Research on the Cultivation of Digital Innovation Capability in New Business Education in the Context of Digital Economy: A Case Study of Financial Management Course

Abstract: The rapid development of digital technology has brought about significant transformations in the business environments and operational models across various fields and industries, thereby imposing new demands on the capabilities of business professionals. Consequently, the cultivation of new business talents in higher education should place greater emphasis on fostering digital innovation capabilities. This paper first explores the connotation of digital innovation capability from three dimensions, which are the knowledge system, creative thinking, and entrepreneurial spirit. Subsequently, it analyses three major issues currently present in the teaching of financial management courses. Finally, the paper proposes pathways for cultivating the digital innovation capabilities of new business talents in the era of the digital economy. Firstly, course content can be updated in alignment with the requirements of the digital economy era. Secondly, digitalised and intelligent teaching models and scenarios should be constructed to provide students with more authentic corporate experiences. Thirdly, interdisciplinary teaching teams ought to be established to offer robust support for the cultivation of new business education.

Key words: digital economy; new business education; digital innovation capabilities

1 Introduction

The wave of digital technologies, represented by big data, artificial intelligence, blockchain, and cloud computing, is permeating every facet of socio-economic activity with unprecedented breadth and depth, propelling the disruptive restructuring of business models and the transformation of corporate operational paradigms (Xia et al., 2025). Digital technology innovation has been playing an important role in driving China's economic development

(Huang et al., 2025). As the core of corporate management, the role and substance of the financial management function are undergoing a quiet yet profound revolution (Wu, 2025). The traditional role of a value guardian, centred on ex-post accounting, fund management, and compliance supervision, can no longer fulfil the needs of enterprises striving for survival and development in a rapidly evolving marketplace. Finance departments must transform into value creators that drive business growth and enable strategic decision-making, leveraging data insights to uncover potential profits, optimising resource allocation through intelligent tools, and employing forward-looking forecasts to navigate future risks. This historic functional shift presents an urgent and formidable challenge to university financial management courses, which bear the primary responsibility for cultivating future finance professionals.

Digital technology is propelling the renewal of educational concepts and models (Yan, 2023), while various departments have successively introduced a series of policies to promote the cultivation of new business professionals in higher education institutions. In December 2018, the National Conference on Undergraduate Education in the New Era and the National Education Conference spurred a wave of teaching reforms across universities, emphasising the need to develop new business disciplines and continuously advance the comprehensive revitalisation of undergraduate talent cultivation. However, in stark contrast to the vigorous digital transformation in the industry, the traditional business education system in China's higher education institutions faces a severe challenge of supply-side lag. A notable disconnection exists between the existing cultivation models and the demands of the digital economy era (Huang, 2025). First, it shows a disconnect between the knowledge system and cutting-edge practices, with course content updates being slow and struggling to deeply integrate the latest digital technologies and data analysis tools with business scenarios. Second, the cultivation model is misaligned with competency objectives. The traditional teaching paradigm, which prioritises theoretical instruction over practical empowerment, fails to cultivate students' core competencies such as data thinking, interdisciplinary integration, and digital innovation. Third, disciplinary barriers are disconnected from complex real-world problems. Rigid disciplinary divisions hinder necessary interdisciplinary convergence between management, economics, computer science, and data science, resulting in a narrow knowledge structure among graduates who are ill-equipped to address the complex systemic business challenges of the digital intelligence era.

Against the backdrop of economic, social, and educational transformation, research and exploration into cultivating new business professionals capable of adapting to the emerging trends of the digital economy era are of paramount importance. However, a certain gap exists between the current teaching of financial management courses in higher education and the practical requirements of the digital economy (Sun & Wang, 2024). A systematic reform of financial management courses, oriented towards fostering digital innovation capabilities, is both essential and of practical significance. The objective of this study is to contribute to the cultivation of digital innovation capabilities in new business talents through the enhancement of teaching practices. This research first elucidates the meaning of digital innovation capabilities for new business talents, identifies key issues in the current teaching of financial management courses, and finally proposes pathways for cultivating these capabilities among financial management professionals in the digital economy era. The primary methodology employed in this study is systematic text analysis. By systematically collecting, organising, and analysing relevant literature, it examines the necessity of fostering digital innovation capabilities in new business talents and the problems present in current financial management course instruction, thereby providing recommendations for higher education institutions to cultivate financial management professionals better suited to the digital economy era.

2 The Significance and Connotation of Cultivating Digital Innovation Capability in New Business Talents

2.1 The Significance of Cultivating Digital Innovation Capability in New Business Talents

Amidst the wave of the digital economy, business practices are undergoing profound transformation, fundamentally driven by the continuous emergence and pervasive infiltration of digital innovation. Viewed from the perspective of economic management, the essence of innovation lies in the ability to create value through the new combination of production factors. Digital innovation is precisely an extension and advancement of this classical paradigm in the digital era, specifically referring to the process of leveraging digital technologies to create novel products, processes, services, or management models (Nambisan et al., 2017). Digital innovation and contemporary business practices are closely intertwined and mutually influential. On one hand, the breakthrough innovations in digital technology itself constitute the indispensable technological foundation for the transformation of business practices. Cutting-edge technologies such as big data, artificial intelligence, cloud computing, and

blockchain do not exist in isolation. They form a system of General-Purpose Technologies (GPTs), providing the feasibility basis for entirely new business models, operational processes, and organisational forms. The rapid iteration and declining costs of these technologies enable their large-scale industrial application, which itself is a direct outcome of digital technological innovation, thereby generating broad possibilities for business practices from the supply side of foundational technologies. On the other hand, for the vast majority of non-technology-native enterprises, the core path of their digital transformation is not inventing new technologies from scratch, but achieving enabling innovation through the creative new combination of existing production factors and digital technologies. This manifests as the deep integration of digital tools and methodologies into existing product design, production processes, customer service, or management structures, thereby significantly enhancing efficiency, optimising experiences, or creating new value. Consequently, actively participating in and driving digital innovation has become a core strategy for all types of enterprises to respond to environmental uncertainty and build sustainable competitive advantage.

In the context of the digital economy, new business education must address the transformations occurring in contemporary business practices (Nie, 2024). First, regarding production factors, increasing emphasis is being placed across society on the input and management of data as a factor. In 2020, the State Council issued the Opinions on Establishing a More Market-Oriented Allocation System and Mechanism for Production Factors, which formally recognised data as the fifth major production factor, following land, labour, capital, and technology. The data factor can create business value through several avenues (Tang, 2025), firstly by combining with other products or factors to generate new value and secondly by improving decision-making to enhance the allocation efficiency of other factors, and third, by being directly traded as a commodity. Through these channels, both the data factor and the datafication of factors have become focal and challenging aspects of current business practice. Second, corporate production and operational methods are becoming increasingly digitalised and intelligent. A growing number of enterprises are embarking on digital transformation, evolving from isolated technological applications to a data-driven, comprehensive, and intelligent restructuring of entire value chains. At the infrastructure level, traditional factory facilities are transitioning into digital twins comprising industrial internet platforms, IoT sensor networks, and edge computing nodes. In terms of production methods, algorithm models are deeply embedded into core processes. For example, intelligent production scheduling systems based on real-time orders and supply chain data can dynamically optimise production plans, thereby improving

resource utilisation. Third, applying digital technologies to business models (Li, 2025). It helps to transform user-centricity into a quantifiable and operable commercial cornerstone, through the implementation of precision marketing, intelligent customer service, and similar approaches. This shift genuinely establishes user-centricity as the foundation of enterprise production and operations. For instance, intelligent customer service systems, integrating natural language processing and knowledge graphs, can autonomously resolve most inquiries and provide personalised solutions based on users' historical orders. Consequently, the cultivation of new business talents must be oriented towards these evolving business practices, with a particular focus on fostering university students' capabilities in digital innovation.

2.2 The Connotation of Digital Innovation Capability in New Business Education

In business education, significant emphasis is placed on cultivating innovative talents capable of creating value through the new combination of factors. Against the backdrop of the digital economy, this objective is further concretised into fostering digital innovation capability. This capability is not merely the simplistic addition of digital tool usage and innovative thinking. It refers to the comprehensive competence of individuals or organisations to employ digital technologies rationally and creatively to achieve breakthroughs in commercial value. The International Federation of Library Associations and Institutions (IFLA) posits that digital literacy entails the ability to use digital technologies efficiently, effectively, and appropriately to meet diverse needs. From the perspective of cultivating new business talents, this paper explores the meaning of digital innovation capability through three dimensions, which are the knowledge system, creative thinking, and entrepreneurial spirit.

Firstly, an interdisciplinary and comprehensive knowledge system. The digital innovation capability of new business talents must be founded upon an interdisciplinary and comprehensive knowledge system. Whilst knowledge itself is not equivalent to practical ability, it provides the indispensable cognitive frameworks and intellectual materials for the generation, development, and advancement of capability. The effectiveness of the higher education model, which uses knowledge transmission to guide capability cultivation, is predicated precisely on the support a systematic knowledge structure offers for solving complex problems. Particularly for digital innovation, a practical activity of a highly convergent and integrative nature, it inherently requires actors to break down traditional disciplinary barriers and achieve new combinations at the intersection of business studies, technological sciences, and the humanities

and social sciences. Digital intelligence facilitates the integration and application of collective knowledge, thereby fostering team creativity (Cai et al., 2025). Consequently, the knowledge foundation of new business talents must transcend the single confines of business and management, integrating multiple dimensions such as core business knowledge, fundamentals of data science and computer science, as well as principles of technology ethics, and social and legal awareness. Firstly, the core of traditional business disciplines, such as classical theories in strategic management, marketing, corporate finance, organisational behaviour, and operations management, reveals the fundamental principles and decision-making logic underlying commercial activities. In the digital economy, the focus of core business knowledge should shift from rote memorisation of static theories towards a profound understanding of how these theories are validated, refined, and applied within dynamic, data-rich environments. Secondly, digital innovation is inseparable from a foundational grasp of technological underpinnings. New business talents need not become programming experts, but they must be capable of interpreting the language of data, comprehending the general principles and limitations of algorithms, and understanding how fundamental architectures such as cloud computing and the Internet of Things operate. Only with such cross-disciplinary literacy can they collaborate effectively with technical specialists when driving digital transformation, make informed decisions regarding technology selection and investment, and avoid descending into the roles of uncritical technology adopters or conceptual dreamers. Thirdly, the transformative power of digital technologies functions as a double-edged sword, generating efficiency and convenience while simultaneously introducing unprecedented societal challenges. Enterprises need to identify and assume corresponding digital responsibilities (Zhu, 2025). Hence, an understanding of relevant laws and regulations, along with the foundational principles of technology ethics, constitutes another critical area of learning for new business talents in the digital economy era.

Secondly, data-empowered creative thinking. In the digital economy, data empowerment has become a core paradigm for innovation activities. As a defining characteristic of digital innovation, data empowerment is not merely a technical method but fundamentally reshapes the logic of business innovation, imposing systematic new requirements on the thinking patterns of new business talents. First, data-empowered creative thinking is underpinned by critically discerning thinking based on big data. New business talents must start from data, independently identifying genuine market demands and technological trends through the insight and analysis of multidimensional data, thereby supporting innovation decisions. They

must avoid blindly relying on past experiences, industry conventions, or authoritative judgments. Simultaneously, they need to view the innovation process with a dynamic and developmental perspective, maintaining sensitivity to data and preparing for the uncertainties inherent in innovation. Second, it involves holistic systems thinking based on big data. Big data inherently emphasizes overall correlations rather than isolated samples. This requires innovators to possess systems thinking, enabling them to discern the complex interactions and feedback loops among various innovation elements such as technology, markets, organization, and supply chains. Through data modelling and visualization, they can analyse the interconnections among these elements and design more resilient and synergistic innovation solutions from a holistic perspective. Teaching teams can gain in-depth understanding of students' creative thinking patterns through classroom activities, helping to enhance their learning engagement (Nasrin et al., 2023).

Thirdly, a pioneering entrepreneurial spirit. When discussing the digital innovation capability of new business talents, the focus often falls on technical tools and thinking methodologies, while overlooking the more fundamental driving factor of human character traits. Those personal qualities that enable effective engagement in innovative activities constitute the core endogenous force within the structure of innovation capability itself. In recent years, the broad implementation of innovation and entrepreneurship education in China's higher education sector has, at a deeper level, aimed to systematically cultivate among young students, particularly those in business disciplines, a spirit characterised by the courage to break new ground, the aptitude for integration, and the willingness to take calculated risks. Methods such as entrepreneurship education and the cultivation of an entrepreneurial spirit can play a positive role in fostering university students' innovation capability (Jia et al., 2024). For new business education committed to cultivating digital innovation capability, the entrepreneurial spirit for the new era has become a key dimension defining talent attributes and driving value creation. Specifically, the entrepreneurial spirit required in the digital economy era needs to emphasise the following two aspects. First, the pioneer's courage to lead amidst uncertainty. In an era where technological advancement and knowledge renewal occur at an unprecedented pace, this demands that individuals proactively transcend existing resource constraints and conventional cognitive frameworks, keenly identifying potential opportunities and decisively allocating resources within highly ambiguous and dynamically changing environments. Second, a value-rational orientation aligned with macro-strategic imperatives. The nature of techno-economic competition in the digital age has evolved into a systemic strategic rivalry among nations

centred on critical core technologies and future industry high ground. Within this context, the connotation of entrepreneurial spirit must be organically integrated into the institutional environment and strategic objectives of national development, actively seeking deep coupling and constructive interaction with macro-strategic agendas such as *National Self-Reliance and Strength in Science and Technology*, and *the Modernisation of Industrial and Supply Chains.*

3 Current State and Challenges in Financial Management Course Teaching

3.1 Misalignment of Course Content and Structure with Contemporary Demands and Lagging Knowledge Systems

In the era of the digital economy, the content of traditional financial management curricula has become severely misaligned with the rapidly evolving technological environment and business practices, exhibiting systematic lag in its knowledge framework. This lag is reflected not only in the absence of emerging technological content but also in the failure of the overall curriculum structure to keep pace with the paradigm shifts of the digital age

From the perspective of course content, the existing knowledge system has failed to effectively incorporate and integrate the transformations in financial practices driven by key technologies such as big data, artificial intelligence, and blockchain. For instance, the focus of financial management has expanded from traditional monetary capital and physical assets to include data assets, user assets, and digital ecosystem equities. However, course content remains predominantly centred on traditional elements such as financial statements, depreciation of fixed assets, and cost accounting. Cutting-edge topics, such as valuation models for data assets, dynamic early-warning systems for credit risk based on machine learning algorithms, the application of smart contracts in supply chain finance, and the accounting treatment of green financial instruments like carbon emission trading, are rarely addressed in course syllabi. This leaves significant gaps in students' knowledge maps, hindering their ability to deeply grasp the new logic of value creation in digital enterprises. Moreover, the internal mechanisms for updating course content are rigid, with lengthy iteration cycles unable to accommodate fast-changing technological landscapes. The prolonged publishing cycle of textbooks means that much of the taught material is still based on business environments and regulatory frameworks from five or more years ago.

From the perspective of curriculum structure, the traditional financial management curriculum system primarily focuses on theoretical courses such as accounting and financial analysis, which are misaligned with real-world demands. Firstly, there is an overemphasis on theoretical courses and a shortage of practical ones, resulting in a competency cultivation model that fails to meet the needs of actual work environments. The dominant theoretical instruction in the current curriculum system is largely based on assumptions of a

stable, continuous, and structured business environment characteristic of the industrial era. However, financial management practices in the digital economy are highly dynamic, complex, and data-intensive, requiring financial managers to possess the contextual application skills and business insight necessary to translate theory into solutions for digital financial problems. Secondly, there is an abundance of single-discipline courses and a lack of interdisciplinary, integrated ones, failing to address the demand for a hybrid knowledge structure in the digital economy era. The existing course offerings exhibit clear disciplinary boundaries, with finance, accounting, and other related courses operating in isolated silos. However, financial innovation in the digital age requires the deep integration of data analysis techniques, legal knowledge, and other specialised fields alongside foundational business expertise.

3.2 Deficiency in Data-Driven Instructional Models and Insufficiency in Practical Teaching

Currently, the teaching model for financial management is increasingly revealing its structural limitations in the process of digital transformation. Firstly, the traditional teaching approach remains dominated by teacher-led instruction and problem-solving exercises, which lacks contextualised case studies, and fails to stimulate student learning motivation and meet personalised learning needs (Feng et al., 2025). Traditional cases, while valuable for teaching theoretical knowledge and enhancing analytical skills by focusing on business logic, often present artificially curated data sets detached from the dynamically changing real-world business environment. More critically, case libraries suffer from a severe shortage of authentic materials reflecting emerging scenarios such as intelligent financial decision-making, big data-driven risk control, and digital supply chain finance. Even when new cases are introduced, they frequently stop at conceptual descriptions without providing operable data sets for students to conduct in-depth mining and modelling analysis. This form of case discussion inadequately cultivates students' data-driven decision-making capability to extract business insights from complex data.

Secondly, experiential teaching remains at the level of process simulation, lacking depth in data analysis (Zhan and Wang, 2025). Existing experiments predominantly revolve around operational training using traditional financial software like Yonyou and Kingdee, focusing on familiarising students with standardised processes such as bookkeeping and report generation. However, the core of digital financial management has shifted from process execution to data insight, yet experiential teaching has not correspondingly incorporated practical applications of data analysis tools like Python, R, or SQL. While students may become proficient in entering accounting vouchers, they often lack the skills to write code for extracting transaction data from databases for analysis or to use tools like Power BI for dynamic visual analysis of multidimensional performance data. The design of experiments fails to construct a complete workflow from data acquisition, cleaning, and analysis to visual interpretation, resulting in a gap between students' proficiency with digital tools and the requirements for solving complex financial problems.

Thirdly, the integration of teaching resources exhibits a formalistic blend, failing to construct an intelligent practice environment. Although resources such as online courses (MOOCs) and virtual simulations are

increasingly abundant, they are often merely juxtaposed with offline instruction rather than organically integrated. Online resources are mostly used for theoretical knowledge transmission, while virtual simulations often become digitalised replicas of traditional experiments, failing to realise their potential for constructing high-fidelity, interactive digital business environments. Truly data-driven teaching should enable students to conduct financial forecasting, risk stress testing, or investment decision simulations within a virtual environment that integrates real-time market data, enterprise operational data, and industry databases. The current teaching model fails to establish such intelligent, interactive practice scenarios. Consequently, while students are exposed to digital resources, they do not undergo comprehensive cognitive training in data-driven processes, and their personalised learning needs remain difficult to meet within standardised resource frameworks.

3.3 Homogeneity in Teaching Team Structure

In the era of the digital economy, the interdisciplinary integration and digital transformation advocated by the construction of new business disciplines impose entirely new systematic demands on the structure and capabilities of the teaching faculty. However, an examination of the composition of teaching teams in current university financial management programmes reveals that structural homogeneity has become a predominant issue, hindering the support for interdisciplinary and practice-oriented teaching reform objectives. This structural homogeneity is primarily manifested as an imbalance across multiple dimensions, including disciplinary backgrounds, knowledge sources, participating entities, and competency areas.

From the perspective of disciplinary background composition, the teams exhibit a high degree of academic homogeneity. The vast majority of full-time faculty possess pure academic training backgrounds in traditional business disciplines such as accounting, financial management, or finance. The logic of their knowledge production and dissemination is deeply rooted in the theoretical paradigms of their own fields. While this homogeneity in origins ensures the rigour of theoretical instruction, it also inadvertently reinforces the collective cognitive boundaries within the team. When courses require the introduction of core concepts and methodologies from data science or information systems, there is often a lack of bridge-building scholars within the team who can navigate the discourse systems of both disciplines and translate them into teachable formats. The singular disciplinary structure directly leads to difficulties in achieving genuine integration in curriculum development and teaching implementation, often resulting in a mere patchwork of courses added together.

From the perspective of knowledge sources and renewal mechanisms, teaching teams exhibit a pronounced reliance on academisation pathways. The career trajectories of the majority of faculty members, which typically progress directly from one academic institution to another, result in knowledge systems predominantly derived from academic literature and textbooks. This creates a temporal and spatial disconnect from the genuine digital transformation processes underway in the corporate world. For most teaching teams, their understanding of digital financial management practices, such as the specific

deployment of Robotic Process Automation (RPA), the practical application of Business Intelligence (BI) in operational analysis, and the iterative logic of big data risk control models, largely stems from indirect case studies rather than direct, hands-on operational or decision-making experience. This structural absence of practical experience hinders teaching from moving beyond theoretical deduction and tool introduction. It prevents the vivid reconstruction of the real-world challenges and solutions associated with technology selection, data governance, and cross-departmental collaboration in practice, leading to a discrepancy between instructional content and the actual realities within enterprises.

From the perspective of participating entities, teaching teams exhibit a deficiency in collaboration among multiple stakeholders. Industry mentors, serving as a critical variable for introducing practical knowledge, are often limited to participating in sporadic special lectures or guest presentations. They are positioned on the periphery or as supplementary elements within the teaching system, failing to be deeply embedded into core instructional activities such as curriculum design, case study development, practical guidance, and dissertation supervision. This superficial level of cooperation fails to establish a stable, institutionalised Closed loop for industry-university-research collaboration. Consequently, cutting-edge business practices, authentic project challenges, and data struggle to be continuously and systematically reintegrated into teaching. In essence, teaching teams remain largely closed systems dominated by academically oriented in-house faculty, lacking the formation of a stable and complementary dual-mentor structure that effectively leverages the respective strengths of internal academic advisors and external industry experts.

From the perspective of competency dimensions, the team faces a shortage of interdisciplinary capability provision. What new business education urgently requires is a compound teaching capability that both deeply understands the essence of finance and business and can proficiently apply data analysis tools to solve practical problems. The current situation, however, is that instructors well-versed in theory often lack strong technical application skills, while those who may possess technical proficiency frequently lack solid financial expertise and teaching experience. This dichotomy in competencies, where individuals excel in finance but lack technical proficiency, and vice versa, means that the envisioned integration of digital technology-enabled financial management in the curriculum often encounters the practical dilemma of having no one capable of implementing it precisely at the frontline of teaching.

4 Suggestions for Cultivating Digital Innovation Capability in Financial Management Talents in the Digital Economy Context

4.1 Dynamically Updating Course Content in Alignment with the Requirements of the Digital Economy Era

In the era of the digital economy, where knowledge iteration and technological innovation grow exponentially, the cultivation of new business talents must move beyond static and rigid curriculum content systems and adopt dynamic content updating. Simultaneously, teaching teams should actively introduce innovative pedagogical concepts to stimulate students' learning interest, deepen their understanding and

application of knowledge (Li, 2025), and enhance educational effectiveness, thereby ensuring that instructional content remains synchronised with the development of the digital economy (Wen & Liang, 2024).

Firstly, the dynamic updating of course content must be deeply embedded within the genuine logic and core issues of digital economic development. This requires curriculum design to transcend the stable frameworks of traditional textbooks and to continuously track and integrate the latest practices, policy norms, and theoretical breakthroughs in frontier areas such as platform economy governance, the assetisation of data factors, AI ethics, and pathways for digital transformation. For example, within the Investment and Valuation module, alongside the traditional Discounted Cash Flow (DCF) model, methods for valuing data assets (e.g., the cost approach), the valuation of digital platforms and intangible assets, and the financial impact analysis of green finance and ESG investments should be introduced. In the Financing and Capital Structure module, in addition to traditional debt and equity financing, explanations should be added on the operational mechanisms and associated financial risks of blockchain finance, supply chain finance, and cryptocurrencies, as well as new financing models based on big data credit assessment (such as data-pledge financing). In the Working Capital Management and Financial Analysis module, the core focus should shift from analysing static financial statements to developing the capability to construct real-time, multidimensional financial dashboards. Emphasis should be placed on teaching how to use business intelligence tools to integrate data from business systems for dynamic cash flow forecasting, supply chain financial optimisation, and forward-looking performance early-warning analysis based on non-financial data such as user engagement metrics.

Secondly, teaching team could try to collaborate with enterprises to implement case-based teaching and jointly develop curricula. Course content should not be derived solely from the lagging publication of academic literature; instead, deep cooperation should be established with leading enterprises in the industry and pioneering technology innovation communities. Implementing case teaching techniques in the classroom not only aligns with the requirements of educational reform but also maximises the quality of education (Li, 2024). It could be achieved through jointly developing real-time business case libraries, inviting industry experts to participate in the review and updating of course content, and using authentic corporate projects as topics for dissertations or course practice. For instance, by partnering with leading internet companies, the latest data models and algorithmic logic applied in areas such as user growth, precision marketing, or risk management can be pedagogically adapted and transformed into teaching cases and experimental materials for classroom instruction, ensuring that students are exposed to contemporary and evolving business knowledge.

4.2 Constructing Digitalised and Intelligent Teaching Models and Scenarios

With the rapid advancement of information technology, blended teaching models are becoming increasingly prevalent in the research and application of financial management courses (Yao, 2025). Teaching teams

could achieve deep integration between the cultivation of new business talents and the digital economy through innovative measures such as constructing distinctive educational models (Shangguan & Wu, 2025). To effectively cultivate students' digital innovation capabilities, financial management courses can construct digitalised and intelligent teaching models and scenarios. Through technological means, these can be materialised and made operable within the classroom, facilitating the effective integration of specialised knowledge with business practice. The utilisation of advanced technologies such as artificial intelligence facilitates the realisation of personalised learning for students (Zhao, 2024). The core objective of this transformation is to achieve deep coupling between abstract financial theory, complex data tools, and dynamic business decision-making. This enables students to accomplish a leap in capability, from cognition and application to innovation, within highly simulated practical environments.

Firstly, establish high-fidelity financial decision-making simulation scenarios to achieve closed-loop training from data to decision. This places the learning of theoretical knowledge within a highly simulated practical environment, enabling the immediate conversion and cyclic reinforcement of learning and application. Utilising virtual simulation technology, a dynamic financial sandbox environment that can simulate enterprises across different industries and lifecycle stages can be constructed. Students assume the roles of management teams within this environment, processing and analysing substantial volumes of internal and external data to complete comprehensive tasks such as investment and financing decisions, comprehensive budget formulation, merger and acquisition valuation, or liquidity crisis response. The system automatically generates simulated multi-period financial statements and market feedback based on their decisions, compelling students to confront the financial consequences of their choices and, through multiple iterations, understand the dynamic relationships between data, strategy, and value. This transforms knowledge points in financial management, such as capital structure and project evaluation, into practical capabilities for seeking optimal solutions amidst uncertainty.

Secondly, introducing authentic corporate data projects to implement inquiry-based teaching. The teaching model should shift from case explanation to project tackling. The integration of case-based teaching can enrich pedagogical practices, shifting away from the traditional teacher-centred, student-passive didactic model (Qiao et al., 2025). Guiding students through immersive engagement in case-based learning can enhance their strategic financial thinking, risk awareness, and practical innovation capability (Gao, 2025). By establishing Financial Data Workshops in collaboration with partner enterprises, real-world challenges of business-finance integration can be brought into the classroom. Instruction can introduce relevant issues such as cash flow stress testing under supply chain disruption risks or analysing the impact of ESG performance on financing costs. The teacher's role evolves from lecturer to that of coach and collaborator, guiding student teams in applying data mining tools, statistical analysis software, and visualisation techniques to progressively complete the entire process from problem definition and analytical modelling to report presentation. This process integrates professional financial knowledge, data analysis skills, and business communication abilities.

4.3 Building Interdisciplinary Teaching Teams

In the era of the digital economy, cultivating the digital innovation capability of new business talents cannot be achieved without the support of an interdisciplinary teaching teams. The teaching teams should continuously enhance their own teaching proficiency, so they could effectively improve students' learning outcomes through the integration of theory and practice (Wang, 2023). The teaching team for financial management courses must first keep pace with the times in their philosophy, focusing on updating educational concepts and adapting to the demands of digital transformation and new business education. They should maintain a commitment to continuous learning and the cultivation of digital innovation capability, orienting their efforts toward solving real teaching problems and striving to build a continuously evolving capacity based on digital literacy and centred on addressing genuinely complex instructional challenges.

Secondly, by tapping into and reconfiguring the potential of existing faculty within the institution, the teaching team can implement an Intra-University Faculty Complementary Programme to establish a dual-qualification foundation at a relatively low cost. For example, across the university, young finance faculty with an interest in data analysis, instructors teaching courses such as Management Information Systems or Statistics within the business school, and faculty from computer or data science departments willing to engage in applied research can be recruited to form teaching clusters. This facilitates the creation of low-cost, high-frequency knowledge exchange groups.

Thirdly, industry experts can be invited to serve as practicum mentors. By focusing on local small and medium-sized enterprises, accounting firms, accounting agency firms, or bank branches, relevant experts from these organisations can be invited to act as practicum mentors. These mentors participate in curriculum development by providing authentic corporate cases, delivering specialised lectures, and co-creating course content. Additionally, some classroom teaching can be arranged directly on-site at the enterprises, with staff members providing explanations. This approach is more cost-effective than purchasing virtual simulation software and offers a more authentic experience.

5 Conclusion

In the era of the digital economy, new demands have been placed on the cultivation of new business talents, necessitating a stronger emphasis on fostering digital innovation capability. This study first clarifies the significance of cultivating digital innovation capability in new business talents. It then explores the connotation of digital innovation capability from three dimensions, which are the knowledge system, creative thinking, and entrepreneurial spirit. Subsequently, the study analyses three major issues currently present in the teaching of financial management courses, highlighting the misalignment between course content and structure and contemporary demands, the lack of data-driven instructional models and insufficient practical teaching, as well as the relative homogeneity in teaching team composition. Finally, the paper proposes pathways for cultivating the digital innovation capability of new business talents in the digital economy era. Firstly, course content can be updated in alignment with the requirements of the digital economy era. Secondly, digitalised and intelligent teaching models and scenarios should be constructed to provide students with more authentic corporate experiences. Thirdly, interdisciplinary teaching teams ought to be established to offer robust support for the cultivation of new business education.

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