have become machine-automated.

The 2025 Central Economic Work Conference emphasized the digital and intelligent upgrading of traditional industries and the optimization and upgrading of production methods and employment structures. The Ministry of Finance's Accounting Reform and Development Plan for the 15th Five-Year Plan Period (Draft for Comment) proposes accelerating the digital transformation of accounting work and integrating big data and AI technology into the entire process of accounting, internal control, and financial management. The 2026 Annual Academic Conference of the Accounting Society of China held special discussions on the reshaping of accounting positions, the reform of accounting education, and the building of digital-intelligent talent, identifying the industry trend of moving from bookkeeping positions toward managerial and analytical positions.

The enrollment scale of accounting programs at Chinese universities is stable, and the annual number of graduates is large. Annual employment industry reports published by Zhaopin and 51job show that the volume of recruitment for basic bookkeeping accounting positions is shrinking year by year, while recruitment for compound accounting positions that require data analysis and intelligent system operation continues to rise. There is a disconnect between the knowledge structure of accounting students and the latest job requirements of the industry. Against the background of industry transformation, a systematic study of the impact of AI on labor demand in the accounting profession is of practical necessity.

B. Research Objectives

This paper aims to review the scope of AI technology application in the accounting industry and the forms it takes in practice, to analyze the characteristics of change in the industry's labor demand structure, to summarize the problems that accounting talent faces in adapting to a digital-intelligent industry environment, and to construct a three-dimensional adaptation system covering universities, enterprises, and students, together with concrete and feasible optimization pathways.

C. Literature Review

1. Foreign Research

In 2013, Autor and colleagues published a classic theory of task substitution in The Quarterly Journal of Economics (Autor et al., 2013). The study distinguishes standardized from non-standardized tasks in the labor market: work content with fixed processes, clear rules, and strong repetitiveness has a high probability of being replaced by automation, whereas work requiring professional judgment, logical analysis, and interpersonal collaboration retains the value of human labor. This theory has become a foundational paradigm for research on how technological change affects employment structure.

In 2018, Balsmeier and colleagues conducted an industry study of the allocation of financial positions in enterprises (Balsmeier et al., 2018). After intelligent financial systems became widespread, the number of staff in basic bookkeeping positions shrank, and the personnel structure of corporate finance departments shifted toward data analysis,

risk control, and strategic finance, so that enterprise labor demand moved from operational manpower toward analytical and decision-oriented manpower.

In 2021, Zhang studied the career development of accounting practitioners (Zhang, 2021). The spread of intelligent tools triggered changes in the occupational structure of grassroots accounting personnel, the pace of skill renewal in the industry accelerated, and traditional accounting personnel faced the problem of lagging skill iteration.

2. Domestic Research

In 2024, Yang Yin and Liu Qin published "Accounting Transformation in the Age of Artificial Intelligence: Evolutionary Logic and Analytical Framework" in Accounting Research, a Chinese Social Sciences Citation Index (CSSCI) core journal; the paper ranks among the top of its kind in downloads and citations on the China National Knowledge Infrastructure (Yang & Liu, 2024). The study concludes that human-machine collaboration has become the mainstream mode of accounting work, that basic bookkeeping functions are gradually being taken over by intelligent systems, and that accounting management, financial assessment, and business decision-making have become the core work of accounting personnel.

In 2026, Chen Jun and colleagues published empirical findings on AI, the structural adjustment of accounting personnel skills, and financial reporting quality in Accounting Research (Chen et al., 2026). Drawing on domestic recruitment big data for statistical analysis, the study found that the spread of AI technology compresses corporate demand for basic bookkeeping skills and that digital, information-based, and data-analytical skills have become the core indicators in corporate recruitment of accounting graduates; the iteration of job skill requirements is thereby forcing reform of accounting talent cultivation systems.

In 2023, Wang Shijie and Liu Feng published research on the impact of large language models on the accounting industry in Financial Research (Wang & Liu, 2023). General-purpose AI tools will not cause the wholesale disappearance of the accounting profession; rather, the boundaries of positions, work content, and competency standards are undergoing systematic reconstruction, and modern accounting personnel need to combine professional knowledge, business understanding, and the ability to apply digital tools.

In 2019, Peng Qifa and Wang Huiyun published talent cultivation research in Commercial Accounting, a Peking University core journal (Peng & Wang, 2019). AI is changing the employment structure of the accounting industry, and traditional university curricula cannot keep pace with the rhythm of industry transformation; accounting teaching therefore needs to incorporate digital and information-based content in order to cultivate compound accounting talent.

In 2018, Yu Yingmin and Wang Cailin studied the application value of financial robots in Friends of Accounting, a Peking University core journal (Yu & Wang, 2018). Intelligent equipment replaces a large amount of basic accounting work, so demand for low-end labor in the industry continues to decline while demand for high-end compound labor continues to rise.

3. Summary and Dynamic Assessment of the Research Status

Existing domestic core literature and classic foreign theories fully support the basic logic by which AI affects labor demand in accounting positions, and prior studies have verified the industry characteristics of substitution effects in basic positions and creation effects in high-end positions. However, existing research focuses mostly on macro-level industry change and on theoretical analysis of technology, and detailed studies conducted from the perspective of employment adaptation for undergraduate accounting students are relatively scarce.

The dynamic industry environment exhibits new research characteristics. From 2025 to 2026, generative AI and large-model financial tools have been fully commercialized, and the latest national accounting development plan and the views expressed at the annual academic conference of the Accounting Society of China have updated judgments about industry development. The data background and industry scenarios of traditional research lag behind the current pace of digital-intelligent development, and new features have emerged in job demand, corporate hiring standards, and talent adaptation. Combining the latest policies, industry reports, and frontier academic views, this paper refines research on changes in accounting labor demand and fills the timeliness gap in existing research.

D. Research Content

This paper reviews the forms in which AI is applied in accounting, audit supervision, and financial management; summarizes the patterns of change in the job structure, labor demand, and skill standards of the accounting industry; identifies the prominent problems that exist in university teaching systems, enterprise job allocation, and student capability reserves; and builds optimization pathways for the three parties concerned, forming a talent development plan suited to the digital-intelligent era.

E. Research Methods

Literature review. Core journal publications such as Accounting Research, Financial Research, and Commercial Accounting were retrieved and reviewed, and classic domestic and foreign theories and frontier views were drawn on in order to build the research framework of this paper.

Data analysis. Relying on annual industry reports and big data statistics on positions published by mainstream recruitment platforms, the study analyzes trends in the number, skill requirements, and types of accounting positions.

Policy analysis. Combining the spirit of the Central Economic Work Conference, the accounting development plan of the Ministry of Finance, and the outcomes of academic conferences of the accounting society, the study identifies the official orientation and development trends of industry transformation.

II. AI APPLICATIONS IN THE ACCOUNTING INDUSTRY AND CHANGES IN LABOR DEMAND

A. Main Application Scenarios of AI in the Accounting Industry

Accounting scenarios employ intelligent recognition and automatic bookkeeping technology. Information from electronic and paper invoices is captured through image recognition; the finance system automatically matches accounting subjects according to fixed accounting standards

and generates standardized bookkeeping vouchers; and the system automatically completes basic bookkeeping processes such as bank statement reconciliation, current account checking, and period-end carryforward. The repetitive work of manual entry and manual checking has thus been largely automated.

Audit scenarios employ intelligent audit and risk control systems. The platform captures corporate bookkeeping data, contract data, and tax data in batches, and the system automatically screens for abnormal accounting subjects, non-compliant invoices, and tax-related risk points. Machines complete the preliminary screening of massive numbers of vouchers, while human work concentrates on risk verification, professional judgment, and the issuance of audit conclusions.

Financial management scenarios employ intelligent analytical models. AI integrates multidimensional operating data on revenue, cost, expenses, and inventory; the system automatically generates financial analysis statements, operating trend reports, and tax burden estimates; and intelligent tools assist enterprises in budgeting, business assessment, and financial planning.

B. Structural Changes in Labor Demand in the Accounting Industry

Demand for standardized basic positions continues to contract. Positions such as cashier, basic bookkeeping accountant, invoice specialist, and data entry specialist involve single, fixed work processes that intelligent systems can complete reliably, so enterprises are reducing recruitment for basic operational accounting positions and scaling down their basic staffing.

Demand for compound managerial positions continues to expand. Recruitment for financial data analysis, financial risk control, business-finance integration coordination, and finance business partner (BP) positions is rising year by year. Enterprises need staff who can interpret machine-generated data, analyze operational problems, liaise with business departments, and provide financial decision-making advice, so requirements for the comprehensive capability of high-end accounting positions continue to rise.

Job skill requirements have been iterated and upgraded. Traditional accounting positions emphasized memorizing standards, bookkeeping operations, and tax filing procedures, whereas in the digital-intelligent context positions emphasize data interpretation ability, intelligent system operation ability, risk identification ability, and business coordination ability. Single bookkeeping skills can no longer meet the needs of accounting positions in modern enterprises.

C. Current Supply and Demand in the Accounting Talent Market

Undergraduate institutions in China generally offer accounting programs, and the annual supply of graduates is stable in scale. Most students concentrate their learning on traditional bookkeeping and on preparation for accounting certificates, and their reserves of digital tool application, data analysis, and business analysis capability are insufficient.

Hiring standards on the enterprise side continue to rise. Large enterprises and accounting firms have fully popularized intelligent finance systems, while small and medium-sized enterprises are gradually replacing traditional manual bookkeeping. The market as a whole therefore displays a structural supply-demand mismatch: an oversupply of basic accounting personnel and an undersupply of compound digital-intelligent accounting talent.

III. EXISTING PROBLEMS IN THE ACCOUNTING INDUSTRY UNDER DIGITAL-INTELLIGENT CONDITIONS

A. Shortcomings in University Accounting Teaching

Curriculum updates lag behind industry development. Core courses in most university accounting programs remain traditional financial accounting, cost accounting, and financial management, while courses in intelligent finance, financial big data analysis, and digital-intelligent practical training are offered at a comparatively low rate. Some institutions set digital courses as electives, so student coverage is insufficient.

Practical teaching content is divorced from real enterprise scenarios. On-campus training courses focus on manual bookkeeping, simulated tax filing, and paper voucher processing, and training scenarios remain at the level of traditional accounting work models. Students lack hands-on training with intelligent finance systems and find it difficult to adapt quickly to intelligent working environments after graduation.

The orientation of talent cultivation leans toward traditional bookkeeping ability. Teaching assessment and course priorities emphasize the accuracy of bookkeeping and the degree of mastery of standards, and the teaching system lacks guidance for cultivating data analysis, risk assessment, and business-finance integration capabilities.

B. Problems in Enterprise Job Allocation and Talent Use

The progress of enterprise digital transformation is clearly stratified. Large enterprises, listed companies, and accounting firms have mature intelligent systems, whereas small, medium, and micro enterprises have limited funds and traditional management models, so the penetration of intelligent finance tools remains low. This uneven industry-wide transformation results in significant differences in hiring standards across regions and enterprise sizes.

The internal skill iteration mechanism of enterprises is incomplete. Most enterprises lack a routine digital training system. Existing accounting staff have long relied on traditional working models and are insufficiently proficient in operating intelligent finance systems, verifying machine-generated data, and screening AI outputs, which makes work transition comparatively difficult for older employees.

It is comparatively difficult for enterprises to match talent through campus recruitment. Graduates generally possess a solid traditional accounting foundation but are weak in digital practice, data analysis, and problem assessment, so enterprises struggle to recruit compound talent suited to human-machine collaborative working models.

C. Capability Gaps Among Accounting Students

Students' perceptions of professional learning are fixed. Students generally regard obtaining certificates and mastering manual bookkeeping as their core learning goals; they neglect the digital-intelligent transformation trend of the industry and lack the awareness to learn digital skills proactively.

Students' understanding of positions is narrow. Their employment targets concentrate on cashier, bookkeeping accountant, and basic tax filing positions, and they have insufficient knowledge of emerging positions such as financial

analysis, finance BP, and risk control; their career planning therefore does not match changes in the industry's job structure.

Students' digital practical ability is weak. Most students master only basic office software, and their reserves of advanced data processing, intelligent finance platform operation, and financial data analysis are insufficient, so they cannot adapt to the human-machine collaborative working model of modern enterprises.

IV. SPECIFIC PLANS FOR OPTIMIZING THE DEVELOPMENT OF THE ACCOUNTING INDUSTRY IN THE CONTEXT OF AI

A. Plans for Optimizing University Accounting Teaching

Update the structure of the professional curriculum. Core foundational courses such as financial accounting, cost accounting, and tax law should be retained, while required practical courses in intelligent finance applications, financial big data analysis, and advanced Excel data processing should be added. Digital-intelligent teaching content should be incorporated into the talent cultivation plan, and digital practical training should be guaranteed to account for no fewer than 16 class hours per semester.

Reconstruct practical teaching scenarios. The share of traditional manual bookkeeping training should be reduced, intelligent finance training platforms such as Kingdee and Yonyou should be introduced, and an on-campus digital-intelligent accounting training environment should be built. Off-campus training bases should be established with local enterprises and accounting firms in order to give students contact with real intelligent finance working scenarios.

Optimize the orientation of talent cultivation and career guidance. Teaching assessment standards should be adjusted by adding assessment of data analysis, case assessment, and system operation. Career guidance courses should introduce emerging accounting positions and explain the work content and competency requirements of finance BP, intelligent audit, and financial analysis positions, so as to broaden students' employment horizons.

B. Plans for Optimizing Enterprise Accounting Positions and Talent Cultivation

Advance enterprise digitalization in tiers. Large enterprises should continue to improve financial shared service centers, intelligent audit systems, and AI financial analysis platforms. Small and medium-sized enterprises should give priority to deploying lightweight intelligent tax filing, invoice recognition, and automatic bookkeeping tools, completing the intelligent upgrading of financial processes step by step in line with their operating scale and financial capacity.

Build a routine employee skill training mechanism. Enterprises should conduct internal digital skill training every month, focusing on intelligent system operation, verification of AI-generated financial data, and risk identification in intelligent work, so as to help on-the-job employees adapt to human-machine collaborative working models and complete the iteration of job capabilities.

Optimize the evaluation system for campus recruitment. Enterprises should reduce the weight given to graduates' purely bookkeeping ability and focus instead on students' data analysis thinking, foundation in digital tools, and financial risk judgment. They should not set programming or advanced technical thresholds but should emphasize students' adaptability to financial work and their learning potential.

C. Plans for Improving the Capabilities of Accounting Students

Consolidate foundational accounting capabilities. Students should systematically master accounting standards, financial logic, tax law, and the fundamentals of cost accounting; value the quality of their professional coursework; build solid financial judgment and risk identification ability; and take a rational view of vocational certificates, treating them as a supplement to capability rather than as the end point of learning.

Proactively build a digital capability system. Students should learn Excel pivot tables, function operations, and the basics of data visualization on their own; use free online training platforms to become familiar with the basic operations of intelligent finance systems; and focus on mastering practical skills in verifying machine-generated financial data, identifying abnormal data, and correcting AI reports.

Update perceptions of career development. Students should proactively learn about emerging digital-intelligent accounting positions, accumulate experience in financial analysis, data organization, and business liaison through extracurricular study and internships, and develop human-machine collaborative working thinking so as to keep pace with the upgrading of the industry's job structure.

V. CONCLUSIONS, LIMITATIONS, AND PROSPECTS

A. Conclusions

AI technology has produced a clear structural impact on the accounting industry. Labor demand for basic standardized bookkeeping positions continues to contract, while demand for compound, analytical, and managerial accounting positions continues to expand, and industry hiring standards shift from purely operational ability toward a compound capability that integrates professional and digital competence.

In the digital-intelligent transformation of the accounting industry, three problems stand out: university teaching systems update too slowly, enterprise talent cultivation is incomplete, and students' capability structures are fixed. Simultaneous optimization and adjustment by the three parties can effectively adapt to the changing trend of industry labor demand. Universities optimize curricula and training systems, enterprises advance digitalization and employee training in tiers, and students proactively iterate their knowledge and skill structures; through this coordination, the supply of accounting talent can be precisely matched to industry job requirements.

The conclusions are consistent with the industrial upgrading orientation of the 2025 Central Economic Work Conference, match the Ministry of Finance's plan for the digital-intelligent development of accounting, and align with the core views on industry transformation presented at the 2026 Annual Academic Conference of the Accounting Society of China.

B. Research Limitations

This study draws on public industry data, authoritative literature, and the views expressed at policy conferences. Its conclusions are derived from the overall development trend of the domestic accounting industry and do not constitute differentiated, detailed research on accounting positions in different regions or sectors. The study focuses on general

patterns and general countermeasures, so its applicability to specific scenarios is limited.

C. Research Prospects

Future research could incorporate data on accounting positions in enterprises of different industries and sizes in order to refine the characteristics of differentiated labor demand; continue to track the iterative achievements of generative AI technology and examine the direction in which competency standards for accounting positions will be updated; and further improve the pathways for cultivating and developing accounting talent in the digital-intelligent era.

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