

Research on the Practical Teaching Reform of the Financial Risk Management Course in Universities under the Background of the Digital Economy

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Abstract: The rapid development of the digital economy has reshaped the business models of the financial industry and put forward brand-new requirements for the teaching of the financial risk management course in universities. Promoting teaching reform enables teachers to introduce diversified teaching methods into the course, thereby effectively improving teaching effects and supporting the development of students' abilities. Based on this, this paper conducts research on the practical teaching reform of the financial risk management course in universities under the background of the digital economy, analyzes the core problems in the current teaching, expounds the important value of the practical teaching reform, and puts forward targeted reform strategies. It aims to provide a reference for universities to optimize the practical teaching of this course and cultivate professional talents that meet the needs of the industry.

Keywords: Digital economy; Financial risk management; Practical teaching; Teaching reform

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1. Introduction

With the continuous innovation of digital financial formats, the financial industry's demand for risk management talents is no longer limited to the reserve of traditional theoretical knowledge, but more emphasizing compound talents with digital technology application capabilities, practical abilities in risk identification and disposal, and the ability to control cutting-edge risks. As a core course for financial majors in universities, financial risk management integrates theoretical, practical and comprehensive characteristics, and its teaching quality directly affects the training level of financial professionals. Therefore, advancing the practical teaching reform of the financial risk management course based on the background of the digital economy is of great significance.

2. Problems in the teaching of the financial risk management course in universities under the background of the digital economy

2.1. Disconnection between practical teaching content and the development of digital finance

At present, the teaching content of the financial risk management course still focuses on the field of traditional financial risks, in which the identification of three core types of risks (credit, market and operational), the construction of measurement models and the research on prevention and control strategies still occupy an important position. Risk factors brought by emerging formats under the background of the digital economy are rarely involved. The update cycle of textbooks is relatively long, making it difficult to timely incorporate application scenarios of cutting-edge technologies such as big data, blockchain and digital currency, and there is also a lack of systematic analysis of issues such as data privacy leakage, algorithm discrimination and platform monopoly. Some universities still only conduct operational training on basic risk management software, without systematically integrating practical training of cutting-edge digital technologies such as big data analysis tools and artificial intelligence risk control models, leading to a large deficiency in students' risk cognition and response capabilities in the field of digital finance^[1].

2.2. Singleness of practical teaching methods

Under the background of the digital economy, the demand for practice-oriented and adaptive abilities in the field of financial risk management is increasingly prominent. However, the current higher education teaching model mostly adopts the form of "theoretical teaching + simple case sorting + software practice". The knowledge content in this conventional form is quite rigid and lacks innovation. The existing risk control systems are usually deficient in functions, limited in application scenarios, and fail to fully consider the use of digital technologies, thus unable to fully restore the real elements of complex risk flow in digital financial scenarios^[2]. Current practical teaching is mostly limited to classroom teaching, with insufficient design and arrangement of extracurricular expansion and on-site internship links. The single teaching form makes it difficult for students to integrate theoretical knowledge with the actual working environment, resulting in insufficient cultivation of students' ability to independently explore and solve complex problems, and the increasingly prominent problem of insufficient participation enthusiasm and initiative.

2.3. Weak practical teaching support system

The defects of the practical teaching support system are important factors hindering the further improvement of the teaching quality of financial risk management, which are reflected in many aspects. On the one hand, the structure of the teaching staff is obviously weak. Although many university teachers have a solid professional theoretical foundation, they lack work experience in financial institutions and practical experience in digital finance, especially in the practical application of data mining and intelligent risk control tools, making it difficult to effectively guide students in practical training. Some teachers still have insufficient in-depth understanding and application capabilities of emerging technologies, especially in the integrated use of cutting-edge information technologies such as big data analysis software and artificial intelligence risk control systems, which has a significant impact on the design of classroom interaction and the improvement of experimental schemes^[3]. On the other hand, the construction of practical teaching bases is outdated. At present, the cooperative units of most universities are still concentrated in conventional financial institutions, and the in-depth cooperation with enterprises and online financial platforms is not yet fully mature. The number of internship venues currently used is small and the equipment is single, which is difficult to fully cover the actual operation scenarios in the field

of digital finance, resulting in students having relatively few opportunities to contact real business. In addition, there is an obvious gap in the allocation of educational resources, with insufficient investment in digital risk management courses.

3. Value of the practical teaching reform of the financial risk management course in universities under the background of the digital economy

3.1. Conducive to cultivating compound financial risk management talents meeting industrial needs

Under the background of the digital economy, the structure of talent demand in the financial industry has undergone profound changes, and compound talents with a foundation of traditional financial theories, digital technology application capabilities and practical operation capabilities have become a rigid demand of the industry. The practical teaching reform of the financial risk management course updates practical content, innovates teaching methods, strengthens practical training, deeply integrates digital technology with financial risk management knowledge, guides students to master the application of cutting-edge tools such as big data analysis and artificial intelligence risk control, familiarizes them with the methods of identifying, measuring and disposing of new risks in digital financial scenarios, and improves students' comprehensive practical abilities. It effectively makes up for the deficiencies of traditional teaching, enables financial professionals cultivated by universities to better meet the needs of industrial positions, enhances students' employability, and provides talent support for the stable development of the financial industry^[4].

3.2. Conducive to improving the quality of course teaching

Practical teaching reform is a key way to improve the curriculum system of financial risk management. With the rapid rise of the digital economy, the scope of financial risk management is undergoing theoretical innovation, method update and technological transformation. Deepening the practical link promotes the continuous innovation of course content, and systematically brings the advanced achievements and cases of digital finance into the classroom, completely changing the drawbacks of outdated textbooks. This can not only stimulate students' learning interest and enhance teaching effects, but also realize the synchronous development of course teaching and industrial development, keeping the course alive with vitality^[5].

3.3. Conducive to promoting the construction of financial majors in universities

As a core course for financial majors, the teaching reform of financial risk management plays an important leading role in the construction of the major. Practical teaching reform can force universities to strengthen the reform of the curriculum system of financial majors, emphasize the practical teaching links of financial majors, increase the allocation of teaching resources, and optimize the practical teaching ability and industrial adaptability of the teaching staff. At the same time, it strengthens the co-construction with fintech enterprises and internet financial platforms, builds an industry-education integration talent training platform, realizes the deep integration of professional construction and industrial development, and forms distinctive professional advantages^[6]. This can improve the quality of talent cultivation for financial majors in universities, enhance the disciplinary competitiveness and influence of universities, and lay a foundation for the connotative development of universities.

4. Strategies for the practical teaching reform of the financial risk management course in universities under the background of the digital economy

4.1. Improve the practical curriculum system and sort out the practical teaching content

Based on the background of the rapid development of the digital economy, universities should build a practical teaching system for the financial risk management course to realize the effective integration of educational content of traditional risks and emerging risks as follows:

- (1) Optimize the setting of course modules: Universities should retain the classic practical training links of traditional financial risks, such as credit risk judgment and market volatility prediction, and add new risk thematic modules focusing on the digital age, including data privacy rules, algorithmic ethical constraints, platform operation supervision, and cryptocurrency compliance inspection. Each part should clearly state the teaching objectives, core knowledge points and operational norms^[7];
- (2) Sort out and update the practical teaching content: By regularly updating the experimental material database, absorb the latest trends and potential problem cases in the fintech field, such as the legal disputes in Ant Group's anti-monopoly lawsuit and the potential safety hazards of virtual asset trading platforms, and design targeted operational tasks to improve students' cognitive level and practical application skills;
- (3) Form a stepped practical content: Teachers should set up stepped practical content according to the knowledge reserve of students in different grades, where lower grades focus on basic software operation and simple risk case analysis, while higher grades focus on complex risk scenario simulation, practical project design and risk disposal plan formulation, enhancing the systematicness and progression of practical teaching^[8].

4.2. Strengthen practical teaching and adopt diversified teaching methods

In teaching practice, teachers should break through the limitations of the traditional practical teaching model, integrate digital technology with disciplinary characteristics, innovate diversified teaching methods, and comprehensively optimize students' awareness of independent exploration and improve their practical abilities. For instance:

- (1) Apply immersive teaching and situational simulation teaching: Through immersive case analysis and situational simulation teaching, teachers should build a virtual financial risk simulation environment on digital platforms, reproduce the evolution of risks in digital finance, and guide students to act as risk management specialists throughout the process, encouraging students to fully participate in key links such as risk identification, risk assessment, risk decision-making and response, effectively enhancing students' sense of experience. For example, simulate the emergency disposal of data leakage incidents on fintech platforms, let students formulate response plans and experience impromptu drills, and strengthen crisis management skills^[9];
- (2) Introduce project-based teaching and team cooperative learning: Teachers can formulate comprehensive practical training topics according to industrial needs, such as "Building a credit rating system with big data" or "Exploring the safety norms of blockchain payment systems", and encourage students to organize teams for division of labor and cooperation, carrying out research and planning, scheme design and task implementation in groups, so as to improve students' project leadership ability and team cooperation quality;
- (3) Build an educational ecosystem integrating online and offline teaching: Teachers can build a virtual

simulation practical training platform, introduce cutting-edge financial risk management tools such as the Wind risk control system and the Flush intelligent monitoring module, as well as authoritative public data sets, and encourage students to carry out independent practical training in their spare time. By holding special lectures and industry exchange meetings offline, invite senior experts in the fintech field to share experience, broaden students' knowledge horizon and strengthen their awareness of career development planning^[10].

4.3. Build practical teaching bases and enrich students' practical experience

Universities should build a practical teaching base system of "school-enterprise collaboration and multi-party linkage" to provide students with a real-scene training environment for digital financial risk management. First, expand the types of practical teaching bases. Universities should optimize the spatial distribution of practical training platforms, not only maintain the cooperation foundation with traditional financial institutions (banks, securities companies, insurance companies), but also focus on deepening cooperation with fintech enterprises, internet financial companies and third-party payment institutions, build stable and efficient internship venues, clarify the responsibilities of all parties in talent training, technical guidance and resource sharing, encourage students to deeply understand the cutting-edge trends and operation mechanisms of the industry, and comprehensively improve their professional quality and vocational adaptability^[11].

In addition, promote the upgrading of on-campus practical teaching bases. Universities should focus on improving on-campus practical training bases, build professional laboratories dedicated to digital financial risk management, equip with high-end equipment such as big data analysis tools, intelligent risk control systems and blockchain technology simulation platforms, and use desensitized actual business data to simulate typical risk prevention and control scenarios, fully meeting students' daily practical needs^[12]. At the same time, establish a long-term stable school-enterprise cooperation mechanism, regularly arrange teachers and students to carry out internships or special seminars off-campus, invite industry experts to serve as consulting advisors, promote resource sharing and collaborative innovation, and greatly improve the application effectiveness of experimental teaching^[13].

4.4. Develop practical school-based courses and timely introduce cutting-edge elements

Combined with the school-running orientation of higher education institutions and the regional financial development trend, universities should systematically develop practice-oriented school-based courses for specific needs, and timely incorporate the latest research results in the digital finance field into the teaching system. For example, set up a course development team. Universities can set up an interdisciplinary teaching and research team composed of on-campus and off-campus scholars and senior industry personnel, focus on key issues of digital financial risk management, and develop diversified teaching resources such as theoretical handouts, practical training guidelines and case compilations. The selected content should reflect application orientation, innovation awareness and local characteristics, strengthen practical significance while ensuring academic rigor, and make up for the deficiencies in traditional textbooks. According to the actual operation of the local fintech industry, introduce real business scenarios and risk prevention and control experience of local financial institutions to further enhance the professional matching and practical value of the course^[14].

Furthermore, establish a dynamic update mechanism for school-based courses. Universities should pay close attention to policy changes, technological innovations and risk evolution in the digital finance field, revise

the teaching syllabus regularly based on these changes, integrate elements such as cutting-edge case analysis, application of emerging technical tools and interpretation of industry norms into classroom teaching, and ensure that practical teaching keeps pace with industrial development. On top of that, encourage teachers to carry out scientific research and application research on digital financial risk management issues, improve curriculum design with research results, and enhance teaching quality and academic level^[15].

5. Conclusion

In summary, the rapid development of the digital economy brings both opportunities and challenges to the practical teaching of the financial risk management course in universities. Promoting practical teaching reform is an inevitable choice to adapt to industrial needs, improve the quality of talent cultivation and enhance disciplinary competitiveness. Based on the background of the development of the digital economy, universities should take cultivating compound financial risk management talents as the goal, improve the practical curriculum system, innovate diversified practical teaching methods, build a school-enterprise collaborative practical teaching base system, and develop characteristic school-based courses to provide strong support for practical teaching reform. In the follow-up work, teachers should continuously promote teaching reform, optimize the practical teaching reform plan, and drive the continuous improvement of the course teaching quality.

Disclosure statement

The author declares no conflict of interest.

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