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Research on the ability improvement strategy of enterprise financial personnel under the background of digital transformation

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Abstract:
In the context of digital transformation, China's digital economy has achieved rapid development, imposing increasingly stringent requirements on the professional competencies of corporate financial personnel. This paper examines the era's backdrop by first elucidating the concept and core characteristics of digital transformation. It then analyzes the necessity for financial professionals to enhance their capabilities from three perspectives: national macro-level requirements, practical enterprise needs, and personal growth objectives. The study identifies current challenges faced by financial staff, including inadequate skill alignment, ambiguous career role positioning, delayed knowledge structure updates, and insufficient integration of job functions. Subsequently, it delves into the root causes behind these issues. Finally, targeted strategies are proposed to drive skill upgrading, clarify career development pathways, expand job cognition frameworks, bridge intergenerational knowledge gaps, establish multi-stakeholder collaboration systems, deepen digital literacy, and optimize knowledge architecture to strengthen business-finance integration capabilities. These measures aim to empower financial personnel to adapt to contemporary demands and achieve mutual success for both individuals and enterprises.

Keywords:
Digital transformation,Financial personnel,Ability improvement,Financial management

1.Introduction

With the rapid advancement of cloud computing, big data, artificial intelligence, and other technologies, the digital economy has flourished both in China and globally. As stated in the White Paper on Digital Economy released by the China Academy of Information and Communications Technology (CAICT), China's digital economy has not only grown rapidly in recent years but also played a pivotal role in driving high-quality economic development. Meanwhile, financial digitization has become an inevitable trend and a necessary path for enterprise development in the new era. The Ministry of Finance outlined in its "Accounting Informatization Development Plan (2021-2025)" that during the 14th Five-Year Plan period (2021-2025), key objectives include establishing a basic accounting data standard system and accelerating digital transformation in ac-

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counting practices, while actively promoting accounting digitization to build a national accounting informatization framework. Against this backdrop, many corporate finance professionals are concerned about potential replacement by emerging technologies like artificial intelligence and automated information systems. As the core of financial management, whether corporate finance professionals can adapt to new changes in digital transformation and enhance their digital capabilities has become a crucial issue for contemporary society. To address this transformation, only through continuous learning and innovation can financial personnel remain competitive in the wave of the digital economy.

2.The concept and characteristics of digital transformation

Digital transformation refers to the process where enterprises reshape their business models, services, and workflows through data-driven approaches and digital technologies. [7]This evolution goes beyond mere technological upgrades—it fundamentally transforms corporate culture, strategic direction, and operational frameworks. The digitalization process primarily encompasses five key stages: data collection, storage, processing, analysis, and application. Its ultimate goals are to reduce costs, enhance decision-making capabilities, boost efficiency, and create new value streams.[8]

The core characteristics of digital transformation encompass five key dimensions: First, leveraging advanced digital technologies such as cloud computing, big data, and artificial intelligence to optimize business processes. Second, establishing flexible organizational structures that enable rapid adaptation to market changes. Third, implementing digital solutions to enhance customer experience while improving product quality and service value. Fourth, cultivating a data-driven culture where analytics inform strategic decision-making. Fifth, fostering open collaboration with external partners to build shared digital ecosystems that create new value.[7]

3.The necessity of improving the ability of enterprise financial personnel under digital transformation

Given the inherent strengths of digital technology—including broad adaptability, robust security, rapid dissemination capabilities, and operational flexibility—enterprises can effectively implement digital solutions in their management practices to develop unique competitive advantages that thrive in dynamic environments. As financial management remains the cornerstone of corporate governance, adopting digital technologies for financial digital transformation has become imperative to enhance both operational quality and efficiency. This paper analyzes the necessity of competency development for financial professionals in the context of digital transformation, focusing on three key dimensions: national macro-level policy requirements, organizational operational needs, and individual career advancement objectives.[4]

3.1. Responding to changes in national macro requirements

In the national development strategy of the new era, innovation-driven growth has become a crucial pathway to shape new advantages for high-quality development, playing a pivotal role in modernization efforts. President Xi Jinping emphasized that innovation is the key to achieving high-quality development, and we

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must accelerate the establishment of an innovation-centered development engine to drive progress. Digital transformation serves not only as the core driver of economic advancement but also as a critical pillar for modernizing social governance. Moreover, it stands as a strategic choice to enhance national competitiveness, presenting both challenges and opportunities for traditional enterprises and financial professionals. Against this backdrop, financial practitioners must keep pace with the times, proactively align with digital transformation trends, and achieve systematic shifts in both operational models and conceptual frameworks.

Therefore, under the continuous adjustment and optimization of national macro policy orientation, financial personnel urgently need to promote the transformation and upgrading of their own functions, deepen the integration and application of digital technology and financial management, so as to adapt to the multiple challenges and development opportunities brought by the digital economy era, and thus provide strong support and positive value for the process of high-quality development of the national economy.[5]

3.2. Responding to changes in the actual needs of enterprises

With the rapid development of the digital economy, enterprises are facing multiple pressures including increasingly fierce market competition, continuously evolving consumer demands, and emerging innovative models driven by new technologies.[5] The dimensions and levels of market competition have significantly intensified. The emergence of new business formats and commercial models has exerted strong impacts on traditional industries. In terms of market promotion, compared to conventional offline channels, emerging formats leverage various digital platforms to achieve broader and more precise user engagement and brand communication. These changes place higher demands on financial personnel, requiring them to provide more accurate and comprehensive financial and decision-making support. Traditional financial models and accounting functions have clearly failed to keep pace with corporate needs, unable to meet the requirements of modern enterprise management.

Therefore, evolving operational demands in traditional enterprises require financial professionals to not only master conventional financial management knowledge, but also understand the characteristics and trends of digital transformation while being proficient in advanced data analysis tools and technologies. Only through this dual mastery can financial personnel better align with corporate development needs and deliver greater value for long-term business growth.[5]

3.3. The need for personal growth

With technological advancements and evolving economic conditions, the roles and workflows of financial professionals are undergoing continuous transformation. Traditional repetitive tasks in finance have been progressively replaced by digital tools like AI-powered systems and financial robots. This shift objectively requires financial personnel to continuously upgrade their skills to adapt to new environments while transitioning their professional responsibilities. Financial staff must engage with frontline operations by systematically organizing, filtering, and capturing information to extract actionable insights, thereby providing timely and precise support for predictive analysis, real-time risk management, and post-event reviews. Under intense work pressure, effectively managing stress and maintaining physical/mental well-being has become a crucial challenge that demands urgent attention in their career development.

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Therefore, in addition to continuously optimizing their professional skills and knowledge system to achieve career development goals, financial personnel should pay more attention to self-management and self-improvement. They should cope with work pressure through scientific time planning, reasonable work allocation and active psychological adjustment, so as to maintain physical and mental health and avoid anxiety.[5]

4.Problems faced by enterprise financial personnel in digital transformation

4.1. Lack of skill adaptation ability and difficulty in implementing technical tools

In the context of financial digitalization, the application of Excel has evolved beyond being a basic skill requirement. The ability to flexibly master tools like Python, SQL, and Power BI is increasingly becoming essential. However, most financial professionals still receive training focused on report generation and voucher creation, lacking targeted reinforcement in data processing and visualization skills. Particularly in small-to-medium enterprises or non-core cities, internal training progress remains slow with rigid role divisions, leaving accounting personnel with unclear career paths and weak motivation for skill upgrades. Meanwhile, some organizations fail to adequately consider financial staff's technical adaptability and collaboration patterns when implementing intelligent tools, resulting in software that is fully functional yet underutilized. The common scenario of "able to operate tools but unable to master their full potential" further undermines the practical effectiveness of financial digital transformation. In the long run, such "tool barriers" may widen job mobility disparities and exacerbate technological adaptation gaps among financial personnel across different enterprises.[1]

4.2. Unclear professional role positioning and uncertain development path

The ongoing digital transformation continues to reshape the financial profession landscape. Basic accounting roles are gradually diminishing due to the substitution effect of financial robots, while data analysis and strategic support positions are rapidly emerging. However, many financial professionals lack preparation for transitioning into "management-oriented" or "analytical" roles, with some even struggling to understand the responsibilities of new positions, leading to career anxiety. Additionally, some companies lack clear evaluation systems and career advancement plans for these new financial roles, leaving many financial personnel trapped in a "career gap" where traditional skills become marginalized while new competencies remain underdeveloped.[1]

4.3. The iteration of knowledge structure is delayed, which is difficult to support the digital transformation of functions

As financial systems evolve from "accounting hubs" to "data-driven decision-making centers", corporate finance professionals urgently need to build cross-domain knowledge frameworks. However, most current financial personnel remain confined to traditional accounting domains, lacking understanding of data modeling, system logic, and algorithmic principles. This knowledge gap hinders their effective use of intelligent financial platforms and integration into data-driven business analysis and value creation processes. For instance, when conducting budget forecasting or operational analysis through ERP systems, financial staff often

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resort to formulaic operations without basic data organization and indicator interpretation skills, failing to demonstrate critical judgment and insight. More critically, as financial robots and AI analytics platforms become mainstream, mid-to-low-level finance professionals face the risk of being "marginalized by skill sets". Knowledge renewal has become a key barrier to functional transformation.[1]

4.4. The comprehensive function of the post is weak, and the integration degree of finance and business is low

From the perspective of bureaucratic theory in corporate governance, most traditional enterprises maintain a refined structure for financial management positions, characterized by clearly defined and compartmentalized divisions of labor. This model was historically rational and efficient, effectively boosting operational productivity. However, with the advent of the digital economy era, an increasing number of business processes are being replaced by intelligent and digital technologies. This necessitates that financial management roles must adapt to emerging trends. If companies persist in maintaining traditional, compartmentalized position structures without enhancing their comprehensive attributes or promoting bidirectional integration between financial operations and business activities, their financial management systems will struggle to keep pace with rapidly evolving market demands.[3]

In the context of digital transformation, financial professionals must not only possess financial expertise but also understand business processes and utilize digital tools for financial analysis to support decision-making. The multifaceted role requires cross-disciplinary knowledge and skills to bridge the gap between finance and operations, enabling seamless information flow and collaborative efforts. This integration not only enhances the finance department's involvement in corporate strategic decisions but also boosts the organization's responsiveness and adaptability to market changes.[3]

5.Analysis of the reasons for the problems encountered by enterprise financial personnel in digital transformation

5.1.The skill system is disjointed and training resources are in short supply

Firstly, the fundamental issue lies in the structural mismatch between traditional financial skill sets and the demands of digital tool applications and real-world business scenarios. Traditional financial training disproportionately emphasizes accounting procedures over practical tools, with resources long concentrated on basic skills like report preparation, voucher completion, and tax filing – methods that align well with industrial-era "standardized, process-oriented" management needs but fail to meet data-driven requirements of the digital age. Training resources for digital competencies such as data processing, visual analytics, and intelligent tool operations remain scarce. Even when companies do offer such programs, they often remain at the surface level of explaining tool usage steps, lacking in-depth instruction that connects technical skills with real business contexts.

Secondly, small and medium-sized enterprises (SMEs) and non-core city businesses face more significant barriers in upgrading financial staff's skills. These companies often struggle with limited funding, leading to delayed development of internal training systems. Positions are frequently filled by individuals handling mul-

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tiple roles with limited expertise, as finance personnel must simultaneously manage daily accounting, expense reimbursement, and reconciliation tasks – leaving them no time for systematic training. Moreover, corporate leadership underestimates the value of digital tools, preferring to allocate resources to business expansion rather than skill enhancement. This creates a situation where financial professionals have strong motivation to improve but lack access to necessary channels.

Ultimately, financial professionals' lack of willingness and direction in skill upgrading has further exacerbated the mismatch between their current competencies and industry demands. The traditional mindset of job security in finance leads many practitioners to resist skill enhancement, believing that merely being able to prepare financial statements and handle tax filings ensures stable employment. This passive attitude diminishes their motivation to learn digital tools. Meanwhile, the overwhelming variety of digital tools with rapidly evolving features leaves financial staff in a "choice paralysis" scenario—uncertain about where to start or which tools align with their roles. Ultimately, they choose to maintain the status quo, while this passive waiting mentality ultimately worsens the skill-demand gap.

5.2.The adjustment of post structure and the ambiguity of career orientation

Firstly, In digital transformation, the interplay between "restructuring of job roles," "outdated personal perceptions," and "incomplete corporate systems" creates ambiguity in career positioning. The core issue lies in the absence of established frameworks for new career development paths after traditional career development models have been disrupted. Financial professionals demonstrate insufficient sensitivity to positional changes. Before digital transformation, career development paths in finance were clear and stable, with linear progression patterns that shaped fixed career expectations. In the digital era, basic accounting positions are rapidly declining due to automation by financial robots, while emerging roles like data analysis and strategic support are proliferating. Career development pathways have shifted from linear to networked structures, yet most financial personnel neither recognize the trend of shrinking accounting positions nor proactively understand the responsibilities of these new roles.

Secondly, the systematic development of emerging positions in enterprises has severely lagged behind, exacerbating the ambiguity in defining financial professionals' career roles. As career development guides, companies have yet to establish position evaluation systems and promotion pathways aligned with digital transformation. Most organizations lack both clear job descriptions and supporting performance metrics, leaving financial staff uncertain about career progression. The existing promotion path lacks continuity – traditional promotions rely on accounting experience while new roles require data literacy and business acumen. Enterprises have failed to build bridges between these two skill sets, resulting in a career gap where traditional competencies become marginalized and new capabilities remain underdeveloped.

Ultimately,the rapid advancement of digital transformation has significantly complicated career positioning for financial professionals. With digital technologies evolving at a pace far exceeding the development cycles of professional competencies, the ever-changing nature of emerging roles leaves practitioners struggling to establish stable career expectations. This creates anxiety about their skills becoming obsolete after training, ultimately exacerbating role ambiguity. In internet companies where business models rapidly iterate, the boundaries of financial responsibilities grow increasingly blurred. If organizations fail to clearly define new

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positions promptly, financial teams risk losing direction in their work.

5.3.There is an intergenerational gap and insufficient multi-party coordination

Firstly,the slow evolution of financial professionals' knowledge frameworks fundamentally stems from a generational gap between their existing expertise and evolving digital operational demands. This disconnect arises from inadequate coordination across multiple dimensions including knowledge supply, learning mechanisms, and technological integration. Traditional accounting education remains disconnected from modern digital requirements, with core curriculum in university programs and professional certification training offering limited coverage of essential digital competencies such as data modeling, algorithmic logic, and intelligent system principles. While vocational qualification exams now include information technology components, these sections predominantly provide conceptual overviews lacking practical implementation guidance. This "path dependence" in educational systems has cultivated an ingrained mindset among practitioners since their career commencement – prioritizing accounting knowledge while undervaluing technical expertise – creating systemic barriers to supporting digital transformation initiatives.

Secondly, the lack of systematic knowledge update channels among financial professionals has widened the generational gap between their existing expertise and digital demands. In the digital age where knowledge evolves at unprecedented speeds, relying solely on formal education or one-off training proves insufficient to maintain professional relevance. Yet most practitioners fail to cultivate lifelong learning habits, while organizations lack platforms for "knowledge sharing + skill upgrading". The fragmented transmission of senior experts' experience through mentorship rarely forms standardized, digitally integrated knowledge frameworks. Moreover, external training programs often focus on technical tool operations while neglecting practical integration with financial contexts, leaving professionals equipped with technical skills yet unable to apply them effectively in analytical work.

Ultimately, the complexity of integrating digital technologies with financial operations has made cross-domain knowledge integration far more challenging than anticipated, further widening the intergenerational knowledge gap. Financial digitization is not merely a simple combination of financial expertise and digital tools, but rather a new paradigm emerging from their deep integration. Meanwhile, the inherent complexity of digital technologies has raised learning barriers. Some mid-to-low-level finance professionals, driven by "tech anxiety," have proactively abandoned knowledge updates, exacerbating the lag in their professional knowledge frameworks.

5.4.Cognitive disconnection era, limited access to resources

Firstly, financial professionals exhibit rigid thinking patterns rooted in outdated perceptions of financial management that clash with digital-era requirements. Subjective "path dependence" fuels learning stagnation, as traditional finance has long prioritized "accounting accuracy and compliance first". This mindset equates completing bookkeeping, tax filings, and report preparation with professional competence – a mindset valid in the industrial age but now becoming an innovation barrier in the digital era. Some practitioners have internalized the notion of "treating finance as accounting tasks" as their professional identity, instinctively resisting new concepts like "financial teams should participate in strategic decision-making" or "data should drive business optimization", viewing these as deviations from their core responsibilities.

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Secondly, the inertia of traditional management models creates cognitive gaps at the corporate level, exacerbating the disconnect between financial personnel's understanding and actual practices. The perception of financial management by corporate leadership directly shapes financial staff's mindset. When management still views the finance department as a support unit that merely "manages accounts and avoids errors," financial personnel naturally focus on accounting tasks. In reality, most traditional enterprise managers remain at a basic stage of understanding financial digitalization, simplistically equating digital transformation with replacing manual bookkeeping with software. This "top-down cognitive lag" is transmitted to the finance department through management directives and performance evaluations, further solidifying the traditional mindset of financial personnel.

Ultimately, the limitations in objective resource acquisition further restrict financial professionals' cognitive expansion. SMEs face a critical challenge of rigid thinking patterns among their finance teams. These enterprises often lack foundational conditions for digital transformation: On one hand, they fail to adopt digital tools like intelligent financial systems and data analytics, leaving staff entrenched in manual accounting and basic Excel analysis with limited exposure to "data-driven decision-making" scenarios. On the other hand, constrained information access prevents participation in high-level industry forums or digital transformation training programs, while also lacking experience-sharing mechanisms with corporate finance teams. This results in financial management practices remaining stuck at the traditional operational level.

5.5.Organizational structure inertia and information island barriers

Firstly,the inherent contradiction between traditional bureaucratic "specialization" and the digital era's "collaborative demands" has resulted in fragmented job functions. Organizational inertia makes bureaucratic specialization ill-suited for modern digital needs. Traditional corporate financial positions, rooted in bureaucratic theory that emphasizes "clear division of labor and defined roles," were effective during the industrial age through specialized workforces. However, their drawbacks have become apparent in the digital age: job functions are now fragmented into isolated modules. Financial personnel typically focus solely on their specific responsibilities while lacking comprehensive understanding of other financial processes and business operations. This fragmentation prevents finance teams from developing integrated capabilities, creating a critical mismatch with the digital era's demand for "end-to-end data insights."

Secondly, the barriers between business and finance create "information silos", hindering functional integration. In traditional enterprises, business units and finance departments often operate in parallel: business units focus on market expansion and production operations, while finance departments concentrate on accounting and supervision. Information flows between them mainly through a one-way process from business documents to financial audits, lacking deep collaboration. These barriers stem from both "professional language differences" and "differing interest demands". Business units prioritize short-term performance growth, whereas finance departments emphasize risk control. Conflicts frequently arise in resource allocation and project decision-making. Although digitalization has introduced systems like ERP to streamline information channels, the fundamental reality of "businesses not understanding finance and finance departments not understanding business" remains unchanged. Financial roles still struggle to transcend their purely financial functions.

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Ultimately, the absence of coordinated mechanisms to drive functional integration in digital transformation has exacerbated role limitations. While digital transformation requires financial roles to transition from "back-end accounting" to "front-end business support", most enterprises lack corresponding collaborative frameworks. On one hand, performance evaluations still prioritize traditional metrics like "accounting accuracy and report timeliness", failing to incorporate business support effectiveness and data insight value into assessment systems. This results in financial staff lacking motivation to proactively engage with business operations. On the other hand, ambiguous delineation of responsibilities across departments leads to buck-passing among business units due to excessive workload, while companies fail to clarify mutual collaboration obligations. Consequently, financial personnel find themselves wanting to participate in business processes but lacking institutional support.

6.Strategies for the ability improvement of enterprise financial personnel under digital transformation

6.1.Promote the upgrading of skill structure and provide sufficient training resources

Firstly, in terms of training content, we are breaking away from the traditional model that "prioritizes accounting over practical tools" by establishing a three-dimensional curriculum system integrating "basic accounting + digital tools + business scenario integration". For foundational accounting, core components like report preparation and tax filing remain essential, but must incorporate compliance verification methods adapted to digital environments. Regarding data processing tools such as SQL and Python, practical cases include financial data cleansing and automated report generation. For instance, Python scripts can automate monthly financial statement compilation with anomaly detection, while accounts receivable aging analysis demonstrates how SQL queries extract customer transaction data to create payment risk warning models. Simultaneously, we strengthen the deep integration between tools and business scenarios, ensuring tool operations directly address real-world problem-solving needs.

Secondly, in terms of resource allocation, priority support should be given to small and medium-sized enterprises (SMEs) and businesses in non-core cities. The government could collaborate with industry associations to launch a "Digital Skills Training Subsidy Program" to reduce corporate training costs. A "Financial Digital Cloud Classroom" platform would integrate high-quality resources such as university lectures by renowned professors and practical case studies from leading enterprises. A dedicated learning channel for county-level financial personnel would be established, offering offline downloads and dialect subtitles to overcome internet access barriers in remote areas. Enterprises should implement tiered training mechanisms: basic roles should focus on practical skills like Excel advanced functions and intelligent financial software operations, while management positions should emphasize data analysis thinking and decision-making model building through quarterly cross-departmental business sand table exercises. Simultaneously, optimizing job responsibilities via a "dual-person rotation system" would help alleviate daily accounting pressures.

Ultimately, to boost learning motivation, companies should implement a "skills-to-promotion linkage" incentive system that incorporates proficiency in digital tools into performance evaluations. To address tool selection challenges, industry associations need to publish application guidelines for financial digitalization

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tools, categorizing recommendations by sector characteristics. For instance, the retail industry should emphasize customer consumption data analytics tools, while manufacturing sectors should prioritize production-data-finance integration solutions, complete with practical application scenarios and step-by-step learning roadmaps. Additionally, annual "Financial Digital Skills Competitions" could be organized featuring real-world projects like "Intelligent Report Automation" and "Cost Forecasting Model Design". Winners would earn industry certifications as recognition points, creating a competitive environment that motivates proactive learning and alleviates passive attitudes toward skill updates.

6.2.Clarify career development path and expand the job cognition system

Firstly, by participating in emerging role workshops and benchmark enterprise visits, financial professionals can break free from career path dependence on traditional positions. Inviting practitioners of new roles like financial data analysts and BP (Business Planning) specialists to share job responsibilities helps them understand the core functions of data mining challenges and strategic decision-making support, allowing direct comprehension of the value of role transition. Financial staff should proactively apply for high-value-added projects, engaging in core modules such as corporate budgeting, investment/financing analysis, and performance evaluation. Through this "learning-by-doing" process, they develop data sensitivity and business insight capabilities. Simultaneously, financial personnel are encouraged to integrate into high-value-added initiatives, experimenting with the "rolling budget + scenario analysis" model during budget preparation. This approach combines macroeconomic data predictions with capital demand assessments under different market conditions.

Secondly, enterprises should accelerate the systematic development of emerging positions while financial professionals must adapt to the competency frameworks of these roles. Companies need to establish seamless transition pathways between traditional and new positions, such as enabling outstanding accountants to upgrade to financial data analysts through supplementary data analysis courses. Meanwhile, finance teams should proactively identify core competencies, design progressive learning paths, and create personalized career "roadmaps". By aligning with digital transformation trends, they should formulate competency development plans and facilitate leapfrog growth through job rotations, cross-departmental collaboration, and industry certification programs.

Ultimately, to address the dynamic changes in job requirements brought by digital transformation, enterprises should establish a dynamic update mechanism for job competencies. Companies should annually review skill requirements for emerging positions. For instance, when financial information system operators need to acquire data interface development capabilities, they should promptly implement relevant training programs. Industry associations could create a skills database for finance roles to track real-time impacts of technological advancements on job requirements, providing proactive learning recommendations to alleviate concerns about skills becoming obsolete. Additionally, the association should release monthly "Technology Trend Briefs", such as predicting that within two years, financial analysts will need to master natural language processing (NLP) technology to analyze unstructured data like customer reviews. This helps finance professionals strategically plan their learning priorities, shifting from reactive responses to proactive strategic planning.

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6.3.Breaking the intergenerational gap in cognition and building a multi-party coordination system

Firstly, universities should systematically study fundamental principles of big data, algorithmic logic, data ethics, and digital regulatory standards across data, accounting, and technology domains to enhance cross-disciplinary understanding. Accounting programs must reform their curriculum by establishing "Fundamentals of Data Modeling" and "Principles of Intelligent Financial Systems" as core required courses. Practical modules like "Python-Based Financial Analysis Practice" and "Machine Learning Budgeting Case Studies" should be introduced, with graduation projects requiring students to complete tasks such as "predicting corporate cash flows using algorithmic models" and "generating dynamic financial reports through SQL data extraction". This approach breaks away from the traditional teaching model that overemphasizes theory at the expense of technical skills. Vocational qualification exams must significantly increase practical IT skill assessments, with examination rooms equipped with real financial software environments to eliminate rote memorization-based exam strategies. Concurrently, industry associations should collaborate with enterprises to develop digital ethics case libraries containing typical scenarios like "financial risks caused by data breaches" and "decision-making errors due to algorithmic biases". Data compliance courses should be incorporated into continuing education requirements to ensure financial professionals master the baseline rules of the digital era.

Secondly, enterprises can leverage platform-based resources to implement modular learning programs covering process design, system operation, and tool analysis. By establishing internal digital learning platforms, companies can break down key components such as financial workflow restructuring, intelligent financial system operations, and data analytics tool applications into independent modules. Each module is equipped with video tutorials, practical case studies, and assessment questions, allowing finance professionals to selectively learn based on their specific skill gaps. Additionally, integrating external premium resources like the "Digital Competency Enhancement Platform" from the Accounting Qualification Evaluation Center of the Ministry of Finance and industry-specific micro-courses from renowned consulting firms creates a resource matrix that combines internal customization with external supplementation.

Ultimately, through participating in enterprise budget process optimization, data report compilation, and business-finance integration projects, finance professionals achieve the transformation of knowledge from abstract concepts to practical applications. By systematically transferring and integrating knowledge, they transcend the limitations of single-accounting logic. When engaging in business-finance integration initiatives, they integrate procurement, production, and sales processes. For instance, they track the entire workflow of raw material procurement—from order placement to invoice documentation—and design automated procurement data reconciliation models. This establishes a knowledge chain spanning "data acquisition, value extraction, and business synergy," effectively meeting the cognitive framework requirements of intelligent financial systems.

6.4.Deepen the understanding of the digital era and seek channels for resource acquisition

Firstly, it is essential to shift our mindset and proactively address the evolving demands of social develop-

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ment on financial management. By actively acquiring relevant knowledge and deepening our understanding of financial management, we can enhance competitiveness in this field and embrace modern trends to avoid obsolescence. Implementing a "Digital Transformation Training Program" through dual-scenario teaching could recreate historical work scenarios – such as industrial-era accountants who "prepared three fixed monthly reports while focusing on calculation accuracy" – while showcasing real-world cases of digital finance Business Planning (BP) professionals monitoring business data in real-time and adjusting pricing strategies through dynamic models. This approach enables financial personnel to intuitively experience the transition from "post-event documentation" to "pre-event forecasting".

Secondly, we should cultivate a digital implementation ecosystem by driving management cognition breakthroughs. It's crucial to help executives recognize that financial digitalization isn't merely about replacing tools, but fundamentally transforming management paradigms. By embedding the concept of "positioning finance departments as strategic support hubs" into corporate strategies, companies can adjust performance metrics to accelerate the transition of financial teams into value-creation roles. This approach empowers managers to establish essential foundations for digital transformation, implement intelligent financial systems and data analytics tools, while enabling finance professionals to truly grasp the value of digitalized financial management through practical application.

Ultimately, enterprises should expand resource channels through multiple dimensions to overcome information access limitations. Companies need to establish external communication incentive mechanisms, providing travel subsidies and paid training leave for financial staff attending high-level industry forums. Regular experience-sharing sessions with major corporations should be organized. Governments could launch digital tool subsidy programs, offering cost subsidies for small businesses purchasing intelligent financial systems. Collaborating with platforms like Alibaba Cloud and Tencent Cloud, "free trial packages" of cloud-based financial tools could be introduced, featuring basic data analysis modules and expert guidance services to lower adoption barriers for SMEs. Additionally, industry associations should create digital resource-sharing platforms for finance professionals, compiling policy interpretations, case studies, and tutorial materials while establishing online Q&A channels. This would enable remote-area financial personnel to access professional support conveniently, breaking down regional resource barriers.

6.5.Optimize the knowledge organization structure and break down the barriers of information islands

Firstly, we must break the rigid hierarchical division of labor and implement an integrated financial-business team model. This approach transcends the traditional siloed structure where "finance focuses solely on accounting while operations concentrate on projects." By forming cross-departmental collaborative teams based on project or business lines, enterprises can achieve seamless integration. Taking construction companies as an example, a joint task force comprising finance specialists, project managers, procurement officers, and site supervisors is established during the preparatory phase. Finance professionals participate in cost estimation during bidding processes, setting baseline pricing by analyzing market fluctuations in building materials. During construction, they monitor progress payments and material consumption in real-time, using budget-expenditure comparisons to issue timely over-budget alerts. At final settlement, cross-functional analysis identifies cost drivers like "design changes causing additional expenses" and "delayed project timelines

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resulting in idle costs," ensuring thorough evaluation of operational impacts on financial outcomes. This end-to-end embedded workflow enables finance teams to intuitively grasp critical business milestones, eliminate cognitive blind spots, and establish deep alignment between financial data and actual operational performance.

Secondly, breaking down barriers between business operations and financial management requires establishing unified terminology and aligned interests. This involves creating a shared metrics framework that correlates key business metrics like "market share" and "capacity utilization rate" with financial indicators such as "gross margin" and "asset turnover ratio", forming a cohesive analytical system. When making project decisions, adopt a win-win approach by requiring business units to submit expansion plans with specified parameters including target customer demographics, projected sales volumes, and channel investments. The finance department then builds dynamic models using these inputs to calculate ROI and break-even points for different expansion scales, while simulating scenarios like raw material price hikes or competitor price cuts. This integrated approach ensures both business growth and financial stability.

Ultimately, establishing a collaborative mechanism to ensure the integration of operational and financial efficiency through performance evaluation. The system incorporates "operational-financial synergy contribution" into performance metrics, with financial staff being assessed on metrics like adoption rate of business optimization suggestions and cross-departmental data coordination efficiency. Business units are evaluated based on timeliness of financial data submission and achievement of cost control targets.Clear responsibility lists and timelines for cross-department collaboration are defined: during budget preparation, business units must submit categorized cost forecasts within five working days. Upon receiving the data, the finance department completes analysis and provides adjustment recommendations within three working days. Departments failing to meet deadlines will have corresponding performance points deducted.

7.Conclusion

In the digital transformation era, the role positioning and competency composition of financial professionals are undergoing systematic restructuring. This paper systematically analyzes the necessity of digital transformation for enhancing corporate financial personnel's capabilities under this context, identifies practical challenges in skill adaptation, professional role definition, knowledge structure evolution, and job functions, and provides targeted improvement strategies by thoroughly examining their root causes. Moving forward, financial professionals need to bridge the gap between tool application and business cognition to drive skill upgrading; clarify career development paths while expanding job awareness systems; eliminate intergenerational cognitive gaps through multi-stakeholder collaboration; establish a composite knowledge framework centered on finance with technical and business insights; proactively acquire relevant expertise to deepen financial management understanding; thoroughly study financial operations and digital systems to break down operational-finance barriers and optimize knowledge architecture. Through these measures, financial personnel can better align with digital transformation-era financial management demands, achieving a two-way win where personal capability enhancement and corporate value growth mutually reinforce each other.

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