

Accounting Roles under China's Digital-intelligent Era Take into Account Three Facets: Policy, Education, and Technology

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Abstract

With the gradual process of digital intelligence transformation speeding up the reshaping of the accounting profession, the policy demand to upgrade accounting standards software promotes electronic voucher standards, digital workflow procedures, while businesses require advanced accounting talent that excels at using technology and data analysis. Universities also take a comprehensive approach to IT-enabled teaching reforms. They impel contemporary accountants to shift from their current foundational role as record keepers to functions that revolve around corporate-level data governance and supporting business decisions, motivated by changes in policies, firms, universities and using a mixed methods research perspective to show a main contradiction. Next it proposes an improvement direction with three prongs: to increase training related to data governance enhancement; integrate technical tool-related subjects within majors; improve the mechanism for industrial-academic collaboration. The final section points out to establish a tripartite mechanism between government, education and industry in order to encourage the strengthening of technical standards, innovate curricula via instructional technology and train employees based on companies' competence-gap needs.

Keywords

Accounting Role Transformation; Digital Intelligence Capability; Diindustry-Education Integration; Policy Drive.

1. Introduction

Digital intelligent technology and China's policy for electronic vouchers/invoices have changed the whole financial business, as now companies will focus more on accountants with data analysis capability, digital intelligence and strategy rather than an ordinary bookkeeper^[1].

This research studies the changes of accounting jobs in China based on policy, education, technology. It presents an empirical analysis from literatures and surveys. It will explain how to match the talent and level of accounting development, update "AI+Accounting", and move accountants' role from bookkeeping to giving strategic advice to remain competitive.

2. Theoretical Background and Literature Review

China's accounting profession is experiencing a fundamental change under the joint impetus of digital-intelligent technology (big data, AI, process automation) and the Electronic Voucher Accounting Data Standard policy^[2]. This change results in a new type of organizational activity, thereby accelerating a transition from transaction recording toward data management and strategic decision-support operations. As a result, universities integrate these advanced

technologies in their accounting programs, whereas firms reprioritize the importance of analytics skills and strategic thinking on talent^[3].

Scholarly research notes accounting change aligns with national plans like the Accounting Informatization Development Plan (2021-2025), but education-industry gaps persist (AI, data analysis). More integration is needed to nurture tech-enabled accounting talents^[4].

3. Research Context and Methodology

This research evaluates how digital-intelligent transition influences accounting practices. Based on the analysis on students' and professionals' views, accounting education, professional skills required for accountants, as well as work organization patterns during the process of tech advancement can be observed.

The report employs literature reviews, questionnaires, and data analysis; it borrows material from CNKI and China's government Web sites concerning Guangdong's digital literature, conducts student/professional opinion surveys, collects raw data through questionnaires, carries out statistical analyses and a statistical summary.

4. Research Analysis and Conclusion

The accounting sector undergoes great changes. This study uses statistics and surveys to analyze digital-intelligent transformation's contribution to accountants' roles and qualifications.

4.1. Uneven Technological Capabilities across Enterprises

As accounting profession digitalization and intelligence develop rapidly, the functions of accountants are moving toward more value creation from the traditional bookkeeping.

4.1.1. From Basic Accounting to Automation

Surveys find more than half of accountants have automated more than one third of their tasks and over one-third (31.37%) of accountants report having automated over 60% of the work they do. Automation raises productivity, shifts roles; smart systems take care of the boring book-keeping leaving room for work of higher value. As basic accounting demand decreases, financial analyst demand increases.

4.1.2. Data Analysis as a Competitive Edge

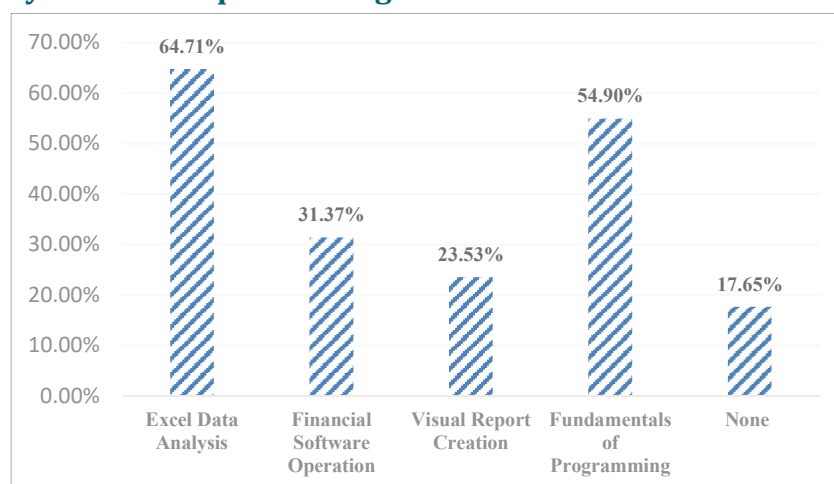


Figure 1. Distribution Map of Digital Learning Content for Accountants

Figure 1 shows that the majority (64.71%) of accounting experts who have acquired Excel skills are also doing basic data analysis and over half (54.9%) who have learned to code. In line

with the request of many employers, accounting professionals' skills need to be up-skilled as firms see the value of incorporating financial data into their decision-making process. However, only a small minority (23.53%) of accountants know how to visualize data, thereby indicating the potential for improvement concerning data visualization skills and communicating information through visual content.

4.1.3. Strengthened Strategic Decision-Making

Survey results show strategic decision-making support's growing importance for accountants: about 66.67% see financial risk identification as necessary, approximately 52.94% want to be financial analysts. This means accounting is shifting to organizational strategy—modern accountants now do more than post hoc bookkeeping, aiding strategy and decisions. These changes bring opportunities but stricter demands on their capabilities.

4.2. Digital Transformation Creates New Competency Demands

With deepening of the digitalization and intelligence transformation, the core competence framework of accounting personnel shall be reconstructed in a new pattern; the combination of digitalization and intelligence technology ability is becoming the core competence of the new era accounting talents.

4.2.1. Digital Skills as Career Threshold

Surveys show that the operation of intelligent systems is a new threshold in accounting, with 50.98% prioritizing them, and only 21.57% valuing data analysis; technology changes the road, using RPA, ERP, and intelligent reporting as criteria; blockchain and AI-assisted decision-making have emerged, requiring accountants to continue studying.

4.2.2. Gaps in Training Models

Analyzing **Figure 2**, we can see that there are evident shortages in today's training system: while 52.94% of respondents receive some kind of basic training, only 11.76% receive no training at all; due to limited investment by universities and outdated company training, accountants lack the intelligent skills they need; due to the training-needs gap, this limits accounting digital transformation, hence a cross-sector collaboration for aligning with talent needs development is required.

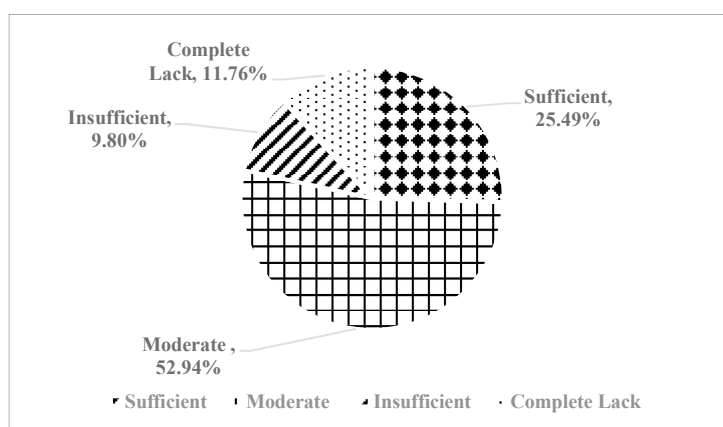


Figure 2. Level of Technical Support Provided by Schools and Enterprises

To summarise, based on **Figure 2** it is evident that accounting training at present suffers from many crucial technical defects. The fact that most novice accountants do not receive adequate training means they would benefit from a new model being developed with wide consultation across various education bodies and industries to be able to adjust to modern technologies as much as possible. Collaboration among all parties could also help ensure that technical

requirements closely match industry standards. Altogether these efforts should further advance the progress of digitalising the accounting field and equip accountants to survive in today's highly technologically driven world.

5. Strategic Recommendations

In terms of the following discussion, two specific tasks will be presented. These four strategies enable solutions for solving the basic problems of service-based lifestyle transformation for smart cities and also focus on the quality improvement of the digital industry's output in term of serving society as well.

5.1. Boost Public Awareness and Promote Digital Inclusion

The public's confidence and active participation in the intelligent transformation process are necessary for a bridge over the digital divide. Governments, local and national, along with enterprises should place emphasis on increasing public awareness of their willingness to employ or befriend computers. This applies particularly to the rural community and the elderly. Methods of doing this include town halls and community teaching sessions, user-friendly apps and simple video tips and tutorials.

By involving citizens in the co-design process for services – using channels like surveys or digital forums – the significance, and therefore value and accessibilities, of smart services can increase. When users are engaged as active partners versus only consumers, trust amongst the public builds as well as increasing the adoption rate.

5.2. Accelerate the Cultivation of Digital-Savvy Talent

A digital-savvy workforce is needed to lead this effort towards progress, and it's important that universities offer multidisciplinary courses to combine technical know-how with digital competences. Corporations can encourage their workers to undertake more professional trainings through internship schemes and qualification programs. For the current workforce – especially workers in front-line services – reskilling will need to focus on engaging and flexible modes of education such as online training platforms, micro-learning apps, or skills-focused efforts from governments. Providing positive incentives from employers is one additional way of making sure that ongoing learning and development remains highly relevant to learners' needs.

5.3. Accelerate the Cultivation of Digital-Savvy Talent

Solid infrastructure is a basis for digitalisation; therefore, extending broadband, 5G network and municipal data centers to lower-tier cities and villages needs to be ensured so that services can be enjoyed evenly across all areas. Potential risks or costs of such practice can be compensated by opting for public-private partnership programmes.

More efforts need to be made to enhance the inter-operability among platforms so that they can create a more effective system as a whole. Governments should recommend the adoption of open standards and data sharing protocol, and prevent fragmentation and improve cohesiveness of services for SMEs to fully participate.

5.4. Improve Policy Coherence and Regulatory Safeguards

Digital transformation requires that the institutional environment be responsive and coordinately aligned; hence, establishing a central coordination unit at the provincial level is instrumental in achieving an easily harmonized policy, decreasing interdepartmental conflicts, and ensuring that a unified implementive initiative is promptly conveyed to accomplish action in line with the goals set forward.

Not only is it necessary to modify current laws governing the way data is used, the people who are responsible for algorithms are held accountable and consumers' rights are enshrined in law, but also we need clear rules with actionable measures so as to improve transparency, protect users and build the institutional trust needed for sustainable innovation.

6. Conclusion

China's digital intelligent accounting transformation has been fully carried out; policy as well as technology transform the financial process, change the accountant's value from accounting calculation to data governance/strategic management, but the market requires technical people and schools fail to offer them; Competency-focused effort to align transforming skill & leadership should be made to drive disruption to innovation.

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