Original Paper

Analysis of the Impact of Artificial Intelligence Technology Enablement on Corporate Financial Management

Chunmeng Wu[1*]

[1] School of Accounting, Shandong Technology and Business University, Yantai City, Shandong Province, China, 264005

[*] Corresponding author, E-mail: 15653388890@163.com

Abstract

As the core driving force of the new round of technological revolution and guaranteeing the resilience of the industrial chain supply chain, many industries have undergone radical changes under the impetus of artificial intelligence technology, including the accounting industry. This paper finds that the promotion of AI technology has a positive impact on the financial management of enterprises and constantly promotes the sound operation of the company through the case study of K company. Therefore, the core competitiveness of the company should be guided by AI technological innovation, and the cultivation mode of related talents should be improved in order to achieve the high-quality development of the national economy with scientific and technological innovation as the guide.

Keywords

artificial intelligence, financial management, smart finance

1. Introduction

In the context of digital intelligence, with the emergence of various new technologies, it not only provides more artificial intelligence technical support to traditional accounting work, but also makes it face great challenges. The traditional financial accounting alone is unlikely to meet the needs faced by an enterprise in the general environment if it wants to develop strategically. Now the general environment is an age where financial accounting is gradually moving towards artificial intelligence, therefore, large enterprises desperately need to use artificial intelligence technology to vigorously promote the transformation of traditional financial accounting to management accounting. Only through this way can enterprises adapt to the era of artificial intelligence, the full realization of the basic accounting processing and basic analysis of the intelligent so as to improve the quality of

accounting work, so that accounting work can be better for the strategic development of enterprises and sustainable development to provide better services (Yu, 2023).

2. The Impact of Artificial Intelligence on Corporate Finance

2.1 Double-edged Sword for Accountants

The born of artificial intelligence has brought great convenience to human life, but its development is also a 'double-edged sword'. The process of accounting work has been simplified due to the effective introduction of artificial intelligence. In traditional work, economic operations that require manual bookkeeping and accounting can be recorded and calculated directly by AI (Jiang, 2023). The AI can follow the specific instructions issued by the accountant to complete the collection and calculation of financial data and information, which can help to save the actual working time of the accountant to the greatest extent possible. In addition to this, artificial intelligence plays a significant role in tax accounting by automatically identifying and categorizing all types of invoices. The accountant simply scans the invoice and the AI inputs the invoice information into the computer and processes it to generate a VAT return. Although the application of artificial intelligence technology in enterprise finance has reduced the work pressure of accountants to a certain extent, the employment situation of many traditional accounting workers is becoming more and more serious. In order to deal with this situation, practitioners in the accounting industry should continuously improve their professional knowledge and struggle to master the application rules of artificial intelligence in the accounting industry, so as not to be eliminated by the development of science and technology.

2.2 Financial Accounting to Management Accounting

In the background of the changing environment of today's world economy, corporate finance in the age of artificial intelligence needs to change, and the transformation from financial accounting to management accounting is an inevitable trend. As an effective management tool capable of allocating resources to companies, management accounting can provide data support and basis for corporate strategy. It can quickly access the information that enterprises need from the financial data collated by the artificial intelligence system, thus significantly reducing manual errors and working time. The acquisition of data becomes more accurate and convenient, thus promoting the management efficiency of the company and the company's development. At the same time, it can also reduce the workload of the financial personnel, so that the financial personnel can play their professional advantages better with the assistance of artificial intelligence, and provide more professional and accurate financial data and management direction for the enterprise, thus reducing the financial risk of the enterprise. It also requires companies to rely more on professional knowledge to understand and organize data (Yu, 2023). Through the use of various artificial intelligence and management accounting expertise to refine and classify the relevant data, and then use financial means to decompose and implement the enterprise's indicators, so as to provide a reliable and effective basis for corporate strategy and ensure that the enterprise can scientifically carry out budget management and corporate strategy deployment.

3. Case Study of Smart Finance in Company K

3.1 Company Profile

In recent years, the development of artificial intelligence is in full swing. As the 'first stock of artificial intelligence', K Company's core technology is completely self-developed. In the current situation of AI continues to booming, K company in the field of general artificial intelligence, continue to increase investment in research and development, in order to promote the iterative innovation of technology and products. The company's number of research and development staff has continued to increase annually since its IPO, in line with its trend of revenue growth, demonstrating its strong focus on R&D.

3.2 Intelligent Financial Evolution of Company K

3.2.1 Cost Reduction by Intelligent Financial Sharing Models

In 2017, the key to Company K's ability to lead the way in the era of data intelligence was its use of innovative technology to build an intelligent financial sharing model (Chen et al., 2023). In the early stage of financial transformation, Company K set up a new financial sharing company through intelligent technology, so that all departments of the enterprise are in a set of standardized and intelligent financial processes. This financial process also reduces the operating costs within the enterprise. On the one hand, the intelligent financial sharing center, under the premise of centralizing all financial positions in the enterprise, uses intelligent robots to complete some repetitive tasks, which greatly reduces the management costs of financial staff. On the other hand, the intelligent financial sharing center has been equipped with intelligent management functions since its foundation, and the financial staff only need to do prior control and budget based on the premise of setting up a good process, thus making the internal financial operating costs of the enterprise to be controlled.

3.2.2 Efficiency Improvement by Account Reporting Robot

In 2020, the application of the accounting robot innovated K Company's accounting model (Duan et al., 2020). Firstly, the introduction of envelope delivery solves the annoyance of employees sticking invoices, and the checkout process is effectively shortened. Secondly, the intelligent delivery box was introduced, which can avoid the documents arriving at the sharing center and then discovering the abnormality of the documents. On this basis, the intelligent document cabinet was introduced to locate the position of documents in the sharing center in multiple dimensions, which solved the problem of time-consuming search for documents. The efficiency of enterprise financial work has been enhanced to a certain extent.

3.2.3 Workload Reduction by Automated Accounting System

Since 2021, Company K has constructed a variety of information technology systems, and through the integration and development of the front-end business system and the ERP system, it has achieved the automation of part of the accounting work. Based on the idea of "AI+IT", Company K enables accounting robots to acquire account processing capabilities via extensive learning. By integrating AI technology into the IT construction process of accounts automation, the company enables the robot to continuously learn all kinds of professional knowledge and make comprehensive judgements on

161

complicated accounts processing according to the expertise in combination with specific situations, thus making it possible to truly reduce the workload of primary accounting workers by using accounting robot technology.

3.3 Impact of Artificial Intelligence Technology Applications

3.3.1 The Positive Impact of Artificial Intelligence on Business Accounting

Before artificial intelligence was widely used, the pressure suffered by accounting workers in their work was far heavier than that of other professions. However, after the application of AI to the accounting industry, the work pressure of workers in the accounting industry has also been well relieved. They no longer need to collect and organize every piece of data manually as before, but directly input the relevant calculation formula into the computer, and the computer can automatically calculate the data. The emergence of AI is a solution to some of the problems in traditional accounting work, so as to effectively improve the efficiency of accounting work. In the days of manual accounting, accountants basically used calculators or abacuses when making calculations on data, which wasted both time and energy. For example, companies need to buy a large number of calculators, paper, etc. to cooperate with accountants to carry out the corresponding accounting work. There are also a lot of calculation materials to be consumed by the accountants in this process, therefore the economic cost of the company will also increase. With the introduction of artificial intelligence, most of the accounting work in a company can be done online. The accounting work in the company also no longer needs to go to the tax office, banks and other places on a regular and scheduled basis to complete the offline work, but can complete a series of operations online. To sum up, it can save some labor costs and travelling expenses for the company.

Standing in the position of the company, the form of accounting work of artificial intelligence can make the financial information of the enterprise more accurate and reliable (Yu, 2023), so as to improve the overall operational efficiency of the enterprise, and at the same time, the leadership of the company can also plan the future development of the enterprise on the basis of accurate financial data. In addition, AI can effectively identify and control the company's overall business risks, and the company can use AI to build the company's financial risk early warning model. In this way, when the company's liquidity and receivables are abnormal, the company can take timely and effective strategies to improve its business situation. In this way, the company can effectively reduce risks and avoid causing greater losses, so that the company's core competence can be strengthened.

3.3.2 The Impact of Artificial Intelligence on the Accounting Profession

Although AI has great advantages in finance, its application has also brought great pressure to many traditional accountants (Hu, 2019). As the recruitment conditions for accounting talents in various industries are different, resulting in the uneven quality of accounting talents in China at present. Some accounting talents cannot use artificial intelligence well due to the lack of professional quality. Artificial intelligence not only requires accountants to have a certain understanding of the relevant operational processes, at the same time, accountants also need to write their own formulae to adapt to

162

their own work requirements, and these aspects of the work for some of the lower level of learning or have been accustomed to the traditional methods of calculation of the accountants have great difficulty. In addition, there are some unqualified practitioners in China's accounting industry, who are not only unable to accurately grasp the use of artificial intelligence, but also may not be able to resist the temptation of profit, violating their own accounting ethics to tax evasion or even make fake accounts. Those behaviors not only affect the normal operation of the accounting industry, but also seriously affect the development of AI technology in the industry.

Artificial Intelligence provides convenience to accountants, but it also brings employment crisis to some traditional accountants. AI has greatly improved the efficiency of accountants, and they do not need to spend too much brainpower and energy in their work. Because of this, the number of accounting positions created in various industries has plummeted, and many traditional accountants are facing unemployment. In a matter of seconds, AI can essentially replace the traditional accountant for what it would take days or even months to do by a human being.

As we can see, the rapid development of AI has had a great impact on our traditional accountants. Therefore, traditional accountants have to catch up with the needs of the times and improve their business skills and learning level, only in this way will they not be swallowed up by the trend of the times.

4. Challenges and Issues Facing Artificial Intelligence

4.1 Ethical Issues

Artificial Intelligence has greatly reduced the workload of accountants and made the processing of accounting information more automated and intelligent. Under traditional financial accounting, accountants are required to do tasks such as collecting, organizing, entering, bookkeeping, calculating, reconciling and closing accounts, which results in a lot of basic and repetitive work. With AI accounting, accounting documents can be standardized and accounting statements can be prepared automatically. In some ways, it can also take on the functions of accounting, thus facilitating the transformation of financial accounting into management accounting. If accountants fail to make improvements to their management accounting business skills, thereby improving their professional skills in accounting operations, they may face the risk of unemployment in the future.

4.2 Compliance Risk

As China's development in the field of artificial intelligence is still in its infancy, and the corresponding legal regulations have not kept up, which creates compliance risks. The first is the issue of privacy protection. Intelligent accounting uses big data, the Internet and other technologies to process accounting information through perception, learning, reasoning and processing, so as to improve optimization of the processing, enhance predictability and use historical data to make predictions about future data, thus potentially infringing on customers' privacy (Li, 2023). Secondly there is also a hidden risk of intellectual property infringement. Autonomous learning based on search engines may involve

163

intellectual property protection when enterprises use AI to process accounting information. Companies continue to create new technologies and knowledge in the actual operation process, and if multiple companies form the same technology, the risk of intellectual property infringement arises.

4.3 Over-reliance on AI

The use of computer programming for accounting saves working time and improves efficiency, while at the same time there is an over-reliance on technological risks. Artificial Intelligence Accounting is designed with the goal of protecting the company's profit maximization, however, as a member of the market economy, the company has to take the appropriate social responsibility for its pursuit of profit. Excessive use of AI accounting would result in a lack of social responsibility on the part of the company, thus affecting the public interest. Although intelligent accounting improves work efficiency to a certain extent, it will inevitably cause accountants to gradually lose their ability to make professional judgements and hence be unable to make accurate decisions. In the case of significant changes in accounting policies, intelligent accounting cannot make timely and corresponding adjustments, thus reducing the company's emergency management capabilities. At the same time, AI accounting belongs to an information technology system, if something goes wrong with the intelligent system, it will need to take an excessive cost price, which will cause the company's accounting information processing system to be paralyzed.

5. Recommendations

5.1 Creation of a Favorable Internal Environment

If enterprises want to take the initiative to change the traditional concept of work, they need to have a deep understanding of management accounting. Enterprises should recognize the important role of management accounting in the business process and future development, and promote the transformation of financial accounting to management accounting. It needs to be combined with the actual operation of the company under the premise of building and improving the management accounting system, to create a good financial management environment for the company. Enterprises can create a good internal environment from the following three points: first, to improve the innovation of management. Enterprises should take the initiative to accept scientific management concepts to guide employees to change to management accounting, provide employees with learning opportunities and create a good working environment. Secondly, enterprise managers should strengthen the grassroots management. Enterprises should focus on improving the internal control system, so that it can better reflect and effectively improve the production and operation process of the enterprise, thus improving the economic efficiency of the enterprise; Thirdly, the finance department should strengthen the basic work of accounting, so that management accounting can better provide the enterprise with more accurate and effective information.

5.2 Emphasis on Talent Development and Skill Enhancement

The quality of accounting personnel directly affects the success of this change. Therefore, enterprises

164

should focus on the cultivation of information literacy of accounting personnel, increase the training of accounting personnel in information technology and network technology application ability, and also guide accounting personnel in accordance with the new trend of rapid development of artificial intelligence. Only by fully stimulating the learning enthusiasm of accounting personnel and adopting an appropriate assessment system can the efficiency of the transition from financial accounting to management accounting be enhanced. The emergence of artificial intelligence has changed the traditional way of accounting work, reducing the workload of accounting, but also inevitably brought a large number of "unemployment" phenomenon. Accounting personnel should actively learn management accounting, turn negative into positive, increase training efforts, and strive to develop into a composite management accounting talent. Only in this way can we more effectively improve the negative impact of artificial intelligence on the accounting industry, and accountants can also be better adapted to the development trend of the accounting industry through continuous learning.

5.3 Strengthening Laws and Regulations and Moral and Ethical Construction

In the booming development of AI accounting today, the relevant legal regulations of the securities supervision and management authorities are unable to cope with the times, and there will be a compliance risk of touching the legal boundaries. Firstly, relevant laws and regulations should be formulated as soon as possible to prevent confusion in the AI accounting software market. Secondly, when determining the property rights of AI software, it should be determined according to the chronological order of the acquired property rights. In addition, a system of professional accounting standards and supporting mechanisms ought to be established and the relevant accounting laws and regulations should be revised. It is necessary to start with improving the quality of accounting personnel and strengthening their professional ethics. With the development of the economy, the importance of accounting is also increasing, and the application of artificial intelligence is also changing the working environment of accounting. It requires accountants to be more consciously abide by the ethical norms of accounting and turn passive into active. Strengthening education on accounting laws and regulations as well as high-quality supervision of accounting work is conducive to improving the professional ethics of accounting workers.

5.4 Promotion of the Deep Integration of Technology and Business

To innovate the business model and enhance the application value of technology, the company should fully utilize artificial intelligence to promote the construction of the accounting platform and provide technical support and guarantee for the in-depth implementation of management accounting. At the same time, the company should continue to improve the accounting work, actively promote the use of big data technology in the company, enhance cross-departmental collaboration to achieve the purpose of resource sharing and complementary advantages. In addition, it is necessary to continuously track the company's technological dynamics and update. Firstly, the coding of smart accounting operations should be updated regularly. Secondly, a secure information storage system should be established and a security firewall should be set up to prevent hackers from intruding. In addition, the storage of financial

165

information is realized through the cooperation with cloud computing platform to prevent the leakage of financial information. At the same time, enterprises should also build an integrated management accounting service platform with the help of artificial intelligence technology to promote the optimized transformation of financial accounting to management accounting in the era of AI.

6. Conclusion

The conclusion should elaborate on the key points of the research results, analyze the conclusions drawn from the results, and explain at present, artificial intelligence technology has been widely used in the financial accounting work of various enterprises, not only to make the enterprise work mode has been innovative, and to some extent, the reform of financial accounting has played a role in promoting. But at the same time, artificial intelligence is also a double-edged sword, it brings convenience to the accounting industry, at the same time, it also brings greater challenges to many enterprises. Artificial intelligence technology is still having some problems in the application, only with human planning to be able to establish. This puts higher requirements on financial accountants and business managers. Therefore, we also need to improve our technological literacy and the Internet mind, from a single financial know-how into a composite talent with multiple capabilities to adapt to the times and the development of science and technology, in order to really give full play to their value.

References

An, M., & Lin, J. B., & Luo, X. (2024). The impact of human AI skills on organizational innovation: The moderating role of digital organizational culture. *Journal of Business Research*, 182.

Chen, J., & Pan, F. (2023). Research on Financial Shared Service in the Era of Artificial Intelligence: Taking KDDI as an Example. *Jiangsu Business Journal*, (04), 82-86. (in Chinese)

Duan, D. W., &Wang, H. X., & Qian, J. P., & Zhao, L. Y., & Tang, J. Q. (2020). AI+IT: Exploration and thinking of intelligent finance of KDDI. *China Management Accounting*, (01), 51-62. (in Chinese)

Hu, Y. (2019). Challenges and countermeasures of accounting in the context of artificial intelligence. *Guangxi quality supervision guide*, (07), 160-161. (in Chinese)

Jiang, X. H. (2023). The impact of artificial intelligence on the development of accounting industry. *China Management Informatization*, 26(05), 54-57. (in Chinese)

Li, H. (2023). Research on the Risks and Countermeasures of Artificial Intelligence Accounting. *Journal of Social Sciences of Jiamusi University*, *41*(01), 41-43. (in Chinese)

Li, Z. N., & Wu, W. J., & Li, Y. J. (2023). Innovative Exploration of Financial and Accounting Informationization Construction in Foreign Trade Enterprises under the Background of the New Economy. *Accounting and Corporate Management*, *5*(11).

Sun, G. Y., & Yu H. P., & Li, K. (2024) Discussion on Capacity Development of Government Accountants in the Digital Economy. *Business Accounting*, (12), 115-118. (in Chinese)

Zhang, J. H. (2024) Integration of financial accounting and management accounting in the era of artificial intelligence. *Finance and Economics*, (18), 135-137. (in Chinese)

Yu, J. (2023). Discussion on the Transformation of Accounting Function in the Era of Artificial Intelligence. *Brand marketing of old brands*, (05), 86-88. (in Chinese)