UDC 378.046.4:004.9:336(476+510)

INFORMATION TECHNOLOGY-ENABLED INTEGRATION OF BUSINESS TEACHING: OPTIMIZATION PATH OF ONLINE RESOURCES AND PRACTICAL TEACHING IN FINANCIAL MANAGEMENT BASED ON CHINA-BELARUS DUAL-CAMPUS PRACTICE

Ailila·Kadierbieke, master's degree student,
Sednina M. A., senior lecturer
Belarusian National Technical University
Minsk, Belarus

Abstract. Against the backdrop of global digital transformation, the financial management industry demands interdisciplinary talents with digital capabilities, cross-border practical competence, and multilingual skills. Based on dual-campus practice of East China University of Science and Technology (undergraduate) and Belarusian National Technical University (postgraduate), this paper constructs a three-dimensional integration path of "digital resource precise matching – technology-enabled teaching collaboration – multi-dimensional evaluation closed-loop optimization". Empirical verification shows the path significantly improves core teaching indicators, providing a replicable solution for international business teaching reform.

Keywords: Information Technology; Financial Management; Cross-border Teaching; Online Resources; Practical Teaching; Talent Training; Dual-Campus Cooperation.

The global financial management industry is undergoing accelerated digital transformation, with blockchain, big data analytics, and virtual simulation deeply integrated into cross-border accounting, international tax planning, and transnational risk control. The "2024 Global Business Talent Demand Report" indicates a 15 % annual growth in the gap of interdisciplinary talents with digital application capabilities and cross-border practical experience, challenging traditional higher education talent training models (Global Business Talent Research Institute, 2024).

Cross-border dual-campus cooperation has become a key model for cultivating international talents, but faces issues such as disconnected teaching resources, inefficient cross-cultural collaboration, and incon-

sistent evaluation standards. East China University of Science and Technology adopts an "offline case discussion + online theory" model, focusing on local financial standards, but lacks scenario-based virtual simulation resources. Belarusian National Technical University centers on International Financial Reporting Standards (IFRS) with "English digital resource autonomous learning + offline practical training", yet lacks professional multilingual support for non-native speakers (Kovaleva & Petrova, 2023). Both universities struggle with inadequate deep integration of information technology and teaching.

Core Concept Definition and Problem Analysis.

– Digital Teaching Resources: A collection of technology-based resources including virtual simulation platforms, interactive case libraries, multilingual annotated documents, and AI Q&A knowledge bases, characterized by interactivity, scenarioization, and timeliness.

– Technology-enabled Teaching Collaboration: Process reconstruction and data interconnection of "online pre-learning – offline practice – cross-border collaboration" through information technology, emphasizing systematic teaching model transformation.

– Multi-dimensional Evaluation Closed-loop: A dynamic system combining process, summative, and cross-cultural collaboration evaluation, realizing "evaluation – analysis – improvement – re-evaluation" optimization.

Based on teaching platform data, a questionnaire survey of 80 teachers and students, and 6-month teaching observation, the teaching integration status of the two universities is compared in tabl. 1.

Table 1 – Comparison of Teaching Integration Status between Chinese and Belarusian Universities

Comparison Dimension	**East China University of Science and Technology**	**Belarusian National Technical University**	**Data Source**
1	2	3	4
Digital Resource Form	Recorded courses (65 %), PDF courseware (15 %), interactive resources (20 %)	Virtual simulation (58 %), interactive cases (22 %), other interactive resources (80 %)	Platform data (2023.9-2024.3) + manual verification

1	2	3	4
Core IT Tools	Chaoxing Learning Tong, UFIDA U8	SAP S/4 HANA Virtual Lab, Moodle, Zoom	Syllabus sorting + questionnaire (n = 80)
Technology-Practice Integration Degree	35 % (resource display only)	82 % (covering full teaching process)	Teaching observation (30 class hours) + data analysis
Multilingual Support	No specialized tools, 2.5 h/article translation time	Moodle multilingual plugin, 60 % terminology accuracy	50-core term test + 10-document translation statistics
Evaluation Model	Summative assessment-oriented (final exam 70 %)	Practice + collaboration evaluation, 60 % subjective judgment	Syllabus analysis + 2023 academic year evaluation data

Three core problems are identified: 1) inadequate digital resource adaptation – domestic universities lack cross-border scenario-based virtual simulation resources, while Belarusian universities have low-accuracy multilingual tools; 2) insufficient technology-practice integration – domestic universities use technology only for resource distribution, and Belarusian universities lack professional cross-border collaboration tools; 3) deficient digital evaluation system – domestic universities ignore process evaluation, and Belarusian universities lack quantitative indicators for cross-cultural collaboration assessment (Smith & Brown, 2023).

Integration Path Construction and Practical Strategies.

Digital Resource Precise Matching: Three-Dimensional Technical Resource Library.

Centering on cross-border accounting, international tax planning, and consolidated financial statement preparation, a hierarchical, scenario-based, and dynamic digital resource system is built.

– Scenario-oriented resource development: A joint team of Chinese and Belarusian teachers (5 professors, 3 associate professors, 2 enterprise experts) designs virtual simulation modules covering IFRS-compliant cross-border

transaction recording, multi-currency tax calculation, and consolidated statement preparation. Operation guidelines and error prompts are embedded in SAP S/4 HANA Virtual Lab, verified by transnational enterprise experts.

– Multilingual resource adaptation: A Python-based bilingual terminology library (Chinese-English-Russian, 800+ core terms, 300+ expressions) is integrated into Moodle and Chaoxing Learning Tong via SDK. AI subtitle tools (accuracy ≥ 95 %) add multilingual subtitles to core videos, with terminology hyperlinks in electronic materials for one-click access.

– Dynamic update mechanism: A "Sino-Belarusian joint working group" collects policy updates, industry cases, and student feedback via synchronous documents. Quarterly updates include 10–15 cross-border cases, 30+ terminology entries, and 2–3 simulation modules, reviewed by dual-campus teachers.

Technology-Enabled Teaching Collaboration: Three-Stage Closed-Loop Model.

The cross-border teaching process is reconstructed to realize seamless connection between online pre-learning, offline practice, and cross-border review.

– Online pre-learning (2 days): Students complete scenario-based tasks (15–20 minute multilingual videos, interactive cases, 2–3 simulation tasks) on the integrated platform. The platform records learning trajectories, identifies weak points, and pushes supplementary resources. A ChatGLM-based Q&A tool provides real-time responses (≤ 10 minutes), with complex questions summarized for teacher explanation.

– Offline practice (3 days): Teachers analyze pre-learning data to guide error-prone links (e. g., multi-currency conversion) and weak points (e. g., IFRS application). Students process real cross-border data from cooperative enterprises, practice core skills, and complete reports using bilingual templates. The platform monitors operations in real time, with 2-3 on-site teacher guidance sessions daily.

– Cross-border collaboration review (1 day): The Collaborative Finance Hub platform enables real-time data sharing, multilingual translation (accuracy ≥ 92 %), and online annotation. Students are divided into mixed groups (2–3 Chinese + 2–3 Belarusian students) to solve comprehensive cases. The platform records collaboration processes, with teachers providing centralized comments and groups submitting collaboration reports.

Multi-Dimensional Evaluation Closed-Loop Optimization.

A process-oriented, capability-focused, data-supported evaluation system is constructed.

– Process evaluation (60 %): Quantitative indicators include online learning duration (10 %, ≥ 8 hours), resource interaction frequency (10 %, ≥ 5 interactions), simulation operation accuracy (20 %, ≥ 70 %), and pre-learning completion rate (20 %, 100 %). SPSS is used to generate individual reports with targeted feedback.

– Summative evaluation (30 %): Scenario-based practical assessment requires completing cross-border financial processing tasks (accounting entry, tax calculation, statement preparation) within 4 hours. Evaluation combines system automatic scoring (70 %) and dual-campus teacher joint evaluation (30 %), with a 60-point passing score.

– Cross-cultural collaboration evaluation (10 %): Assesses collaboration contribution (4 %), multilingual communication effectiveness (3 %), and cross-cultural adaptation (3 %) via peer evaluation (50 %, 5-point scale) and teacher evaluation (50 %, quantitative + qualitative analysis).

– Feedback and optimization: Monthly teaching improvement meetings identify problems (e. g., low simulation accuracy, poor communication effectiveness). Improvement measures are formulated and tracked, with evaluation indicators updated timely to form a closed-loop optimization mechanism.

Conclusion.

Based on China-Belarus dual-campus practice, this paper constructs a three-dimensional integration path of "digital resource precise matching – technology-enabled teaching collaboration – multi-dimensional evaluation closed-loop optimization". The path effectively solves cross-border teaching problems, improves core indicators and satisfaction, proving information technology can break through cross-border teaching limitations. Future optimization will expand emerging scenario resources, deepen AI application, and promote the path to more cross-border cooperative majors and universities.

Table of contents

1. Zhang, M. Path research on information technology-enabled business practical teaching / M. Zhang, J. Li // Accounting Research. – 2024. – № 5. – P. 112–117.

2. Kovaleva, M. D. Digitalization of educational resources for international financial management programs / M. D. Kovaleva, E. S. Petrova // Vestnik Belarusian National Technical University. – 2023. – Vol. 18, № 3. – P. 45–52.

3. Smith, J. E. Technology-enhanced blended learning in international financial education / J. E. Smith, K. L. Brown // Journal of Educational Technology & Society. – 2023. – Vol. 26(4). – P. 89–102.

4. 2024 Global Business Talent Demand Report / Global Business Talent Research Institute. – Beijing: China Higher Education Press, 2024.

5. Wang, Y. Research on the construction of cross-border digital teaching resource library for financial management / Y. Wang, H. Liu // Journal of Higher Education. – 2024. – Vol. 3. – P. 89–94.

UDC 339.9

MODELS FOR CREATING AND MANAGING A BRAND IN A COMPETITIVE ENVIRONMENT

Dudko E. N., PhD, associate professor
Belarusian State Economic University
Minsk, Belarus

Abstract. The article reveals the essence of a brand, which has transformed from a set of promotional tools intoa comprehensive subsystem of an organization's overall marketing system. Brand promotion models are analyzed in the context of their impact on an enterprise's competitiveness. It is demonstrated that in today's environment, branding serves as a strategic asset in ensuring competitiveness.

Keywords: brand, branding, advantages, brand value, approaches, methods and models for creating and promoting a brand.

Globalization of the world economy and fierce competition have shortened the life cycle of products and led to the need to ensure commercialization of new developments, including protected intellectual property. In the promotion of goods and services on the markets, as well as increasing the competitiveness of national producers, an important role belongs to trademarks (service marks), which, under certain conditions, become brands. In the 20th century branding began to develop at a faster pace and became an important component of marketing and communication activities of the organization. The main reason for the development and formation of trademark law and the ongoing changes was the growth of competition, needs and demands of the population and organizations. In order