

Research on digital transformation of university accounting: internal logic, mechanism and development strategy

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Abstract: At present, the digital transformation in the accounting field of universities is facing new challenges and opportunities in the internal logic, mechanism and development strategy. This research focuses on the internal logic of this transformation, examining the internal relationship between teaching demand and market change, technological progress and teaching innovation, data-driven and decision support, etc. With the increasing evolution of technology, this paper deeply discusses the evolution of technology-driven teaching mode, the supporting role of institutions and policies, and explores the mechanism and influence of digital teaching. Finally, this study explores in depth the development strategies for the current challenges and opportunities, including curriculum content and teaching method innovation, data application and learning assessment mechanisms. This paper attempts to provide comprehensive understanding and practical suggestions for the digital transformation of accounting in colleges and universities.

Keywords: College accounting major, Digital transformation, Internal logic, Mechanism, Development strategy

1. Introduction

The field of university accounting is at the forefront of digital transformation, and its internal logic, mechanism and development strategy have attracted much attention. The interaction between teaching demand and market change, the promotion of technological progress on teaching innovation, and the impact of data-driven decision-making on teaching effectiveness all provide new perspectives for transformation. In this context, this paper aims to deeply analyze the internal logic and mechanism of transformation of digital accounting teaching in colleges and universities, and then propose feasible development strategies to provide valuable reference and guidance for the digital transformation of accounting field in colleges and universities.

2. The internal logic of digital accounting teaching and transformation in colleges and universities

2.1 Teaching demand and market change

Accounting teaching in colleges and universities is facing the ever-changing market demand. The advent of the digital age has brought new requirements for accounting talents, and it is necessary to the teaching content and methods according to the market demand, so as to train students who can to the future changes in the accounting field.

2.2 Technological progress and teaching innovation

The continuous progress of technology has become the key to promote the innovation of accounting teaching. The application of digital technology provides new possibilities for teaching, such as using virtual reality, online education and other ways to innovate teaching mode and improve teaching effect.

2.3 Data driven and decision support

Data acquisition and analysis in digital teaching environment provide important support for decision-making. Through data analysis of students' learning behaviors and teaching effects, teaching

methods and contents can be better adjusted to improve teaching quality ^[1].

2.4 Resource integration and efficiency improvement

Digital transformation promotes the integration and optimal utilization of teaching resources. By effectively integrating resources such as digital courses, online platforms and traditional teaching methods, we can significantly improve teaching efficiency and make learning more efficient and fun. This kind of integration is not only the integration of technology, but also the renewal of educational ideas and the innovation of teaching methods.

2.5 Student needs and individualized education

The demand for personalized education has become increasingly prominent. Digital transformation provides more possibilities to meet the individual needs of students, including providing personalized learning content, flexible learning time, etc., to better meet the diverse needs of students.

3. The mechanism of digital accounting teaching and transformation in colleges and universities

3.1 The evolution of technology-driven teaching model

Digital technology promotes the continuous evolution of accounting teaching mode in colleges and universities. From the traditional classroom teaching to the integration of online learning, practical teaching and other diversified models, technology is driving the teaching model towards a more flexible and interactive direction.

3.2 Supporting role of system and policy

Digital transformation requires the support of relevant institutions and policies. The establishment of a sound policy system and the formulation of supporting policies can provide a reasonable system guarantee for the digital accounting teaching in colleges and universities, and promote the digital transformation to a more orderly and stable direction.

3.3 The development trend of educational informatization

Education informatization plays an important role in digital transformation. It is the basis of digital teaching. With the continuous development of technology, educational informatization shows a more comprehensive and three-dimensional development trend ^[2].

3.4 The influence of data analysis on teaching decision

Data analysis provides the basis for accounting teaching decision-making in colleges and universities. Through the data analysis of students' learning behavior and teaching effect, we can guide teaching more scientifically and improve teaching effect.

3.5 Learner behavior and digital environment interaction

The interaction between learner behavior and digital teaching environment influences the teaching effect. The interactive learning of students in the digital environment and the interactive use of teaching resources jointly shape the quality of teaching effect.

4. The development strategy of digital accounting teaching and transformation in colleges and universities

4.1 Curriculum content and teaching method innovation

The key to the digital transformation and modern transformation of the teaching mode of accounting major in colleges and universities lies in the adjustment of teaching content and the innovation of teaching methods. In order to actively respond to the call of the government management

department of our country and adapt to the development trend of higher education reform in the new era, teachers must clearly define the basic goal of digital transformation. On this basis, relevant course contents are arranged reasonably and relevant teaching resources are widely collected, so as to further enrich the main contents and forms of digital teaching of accounting majors in colleges and universities, provide students with more diversified teaching modes and more modern teaching resources and materials. This means that updating and innovating curriculum content is at the heart of digital transformation. As the industry evolves and technology advances, knowledge in the field of accounting is constantly updated, so course content needs to keep up with The Times. This includes integrating the latest accounting theory, regulatory updates, and practical content such as financial software applications to ensure that students keep up with industry trends and have the knowledge and skills necessary for practical application. At the same time, every teacher needs to be aware that innovation in teaching methods is also an integral part of digital transformation. Traditional teaching methods have been difficult to meet students' learning needs. Therefore, more forward-looking and interactive teaching methods, such as multimedia technology and online interactive classes, should be explored to provide a more vivid and intuitive learning experience [3]. This kind of innovative method can better stimulate students' learning interest, enhance students' learning experience, and cultivate students' practical operation ability and problem-solving ability. In the digital transformation, the innovation of course content and teaching method is the key to ensure the teaching effect. Updating and improving curriculum content, exploring innovative teaching methods, and providing students with a more hands-on, forward-thinking learning experience are integral to digital transformation. Through innovative teaching content and methods, enhance students' learning motivation and effect, and lay a solid foundation for their future career development.

For example, in the teaching process of accounting majors in universities, we are actively promoting digital transformation to have a profound impact. Taking the course "Financial Statement Analysis" as an example, we take the following specific measures: First, we introduce virtual simulation software, which can simulate real financial statement situations, so as to provide students with a more intuitive and practical learning environment. In the classroom, we guide students through the use of electronic financial software, allowing them to manipulate and analyze the financial statements of real businesses. In this way, students are able to combine theoretical knowledge with practical application to deepen their understanding of financial statements. In order to further enhance the practical ability of students, we also set up special online discussion and interactive sessions. Students can ask questions and discuss with other students at any time during the online class. This not only promotes the communication between students, but also stimulates their thinking vitality. At the same time, we have published a wealth of learning materials on the network platform, and provide online tutoring and question-answering services for students. In this way, students' learning styles become more diverse and flexible, and they can learn whenever and wherever they need. These digital teaching methods make our classroom teaching more close to the actual situation, enrich the teaching methods, and significantly improve the learning effect of students. In this way, we not only develop students' financial analysis ability, but also improve their practical skills, laying a solid foundation for their future careers.

4.2 Strengthen the construction of teaching resources and technical infrastructure

The construction of teaching resources and technical infrastructure is the basic support for the digital teaching transformation of accounting major in colleges and universities, which requires comprehensive planning and layout in both hardware and software. First of all, the improvement of teaching resources is an important part of digital transformation. Teaching resources include all kinds of teaching materials, cases, multimedia teaching equipment, etc. The enrichment and improvement of such resources is the indispensable foundation of digital teaching. In accounting teaching, abundant case materials, classic textbooks and resources related to actual accounting work are the key to promote students' understanding and practice. Therefore, it is very important to build a perfect digital teaching resource platform, integrate all kinds of resources, and provide convenient retrieval and use methods for improving teaching quality. Secondly, from another perspective, the improvement of technological infrastructure is also an indispensable part of digital transformation. Including network equipment, hardware facilities, multimedia classrooms, etc., the improvement and upgrading of such facilities will directly affect the smooth development of digital teaching. Efficient and stable network environment is the cornerstone of digital teaching, while high-quality multimedia equipment can also provide more interactive and lively teaching scenes. Therefore, investing in the upgrading and maintenance of technical facilities is also a top priority of digital transformation. In the digital teaching transformation of accounting major, the upgrading and improvement of teaching resources and technical facilities is an

important step to promote the transformation [4]. This requires schools to increase investment in teaching resources, gradually improve the digital teaching platform, integrate all kinds of resources, and provide more diversified and convenient support for teaching. At the same time, the upgrading and maintenance of technical infrastructure also requires schools to pay attention to investment and planning to ensure the smooth development and stable operation of digital teaching. Only with this kind of infrastructure can digital transformation better deliver a better and more efficient teaching experience for students and teachers.

4.3 Establish data application and learning evaluation mechanism

In the digital transformation of accounting major in colleges and universities, data application and learning evaluation mechanism are the key links that must be paid attention to. The digital transformation of university accounting is not only the application of technical tools, but also the reshaping of teaching thinking and ideas. The essence of digital teaching is to provide students with a more personalized and efficient learning experience, making teaching and learning more compatible and interactive [5]. Data is not only the presentation of information, but also the basis of teaching improvement and optimization. Through digital means, teachers can deeply understand the learning situation of students, master their learning trajectory and learning habits. This kind of information collection helps to accurately assess students' learning level and provide personalized guidance and help to students in a more targeted manner.

Teaching evaluation mechanism is another important aspect of digital transformation. Traditional evaluation methods are often limited to test results, while digital teaching gives teachers more evaluation dimensions. Through the collection and analysis of students' learning data, we can have a comprehensive understanding of students' learning process, including learning habits, classroom performance and so on. This kind of evaluation mechanism not only contributes to the all-round development of students, but also provides teachers with more scientific guidance. The optimization of data application and learning evaluation mechanism is the core of digital transformation. Digital teaching is not simply about moving traditional classrooms online, but about a deeper understanding of students' learning needs and the flexible application of technology to meet such needs. Such transformation not only requires the support of technology, but also requires teachers' deep understanding and application of digital teaching concepts, as well as rational use and analysis of data. Therefore, in the digital transformation of accounting major in colleges and universities, data application and learning evaluation mechanism are the key links that must be paid attention to. The optimization and improvement of such links will directly affect the improvement of teaching quality and the overall development of students' academic level. Through the clever use of digital means, it can provide more diversified and personalized teaching methods for teaching, and promote students to acquire knowledge and develop their abilities more effectively.

4.4 Promote interdisciplinary integration and practical teaching

Through interdisciplinary integration, accounting majors can form organic links with other related majors, broaden disciplinary boundaries, and enable students to better understand and apply accounting knowledge in the interdisciplinary knowledge system [6]. It can be achieved through interdisciplinary elective courses, project cooperation and other ways to provide students with a more comprehensive and integrated disciplinary vision. Practical teaching is an effective way to combine theoretical knowledge with practical application. In the process of digital transformation, accounting majors can guide students to use digital tools for actual data analysis and participate in real accounting practice projects through practical teaching to improve students' practical operation ability. In addition, practical teaching can also cultivate students' teamwork spirit and problem-solving ability, so that they can better adapt to the needs of future career development. The combination of interdisciplinary integration and practical teaching can enrich the teaching content of accounting major in colleges and universities, provide students with more comprehensive knowledge experience, and make them better adapt to the development of the digital age. This strategy helps to enhance students' comprehensive ability and make them more competitive after graduation.

4.5 Strengthen personnel training and teacher professional development

Personnel training and professional development of teachers play a key role in the digital transformation of accounting in colleges and universities. Attaching importance to talent training

means paying attention to the overall growth of students, not only paying attention to academic literacy, but also cultivating students' practical ability and innovative thinking. This means setting up a diversified curriculum system, including theoretical courses and practical courses, encouraging students to actively participate in project practice, case analysis, etc., and cultivating their problem-solving and teamwork abilities [7]. At the same time, strengthen the students' self-learning consciousness and guide them to actively explore and learn in the digital learning environment. The professional development of teachers is the key link to guarantee high quality education. To improve teachers' digital teaching ability, it is necessary to start with teacher training, provide teachers with training and guidance on digital teaching methods and tools, and make them skilled in using various digital tools to assist teaching. Establish a communication platform among teachers, encourage teachers to share the experience and innovation of digital teaching, and promote the renewal of professional knowledge and the improvement of teaching level. In addition, establish a teacher evaluation mechanism, encourage teachers to participate in teaching innovation and research, and improve teachers' teaching quality and level. This also means that personnel training and teacher professional development are the two-wheel drives of the digital transformation of university accounting [8]. By cultivating the overall quality of students and improving the professional level of teachers, it can effectively promote the digital transformation and development of accounting major in colleges and universities, and better adapt to social needs and industry development.

4.6 Strengthen industry cooperation and expand internship resources

The expansion of industry cooperation and internship resources is of great significance in the digital transformation of accounting in colleges and universities. Strengthening partnerships with industry can provide students with richer and more diverse practical opportunities. Establish a bridge of school-enterprise cooperation, set up school-enterprise cooperation courses, guide students to have access to real work scenes on campus, and deepen their understanding of the industry. In addition, the university and enterprise joint laboratory or research center is set up to encourage students to participate in practical projects and case analysis, so as to cultivate students' practical ability and problem-solving ability. Expanding internship resources is an effective way to provide students with a broader practice platform. Establish deep cooperation with enterprises and institutions, provide internship opportunities for students, and guide students to learn and practice in a real working environment. This can not only deepen students' understanding of the industry, but also guide students to apply what they learn in practice and improve vocational skills [9]. At the same time, establish the internship base and platform, improve the internship system, standardize the internship process, ensure the quality of internship, and improve the comprehensive quality and competitiveness of students. The expansion of industry cooperation and internship resources is not only to provide students with practical opportunities, but also to break the gap between theory and practice and promote the deep integration of teaching. Through this type of collaboration, students can better understand the relevance of what they learn in the classroom to actual work scenarios, develop practical skills, and prepare for a smooth career path in the future. Such connections can also promote innovation in teaching models to better meet the needs of the industry and promote the digital transformation of the accounting profession in universities.

4.7 Improve the teaching management and quality assurance mechanism

Establishing perfect teaching management and quality assurance mechanism is an important part of accounting digital transformation in colleges and universities. In this process, curriculum management plays a key role, and it is necessary to optimize the teaching content design and adjust the curriculum structure to meet the development needs of digital teaching. Moreover, strengthening teaching evaluation is also an indispensable part. Through continuous evaluation mechanism, the teaching process is constantly optimized to ensure the continuous improvement of teaching quality. The effective teaching management mechanism should be a comprehensive and multi-dimensional system. In addition to the management of curriculum content and evaluation system, it is also necessary to pay attention to the training and guidance of teachers. Provide targeted teacher training programs to help teachers master digital teaching skills and expand teaching methods. At the same time, establish the incentive mechanism for teachers, stimulate teachers' teaching enthusiasm, and promote the improvement of teaching level. The quality assurance mechanism also includes the evaluation of student participation and teaching effect [10]. Establish a regular student evaluation mechanism, collect students' feedback and suggestions, timely adjust the teaching content and methods, and ensure the pertinence and effectiveness of teaching. In addition, the teaching effect is quantitatively evaluated

regularly, data is analyzed, problems are found, and improvement plans are formulated. In the digital teaching environment, the teaching management and quality assurance mechanism is not only to manage and guarantee the teaching quality, but also to promote the development of digital teaching. The continuous improvement and optimization of such mechanisms will provide solid guarantee and support for the digital transformation of accounting majors in universities.

4.8 Strengthen social interaction and digital education community construction

By building a digital education community, academic communication is no longer limited by time and space. Digital platforms have become a bridge for teacher-student interaction, promoting the seamless transfer and sharing of knowledge. Such interaction is not only limited to the classroom, but also extends outside the school to industry cooperation and practice. Digital community is not only a gathering place of information, but also a platform for sharing teaching resources, providing a wider range of possibilities for teaching and building a three-dimensional academic exchange platform for teachers and students. The establishment of digital education community is also an important means to enhance the interaction of teaching. Such platforms lead students to participate more actively in discussions and share ideas, and promote communication and cooperation among learners. Moreover, social interaction has also been extended to school-enterprise cooperation, which has built a broader industry exchange platform, provided more practical opportunities for students, and enhanced students' practical operation ability. The construction of digital education community is also a platform for the construction of teachers and professional development. This kind of community not only provides a space for teacher-student interaction, but also a hotbed for teachers' professional growth. Here, teachers can share experience and discuss teaching problems together, constantly improve their teaching methods and skills, and also communicate deeply with industry experts to continuously improve their business level. The construction of digital education community is a strong support for the digital teaching and transformation of accounting in universities. The development of this kind of community provides a broader development platform for teaching, promotes the dissemination and sharing of knowledge, and greatly promotes the process of digital transformation of accounting major in colleges and universities.

For example, teachers can actively guide students to seriously study the important knowledge point of "cost management", and the process of digital teaching can also be centered on this knowledge point. Through the digital teaching platform, students can participate in the simulation case analysis of cost management. First of all, using online simulation software, students can simulate the actual business scenarios of enterprises and learn the classification and calculation of costs. Such simulations lead students to acquire practical skills in a digital environment, such as developing cost budgeting and cost control strategies. Secondly, digital teaching can also provide multimedia resources to showcase real cases and business practices. Through online videos or virtual presentations, students can gain insight into cost management practices in various industries and conduct case discussions and analyses. This kind of digital learning model not only provides students with a more realistic learning experience, but also cultivates students' problem-solving ability and analytical thinking. Digital teaching can also provide a real-time online discussion and interactive platform to guide students to share their experiences, ask questions, and have in-depth exchanges with teachers and classmates in social learning. This kind of teaching process not only breaks the time and space limitation of traditional teaching, but also improves the participation and learning effect of students. The digital teaching promotes the knowledge of cost management and promotes the digital transformation of accounting major in colleges and universities.

5. Conclusion

At present, with the rapid development of network information technology, digital teaching mode has gradually integrated into all aspects of accounting teaching in colleges and universities, and is actively promoting the profound transformation and reform of the teaching mode of accounting major in colleges and universities. This also means that in the field of college accounting, digital transformation has become a trend that cannot be ignored. Through the in-depth study of the internal logic, mechanism and development strategy, the internal mechanism and influence of digital transformation are found. The innovation of course content and teaching method, the application of data and the learning evaluation mechanism and other development strategies provide effective guidance and support for the realization of digital teaching. The purpose of this study is to promote the effective implementation of the digital transformation of accounting in colleges and universities, in

order to inject new vitality and possibility into the future teaching and development.

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