

Exploration and Practice of the “Digital-Innovation +” Business Talent Cultivation Model at Frontier Finance and Economics Universities Serving the Silk Road Economic Belt

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Abstract: Centering on the characteristics of talent demands for the construction of the Silk Road Economic Belt, combined with the school-running orientation and regional features of frontier finance-and-economics universities, this paper takes satisfying business talent demands of the Silk Road as the core, highlights the cultivation of digital-intelligence capability and innovation capability, and builds the “Digital-Innovation +” business talent cultivation model. Based on surveys on current digital-intelligence competencies and learning preferences of students, this paper puts forward five implementation paths, including specialty transformation, ideological-political guidance, curriculum reconstruction, industry-education integration, and faculty development. It designs a three-dimensional integrated curriculum system of “Digital-Innovation +” to promote the clustered transformation of business specialties. It also strengthens “Three-All-Round Education” and ideological-political value guidance, and builds a high-level teaching staff through the strategy of “external introduction and internal cultivation”. This study holds that this model can improve the adaptability of talent cultivation to regional economic development, and provide referable practical paradigms for frontier finance-and-economics universities to serve national strategies and local development.

Keywords: Silk Road Economic Belt; Business talent cultivation; Frontier finance-and-economics universities; Digital-intelligence literacy; Innovation capability

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1. Introduction

The accelerated advancement of construction for the core area of the Silk Road Economic Belt has generated massive demands for business-related talents. The iterative upgrading of digital technologies represented by artificial intelligence has further reshaped the capability-demand structure for talents in the business field.

Modern business talents are required not only to possess a solid theoretical knowledge system of business disciplines, but also to have strong digital-intelligence capabilities and innovation capabilities. Such changes have brought brand-new challenges to the business talent-cultivation system of frontier finance-and-economics universities. The *Outline for the Construction of an Education-Powerful Country (2024-2035)* clearly puts forward requirements for “fostering a new pattern of cultivating virtue through education, promoting university reform in a classified manner, and deepening the construction of new liberal arts”. The *Opinions on Accelerating the Digital Transformation of Education* jointly issued by nine departments, including the Ministry of Education, emphasize promoting the digital upgrading of disciplines and specialties as well as digital reform of curricula and teaching”. The two policies offer clear directional guidance for the reform of talent-cultivation models in higher education, especially for business majors, and also highlight the urgency and necessity for frontier finance-and-economics universities to optimize their business-talent-cultivation systems.

Against such a background, exploring and practicing the “Digital-Innovation +” business talent-cultivation model in frontier finance-and-economics universities has become a key path to resolve the above-mentioned problems and connect national policy requirements with regional development demands. Existing research mainly focuses on innovation of business talent-cultivation models, cultivation of digital-intelligence and innovation capabilities, and talent cultivation for the Silk Road Economic Belt. In terms of innovation for business talent-cultivation models, the case-action learning method effectively improves students’ theoretical attainments and practical capabilities by integrating the dual-driving logic of incentive compatibility and knowledge sharing ^[1]. Making full use of digital technologies such as artificial intelligence and big-data helps improve the practical-teaching effects of business majors ^[2]. Integrating algorithms to consolidate multi-source data, optimize curriculum systems and dynamic management mechanisms, and build an “algorithm + mechanism”-driven talent-cultivation model can enhance students’ innovative thinking, entrepreneurial capabilities and employment competitiveness ^[3]. Business talent-cultivation modes can be divided into government-dependent type, technology-driven type, society-oriented type and other categories ^[4]. In the digital-intelligence era, traditional single-sided cultivation modes can hardly cope with complex business challenges, and it is necessary to cultivate compound business talents with technical-application capabilities, interdisciplinary thinking and innovative-practical capabilities ^[5]. In terms of cultivating digital-intelligence and innovation capabilities, deepening university-enterprise cooperation and cultivating talents matching supply and demand have become new requirements for industry-education integration brought by economic and social development ^[6]. We shall actively boost interdisciplinary and inter-specialty reconstruction of curriculum systems and build industry-education communities of destiny led by modern industrial colleges ^[7]. Promote the organic integration of digital-intelligence technologies and educational development ^[8], innovate talent-cultivation mechanisms and resource-cooperation paths ^[9], and address problems such as poor integration degree of talent cultivation on the teaching supply side and the lack of industry-driven curriculum systems ^[10].

Existing research has yielded fruitful outcomes on relevant themes, yet there are relatively few explorations targeting business talent cultivation in finance-and-economics universities. In particular, research on new-era business talent-cultivation models integrating digital-intelligence capabilities and innovation capabilities is even more insufficient.

2. Analysis of the current situation and problems of business talent cultivation in frontier finance-and-economics universities

To analyze the current situation of the “Digital-Innovation +” business talent cultivation in frontier finance-and-economics universities, this paper takes undergraduate business students from Xinjiang University of Finance and Economics as research objects. Through questionnaire surveys (485 valid questionnaires recovered) and student forums, it systematically analyzes students’ current digital-intelligence capabilities, core demands and learning preferences, so as to provide support for designing implementation paths for the subsequent “Digital-Innovation +” talent-cultivation model. The survey results are shown as follows.

2.1. Consensus reached on importance of digital-intelligence capabilities and highlighted urgency for cultivation

Surveys show that students hold highly unified perceptions about the importance of digital-intelligence capabilities. 80.53 % of students regard digital-intelligence capabilities as “important” or “very important” for professional study. It confirms the consensus on technical empowerment for business talents in the digital era, and also reflects that curriculum reform must closely focus on the core orientation of cultivating digital-intelligence capabilities.

2.2. Demands for capability improvement focus on core modules and curriculum setting requires precise matching

Students’ demands for improving digital-intelligence capabilities show obvious practice-oriented features. Data-analysis methods, data visualization and programming capabilities rank high among students’ concerns, accounting for 76.84 %, 67.01 % and 53.07 % respectively. Besides, digital-management tools as well as data ethics and privacy protection also draw wide attention. This indicates that students attach great importance to digital-intelligence skills for solving practical problems. Priority shall be given to arranging core modules such as data analysis, visualization and programming to avoid over-theoretical curricula and ensure effective connection between curriculum contents and vocational application scenarios.

2.3. Learning preferences lean toward practice and teaching modes require diversified innovation

Students prefer more practical learning approaches such as participating in cooperative projects, internships and disciplinary competitions. This demonstrates that traditional theoretical teaching can no longer satisfy students’ demands for improving digital-intelligence capabilities. Among all options, taking part in university-enterprise cooperative projects or internships, schools offering new professional courses, and participating in disciplinary competitions rank the top three, with proportions of 64.34 %, 61.89 % and 50.41 % respectively. Self-paced online learning and workshops / short-term training also serve as important learning methods.

3. Objectives and implementation paths of the “Digital-Innovation +” business talent cultivation

3.1. Objectives of the “Digital-Innovation +” business talent cultivation

Closely centering on regional resource endowments and university-running objectives, focusing on disciplinary layout and undergraduate specialty setup, this paper constructs a “2+1” business talent-cultivation

system. Targeting business talent demands arising from the construction of the core area of the Silk Road Economic Belt, it focuses on cultivating “Digital-Innovation +” business talents equipped with digital-intelligence capabilities and innovation capabilities. In specific implementation, with the help of four integrations (integration of Party-building and professional work, integration of ideological-political education and specialties, integration of theories and practice, integration of scientific research and teaching) and three classrooms (the first classroom, the second classroom and the virtual classroom), it highlights the cultivation of undergraduates’ digital-intelligence and innovation capabilities. Giving full play to disciplinary layout advantages covering bachelor, master and doctoral degrees, we shall vigorously cultivate “Digital-Innovation +” business talents with integrated bachelor-master-doctor training.

3.2. Implementation paths of the “Digital-Innovation +” business talent cultivation

3.2.1. Promote transformation and upgrading and clustered development of business specialties

Faced with regional demands for compound business talents, we shall take clustered specialty development as the starting point to strengthen students’ identification with business majors. Taking the optimization of talent-cultivation programs as the carrier, reduce excessive differences among specialties, push the transformation and upgrading of existing specialties, and build business specialty clusters featuring prominent “Digital-Innovation +” characteristics. For existing specialties, guided by national-level first-class specialty construction sites, deeply integrate the OBE concept into talent-cultivation programs, and realize reverse mapping of digital-intelligence and innovation capability objectives to curriculum setup and practical sessions. For specific transformation ideas: Business Administration specialty lays stress on digital management and highlights strategic and innovation-entrepreneurship features; Logistics Management specialty transforms toward digital-intelligence logistics; Marketing specialty relies on the micro-specialty of “Digital-Intelligence Marketing and Business Analysis” and big-data-marketing experimental classes; Human Resource Management specialty highlights its digital-oriented direction. While maintaining core strengths, each specialty shall form shared competency features of digital-intelligence and innovation. In terms of new-specialty construction, for the newly-approved Supply Chain Management specialty, simultaneously explore dual-bachelor-degree and industry-education-integrated dual-feature cultivation modes.

3.2.2. Strengthen “Three-All-Round Education” and ideological-political value guidance

Taking the construction of the “Three-All-Round Education” demonstration college as the starting point, further boost the integration of Party-building and professional work to guide ideological-political education of all business specialties. Aiming at fulfilling the fundamental task of fostering virtue through education, focusing on the “four emphases and one weakness” of undergraduate ideological-political education (key tasks, key groups, key fields, key regions, and weak links), build the “Three-All-Round and Four-Achievement” education mode (four achievements include inspiring students to grow, guiding students to mature as persons, educating students to become competent professionals, and helping students attain success). Push forward the improvement of the “Ten-All-Round Education” system, including curriculum education with “one objective, two platforms, three levels and four modules”. Centering on four ideological-political modules of family-country sentiments, the Silk-Road spirit, business ethics and frontier responsibilities, through approaches including pre-college career planning, embedding value concepts into curricula, enterprise-visit practice and employment-policy guidance, deeply integrate regional development strategies, entrepreneurship spirit and business-ethical norms into professional teaching, and strengthen students’ sense of responsibility

and emotional identification to serve frontier regions.

3.2.3. Reconstruct the three-dimensional integrated curriculum system of “Digital-Innovation +”

To guarantee the implementation of the “2+1” undergraduate talent-cultivation system, actively plan “Digital-Innovation +” undergraduate specialty curricula. First, cultivate digital-intelligence capabilities via “three categories of courses, one transformation and two integrations”. Actively set up three categories of digital-intelligence courses (basic digital-intelligence courses, specialty-oriented digital-intelligence courses, practical-combat digital-intelligence courses), push the digital-intelligence transformation of professional courses, and realize in-depth integration of internships, competitions and the cultivation of digital-intelligence capabilities. Second, cultivate innovation capabilities relying on “one course, one training and multiple supports”. Build one course, General Theory of Innovation and Entrepreneurship; carry out one training program, namely the College Students’ Innovation and Entrepreneurship Training Program; and realize multi-link supports, including disciplinary competitions, innovation-oriented specialty courses, integration of specialty and innovation, as well as industry-education integration, so as to continuously improve students’ innovation capabilities. Third, cultivate business talents meeting the demands of the Silk Road Economic Belt construction. It includes building Silk-Road-themed courses, setting undergraduate graduation-thesis topics around the Silk Road Economic Belt construction, and developing Silk-Road-relevant cases (develop a batch of teaching cases concerning enterprise management along the Silk Road), so as to provide teaching resources and scenario support for business talent cultivation.

3.2.4. Reform cooperation modes and promote in-depth industry-education integration

To resolve the disconnection between theoretical teaching and practice, take modern industrial colleges as the carrier and explore the “3+3” industry-education-integration mode to realize in-depth integration between business talent cultivation and industrial practice.

First, explore the “3+3” industry-education-integration mode to improve students’ practical capabilities. University-enterprise cooperation bases built in multiple fields, including manufacturing (covering agricultural products, biomedicine, etc.), supply chain, commerce & logistics, and human resources, shall serve business-specialty talent cultivation. Explore and construct the “3+3” industry-education-integration mode: firstly, three empowerment approaches from enterprises for talent cultivation, namely enterprises empower business talent cultivation through internships & employment, joint curriculum development and case development; secondly, three types of services provided for enterprises, namely actively providing training services, horizontal research projects and joint researches for enterprises.

Second, build the Digital-Intelligence Supply-Chain Industrial College to empower in-depth industry-education integration. The Digital-Intelligence Supply-Chain Industrial College shall integrate and coordinate practical resources of the college, and focus on promoting university-enterprise joint curriculum development, industry-education-integration featured classes, vocational-qualification certification and enterprise-case development. It is planned to jointly build the course *Agricultural-Product Supply Chain Management* and compile relevant teaching materials with Xinjiang Fruit Industry Group, and jointly build *Intelligent Warehousing and Distribution Management* with JD Logistics. Explore the construction of industry-education-integration featured classes covering internships & employment, innovation projects and disciplinary competitions. Authorized by the China Federation of Logistics & Purchasing Vocational Competence Level Certification & Training Center, carry out junior-, intermediate- and senior-level training

for logistics specialists and supply-chain management specialists for on-campus students and enterprise employees.

3.2.5. Build a high-level teaching staff via the strategy of “External Introduction and Internal Cultivation”

In view of the faculty characteristics of frontier universities, adopt the combined strategy of internal cultivation, external introduction, and institutional incentives to build a double-competency teaching staff with academic attainments, digital-intelligence capabilities, and practical experience. In terms of internal cultivation, support teachers to take temporary posts in enterprises for practice, systematically organize training on digital-intelligence teaching capabilities, select teachers for special-topic studies and visiting-scholar programs in other universities, and support young teachers to pursue doctoral degrees in relevant fields. In terms of external introduction, implement targeted talent-introduction plans and mainly introduce young doctors with digital-intelligence-technology or business backgrounds. Employ high-level teachers or enterprise experts to participate in talent cultivation via distinguished-professor posts, flexible talent-introduction and silver-haired-expert professor programs, and form a dual-tutor system combining on-campus academic tutors and off-campus industrial tutors. Establish sound teacher-incentive mechanisms: include teaching innovation, curriculum construction and industry-education-integration achievements in performance-evaluation systems, and stimulate teachers' enthusiasm to participate in talent-cultivation reform through teaching competitions and teaching-research activities.

4. Conclusion

Faced with new requirements for business talents brought by the construction of the core area of the Silk Road Economic Belt and the reshaping of talent-capability structures in the digital-intelligence era, frontier finance-and-economics universities must take the initiative to adapt to changes and build new paradigms for business talent cultivation with regional features and characteristics of the times. The “Digital-Innovation +” business talent-cultivation model proposed in this research is oriented toward serving national strategies and focuses on cultivating digital-intelligence capabilities and innovation capabilities. Through systematic objective design, path integration and mechanism innovation, it realizes the transformation of business education from knowledge imparting to capability shaping. Specific practices of this model in specialty transformation, ideological-political guidance, curriculum reconstruction, industry-education integration and faculty construction can not only cultivate students' comprehensive qualities and employment competitiveness, but also improve universities' capacity to serve regional development.

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Disclosure statement

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