

Transformation of Financial Management in Universities in the Era of Digital Intelligence

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ABSTRACT: With the development of digital technology, digital and intelligent governance is deeply affecting the financial management work of universities. In the rapidly developing era of digital intelligence, how to use artificial intelligence technology to deeply tap into the innovative potential of digital technology has posed new challenges to the financial management work of universities. This article analyzes the situation and challenges faced by financial management work in universities in the era of digital intelligence, and proposes the path for financial management reform in universities. It is hoped that financial management work in universities can assist in the high-quality development of universities and accelerate the process of modernization of university governance.

Keywords: The Age of Mathematical Intelligence, universities, Financial Management Transformation

1. INTRODUCTION

At present, China's economy has shifted from high-speed growth to high-quality development, and various industries are beginning to pay attention to the deep integration of digital technology and the real economy. Moving from the digital era to the digital intelligence era has become an inevitable trend. The "14th Five Year Plan for the Development of the Digital Economy" issued by the State Council proposes specific measures to continuously strengthen, optimize, and expand China's digital economy^[1]. The "14th Five Year Plan Outline for Accounting Reform and Development" issued by the Ministry of Finance has put forward requirements for accounting personnel and accounting management departments to promote the application of new technologies, integration into the new era, and achievement of new breakthroughs in accounting work, solidly promote various work of accounting reform and development, and help modernize the national governance system and governance capacity. The era of digital intelligence has put forward inevitable requirements for Digital transformation of accounting. Universities are in the era of digital intelligence, and should seize opportunities to cultivate new driving forces through informatization, promote new development with new driving forces, and continuously create new possibilities^[2]. In this process, financial management in universities should bear the brunt, transforming scattered and unstructured accounting data into aggregated and structured accounting data elements, leveraging the value creation function of serving schools, and achieving digital and intellectual transformation.

2. THE SITUATION AND CHALLENGES FACED BY FINANCIAL MANAGEMENT IN UNIVERSITIES IN THE ERA OF DIGITAL INTELLIGENCE

Since entering the era of digital intelligence, digital technologies such as big data, artificial intelligence, mobile internet, cloud computing, the Internet of Things, and blockchain have developed rapidly, and financial management in universities is facing many opportunities and challenges.

2.1 The application of artificial intelligence will significantly improve the efficiency of financial management in universities

Science and technology are rapidly changing, digital technology is rapidly developing, and application scenarios are also constantly deepening^[3]. At the same time, it also promotes the transformation of financial management tools, especially the emergence of financial robots, which can quickly handle repetitive and cumbersome basic work such as data entry, with a low error rate, and can greatly reduce the workload of financial personnel. The efficiency of financial management work in universities will be greatly improved. At present, universities are actively using financial robots to handle accounting work such as accounting, expense reimbursement, accounting reports, and fund settlement; Universities have begun to explore and promote the intelligence of financial accounting work, improving the efficiency of accounting work such as accounting, reporting, management accounting, and internal control. The replacement work of financial robots can liberate some financial personnel from basic work, allowing them to have more time for more valuable management work^[4]. The scale of the artificial intelligence market is shown in Figure 1.

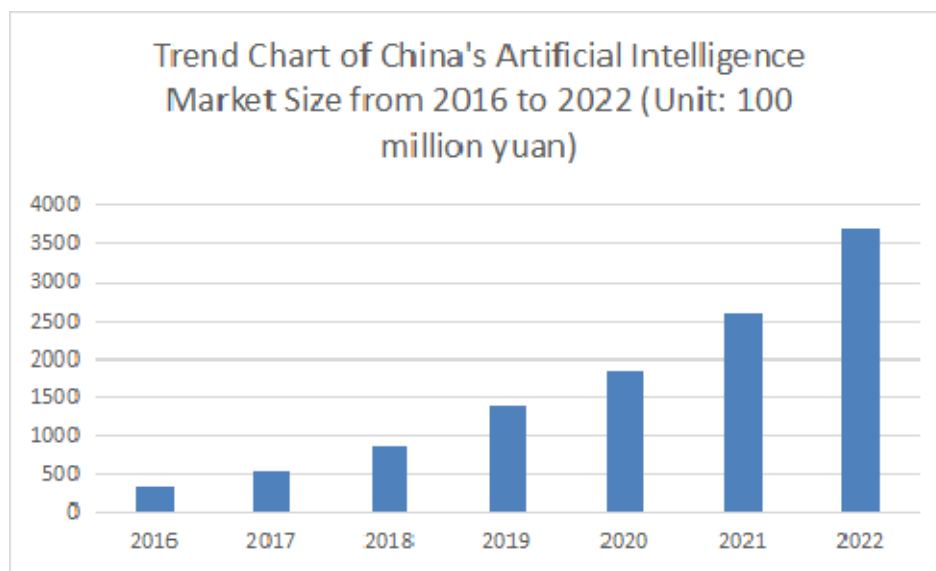


Figure 1. Trend Chart of China's Artificial Intelligence Market Size from 2016 to 2022.

2.2 Accounting's spatiotemporal perspective is facing challenges, and the integration of industry and finance in universities is becoming more urgent

The development of modern science and technology has changed the organizational and management models of enterprises, breaking the temporal and spatial boundaries of economic activities, and posing huge challenges to the real-time, timely, and open nature of accounting. Traditional accounting temporal and spatial perspectives such as accounting entities, continuous operations, and accounting periods are facing challenges. In addition, in the era of the digital economy, accounting supervision has evolved from post inspection to full process control, which requires the financial department and business department to work together to promptly identify and solve various problems and abnormal situations^[5]. Universities have also realized the importance of integrating industry and finance, and have taken some measures. However, most universities are still in the initial stage of integrating industry and finance.

2.3 The accounting function is constantly expanding, and there is a shortage of compound financial personnel in universities

The feasibility of management accounting is empowered by the digital economy and new technologies. Under the influence of new technologies, the construction of internal control informationization supporting and performance management work is more convenient, accounting functions are expanded, and value creation ability is improved. The expansion of accounting functions requires the provision of composite financial personnel. However, the knowledge structure of financial personnel in universities needs to be improved^[6]. Currently, financial personnel in universities mainly have a background in finance and accounting, and lack knowledge in computer science. The sharing of financial personnel in universities and the management concept of real-time accounting are not strong, and more attention is paid to the compliance and legality of economic matters that have already occurred. In addition, financial personnel in universities lack awareness of data security and risk prevention, and some universities have problems with data loss.

3. THE PATH OF FINANCIAL MANAGEMENT TRANSFORMATION IN UNIVERSITIES IN THE DIGITAL INTELLIGENCE ERA

3.1 Financial management in universities should comply with the development trend of the digital intelligence era and innovate from the past

With the rapid development of technology, digital materials are constantly changing, and data resources are very vast. People can mine, analyze, and utilize massive data resources to unleash their management value^[7]. This also makes big data analysis an important tool for financial governance. Big data analysis no longer uses the original random sampling analysis in finance, but instead analyzes all data, which can compensate for the shortcomings of sampling surveys and provide more comprehensive and scientific data support for decision-making. This requires the reform of financial management in universities, abandoning the previous practice of only focusing on financial data related to finance, and instead exploring

the value of various financial and non-financial data related to both internal and external aspects of university financial management, in order to comprehensively and scientifically analyze data^[8].

3.2 Optimize financial processes and deeply promote the integration of industry and finance in universities

In the era of digital intelligence, if financial management only understands financial data and does not understand business, it cannot seize the opportunity of the development of the digital intelligence era. If the business department does not understand finance and has weak risk awareness, it is not conducive to the development of the unit^[9]. Only by closely integrating financial management with business development and deeply integrating, can we better promote the high-quality development of the unit. Therefore, the financial management of colleges and universities needs to change the traditional work process, promote colleges and universities to carry out in-depth integration of industry and finance through the standardization and digital construction of accounting information, make full use of various information technologies, explore the formation of scalable, aggregatable and comparable accounting data elements, and improve the level of data governance.

3.3 Establishing the concept of big finance and strengthening the cultivation of versatile financial talents

The transformation of financial management cannot be achieved without the support of high-level talents. In the context of the digital intelligence era, some basic financial work has been replaced by financial robots, and there is a lack of composite financial talents who are familiar with business processes, have strategic vision, and are skilled in management and control. In order to better adapt to the development trend of the times, financial personnel in universities need to be proficient in accounting, proficient in management, familiar with information technology, good at capturing business opportunities, and have strategic foresight, striving to become a versatile financial talent^[10]. Only by diligently studying, practicing internal skills, and continuously improving their own literacy in these aspects can financial personnel in universities adapt to and effectively control the development of the digital economy, and make their due contributions to the financial work and the development of the university. Here is a sample illustration and caption for a multimedia file:

4. CONCLUSION

In the context of the era of digital intelligence, the accounting function is constantly expanding, and financial management work in universities is facing enormous opportunities and challenges. The financial management work in universities needs to comply with the trend of the times, continuously innovate, strengthen communication and exchange with relevant departments, achieve deep integration of industry and finance, actively cultivate composite financial talents, and provide favorable support for the modernization of the university's governance system and governance capabilities.

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