Exploring the Development Direction of Artificial Accounting under the Impact of Artificial Intelligence based on Materialist Dialectics

-- Study Lenin's "Talking about Dialectics"

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Abstract

With the rapid development of economic globalization and the continuous iteration of digital technology, financial robots have begun to appear and have a wide and farreaching impact on the accounting industry. On the one hand, the application of artificial intelligence technology can improve the efficiency and effectiveness of accounting work; on the other hand, the application of artificial intelligence technology also allows the work of many accountants to be replaced, and the phenomenon of accounting professions has increased. With the increasing development of artificial intelligence technology, deep learning, and the emergence of expert systems, artificial intelligence has gradually reached a new level. The identity and struggle of the contradiction between artificial accounting and artificial intelligence has gradually deepened. The development direction has given more in-depth thinking and discussion. This article will explore the relationship between artificial accounting and artificial intelligence based on the basic viewpoints of materialist dialectics, so as to provide suggestions for the development direction of artificial accounting under the impact of artificial intelligence.

Keywords

Materialist Dialectics; Artificial Intelligence; Artificial Accounting; The Development of the Accounting Industry; Identity; Struggle.

1. Introduction

Looking at modern intelligent technology, some scholars call it the fourth technological revolution, and many occupations have also shown a tendency to be replaced. Taking manual accounting as an example, the British BBC analyzed the "probability of being eliminated" of 365 occupations in the future based on the data system of Cambridge University researchers Michael Osborne and Carl Frey. The replacement rate of manual accounting is as high as 97.6%. There is a huge difference between the technological development of the intelligent era and other eras, such as exponential growth and rapid iteration, which have a huge impact on the penetration of the accounting industry. The operation of artificial intelligence can completely replace simple, repetitive, and high-frequency tasks, and the labor can be better liberated; but the artificial accounting industry has a large base, a large number, and a strong system. If artificial accounting is replaced, the industry will develop. Social problems such as difficulty in monitoring and unemployment of a large number of accountants. These potential hazards have triggered people to think at a higher level: how to better coordinate the contradiction between artificial intelligence and artificial accounting, and how to provide better guidance for the development of the accounting industry. Analyzing and studying the status quo of the accounting industry under the background of artificial intelligence is of great significance for in-depth understanding of the accounting industry, understanding the situation of the accounting industry, developing modern intelligent accounting, and formulating practical measures to promote the development of intelligent accounting. In Lenin's "Talking about Dialectics", Lenin systematically studied the dialectics of Hegel and other philosophers. The full text accurately and accurately expounded the basic principles and basic viewpoints of materialist dialectics, and clarified the essence and core of materialist dialectics. That is, the contradiction and unity of contradictions, this article will use this as the theoretical basis for further discussion, so as to provide suggestions for the development of the accounting industry under the background of the new era.

2. Exploring the Relationship between Artificial Accounting and Artificial Intelligence based on Contradiction Analysis

The method of contradiction analysis is the fundamental method of materialist dialectics. Contradiction is a philosophical category that reflects the unity of opposites within and between things. Opposition and unity respectively embody the two basic attributes of contradiction. The two sides of the contradiction are both opposed and united, thereby promoting the movement, change and development of things. Contradiction analysis is one of the basic methods of Marxist sociology. Lenin pointed out at the beginning of "Talking about Dialectics": "The unity is divided into two parts and the understanding of its contradictory part... is The essence of dialectics. The dialectics of contradiction has universal applicability to the study of social phenomena. It can not only explain the present, but also predict the future, especially for the study of macroscopic and complex social phenomena and social problems. Contradiction analysis method Including the two-point approach, specific analysis of specific issues, focusing on the key points and mainstream, and insisting on the unity of the two-point theory.

2.1. The Struggle between Artificial Accounting and Artificial Intelligence

The conflicting nature of contradiction refers to the mutually exclusive nature of contradictory opposites. It embodies the tendency and tendency of the two opposite parties to separate from each other. It is unconditional, eternal, and absolute. Artificial accounting and artificial intelligence fight each other to promote mutual progress.

In 2017, Deloitte's "Financial Artificial Intelligence" came out, and artificial intelligence was introduced into the fields of accounting, taxation, and auditing. Financial artificial intelligence is based on cloud computing, big data and deep learning to replace the routine, repetitive, standardized and low-value-added accounting manual processing links in the daily financial process, rationally plan and allocate financial resources, manage and control financial processes, and promote The efficient operation of corporate financial management greatly improves the timeliness and accuracy of accounting information calculations and judgments. At the same time, artificial intelligence is based on powerful computing and response capabilities, using the experience and knowledge acquired from human experts to simulate human experts to make judgments, reasoning and processing problems, and to describe, decompose, diagnose, and diagnose complex and challenging financial problems. It is completely achievable to inspect and summarize, and provide timely and accurate solutions for decision-making and planning in the accounting profession. In addition, with the rational application of artificial intelligence accounting system, the robot can replace the accounting work of some basic personnel. In this way, it can save a lot of human resources, assign excellent accountants to important jobs, improve the allocation of human resources, make full use of human resources, and ensure that enterprises obtain more economic benefits.

Manual accounting has basic functions such as accounting supervision, which derive functions such as experience accumulation, process estimation, strategic analysis, etc., which greatly

determines its irreplaceability. Taking asset impairment provision as an example, manual accounting usually judges whether the asset is impaired based on the asset's book balance exceeding its recoverable amount, and some signs that the asset may have been impaired. If there is any sign, the enterprise should deal with it. The recoverable amount is officially estimated. This process embodies the principle of accounting prudence and is one of the basic principles of the accounting profession. This also explains the incompleteness of artificial intelligence and artificial accounting to a certain extent.

Artificial intelligence and artificial accounting are mutually exclusive and struggle with each other. The emergence of artificial intelligence is gradually replacing part of manual accounting. causing some unemployment of manual accounting. At the same time, manual accounting relies on forecasting, decision-making, and supervision based on management accounting. High comprehensive requirements, highly subjective work content and artificial intelligence have formed Jinghe Shuiqing's work content. Artificial intelligence is gradually replacing manual accounting. At the same time, the manual accounting industry is also constantly innovating, forming new functions focusing on management accounting. The form of the struggle between artificial intelligence and manual accounting has gradually changed from simple and repetitive tasks to complex information tasks such as forecasting and decision-making.

2.2. The Identity of Artificial Accounting and Artificial Intelligence

Lenin pointed out: The unity of opposites (identity, identity, balance of power) is conditional, temporary, perishable, and relative. The struggle of mutually exclusive opposites is absolute, just as development and movement are absolute. Artificial intelligence and artificial accounting also have the same identity on the basis of struggle.

The identity of artificial intelligence and manual accounting comes from the inseparability of the two. If artificial intelligence wants to replace manual accounting, it needs to have three basic premises: matching algorithms, computing power and data. Taking data as an example, artificial intelligence needs to operate in conjunction with a huge data network and prepare for operation through human experience input, data integration, and code sorting. This requires manual accounting to summarize and input manual experience, and pave the way for subsequent forecasting, supervision and other functions. Under the current situation, due to the incomplete data, the artificial intelligence forecasting function cannot work well for the time being. For example, the analysis of financial statements by the Zhizehua financial consultant expert system can only explain the common management problems of more than 50 enterprises, and generate more than 50 pages of financial affairs. Consultant report.

As for manual accounting, in the era of big data, the characteristics of data redundancy, irrelevance, and difficulty in analysis have led to the fact that humans have gradually been unable to systematically and logically sort out existing data, which has led to management accounting for corporate strategic planning. The decision was biased. The high-performance and high-analysis characteristics of artificial intelligence can make up for the shortcomings of manual accounting. At present, artificial accounting is developing towards digitization and intelligence. To a certain level, it is determined that artificial intelligence will gradually play a regulatory and auxiliary role in the development of the accounting industry. With the in-depth research on the ethical issues of accountants, the emergence of artificial intelligence will better avoid the emergence of irregular issues such as secret preparations and malicious challenges to the market, and has made a good forward-looking regulation of the development of the accounting industry.

Due to the mutual struggle and interdependence of the two, the mutual transformation of artificial intelligence and artificial accounting reflects the impact of emerging technologies on traditional occupations under rapid development. This requires careful thinking and reasonableness in traditional industries. Use existing resources to maximize industry functions.

3. Discuss the Development Direction of the Accounting Industry based on Philosophy

The accounting profession has gradually developed from manual accounting to computerized accounting, digital accounting, and eventually evolved into intelligent accounting. The disruptive changes that artificial intelligence has brought to the accounting industry are quite substantial. Due to the requirements of the times and the development of new technologies, modern accounting is gradually transforming from financial accounting to management accounting, so as to predict the economic prospects of the current operation and long-term planning of enterprises. Establish an economic indicator system, implement an economic responsibility system to control the entire operation process, do a good job of fund raising, strengthen cash flow management, establish a rigorous accounting and bargaining system, increase awards and punishments, and participate in corporate economic decision-making. These transformations mean that the level of accounting gradually tends to be specialized, specialized, and expert. The contradictory body of artificial accounting and artificial intelligence promotes and restricts each other, and provides more powerful help whether it is from theoretical practice or the development of the times. Take AlphaGo playing chess with the Go champion as an example. The emergence of AlphaGo has brought a huge impact to the world of Go, and at the same time it has found a breakthrough in the field of Go.

3.1. Strengthen the Comprehensive Ability of Accountants and Transform Them into Compound Talents

In the context of the era of artificial intelligence, accountants must change their old working methods, keep pace with the times, and fully understand and apply artificial intelligence technology. In order not to be eliminated by the whole market, every financial practitioner should have a sense of crisis. As an accountant, you must not only fully understand the rich professional knowledge, but also be proficient in the application of artificial intelligence technology in actual work, improve your personal comprehensive level. Under economic globalization, accountants need to improve their adaptability and competitiveness. Facing the new situation of the diversification of service subjects, the diversity of information needs and the intellectualization of management methods, accountants must establish the idea of lifelong learning, and seek the identity of artificial intelligence and manual accounting.

3.2. Promote the Transformation of Financial Accounting to Management Accounting

Most of the accounting work has the characteristics of standardization, mechanization, and standardization. In the era of artificial intelligence, financial functions and automation can be realized; while management accounting focuses on internal management, and compared to financial accounting, it requires human analysis of the actual situation. Management accounting can not only provide powerful financial data for business operations, but also can directly participate in the management work of the company. Combine it with artificial intelligence to comprehensively improve the level of corporate financial management and respect labor. This phenomenon is that enterprises first use artificial intelligence technology to count and classify the collected original data, and then professional senior financial personnel extract information that can promote the development of enterprises from the data sorted out by relevant artificial intelligence, so as to help relevant stakeholders make decisions based on relevant data, to respect the struggle between artificial intelligence and artificial accounting.

3.3. Further Improve the Degree of Informatization

Nowadays, the use of network and computer software is a concrete manifestation of the gradual intellectualization of the accounting industry. China is in the era of comprehensive

computerization, and accounting computerization is an important part. The management accountant of the enterprise is responsible for processing, analyzing and compiling relevant accounting information. The computer replaces the manual to handle some basic work, such as account repayment and collection. The computerization of accounting has greatly improved the information dissemination speed of enterprises, significantly reduced the information redundancy and error rate, and greatly improved the work efficiency. Therefore, as an enterprise financial accounting practitioner, we not only need to master the operation and maintenance of computer technology, but also need to learn the knowledge of programming to meet the development and use of enterprise accounting software. Financial accounting personnel are more familiar with information technology, the informatization degree of financial accounting will be improved unprecedentedly, and enterprises can stand tall in the industry.

3.4. Pay Attention to Accounting Information Security Risk Prevention

Artificial intelligence can connect all kinds of data inside and outside the enterprise. On the one hand, it facilitates the transmission and storage of electronic data, and on the other hand, it also increases the security risks of financial data, such as being attacked by hackers and information disclosure. If it is improperly stored, leading to the disclosure of financial information or theft or malicious tampering of information by outside lawless elements, it will pose a greater risk to the enterprise. Up to now, the country's laws and regulations on artificial intelligence or financial robots are not perfect. Once disputes or losses arise, it is difficult to obtain due compensation or rescue measures. This reminds financial personnel that they must have a strong sense of risk prevention and risk awareness in their usual management. At the beginning of processing financial data, they must recognize the security of these data information under artificial intelligence technology, as well as the risk of being attacked and leaked in the later stage. If all these are done in place, even if there are risks of attack and information disclosure, corresponding emergency plans can still be taken quickly to prevent these risks scientifically.

3.5. Diversification in the Teaching of Accounting Knowledge in Colleges and Universities

The main places for cultivating accounting talents in our country are colleges and universities. In the context of the increasing popularity of artificial intelligence technology, the curriculum system of Accounting Specialty in Colleges and universities has begun to reform, and the previous teaching of simple theoretical knowledge has become more and more diversified, accounting education in colleges and universities will naturally change accordingly. The application of corresponding new technologies and knowledge should also enter the classroom. Students should not only study in the classroom, but also focus on the laboratory and the company. Cooperation between. To be efficient, we must focus on strengthening the construction of artificial intelligence technology in accounting work, know the main points of their future jobs, and ensure that the talents cultivated by universities can quickly adapt to the development and changes of the times.

Contradiction is the source and driving force of the development of things. Artificial intelligence and artificial accounting are at the same time struggle and identity, and the two are opposites and unified. Artificial intelligence is replacing part of simple accounting work, and at the same time it promotes the new development of the accounting industry. Artificial accounting is gradually transforming to forecasting and decision-making management accounting. At the same time, it uses the computerization and intelligent tools brought by artificial intelligence. , The financial efficiency and accuracy of manual accounting are also gradually improving. The contradiction between artificial intelligence and manual accounting is both opposed and unified, which has promoted the continuous progress of the accounting industry in the direction of efficiency, multi-function, and comprehensiveness.

4. Conclusion

The development and progress of artificial intelligence give certain warnings to the development of the new era: the emergence of new things will impact and challenge the status of old things, which requires us to look at the emergence of new things dialectically. Materialist dialectics points out that the essence of development is things. The advancing and rising is the birth of new things and the demise of old things. However, new things conceive from the old things and deny all the negative, outdated, and decayed things in the old things, and add new things that are full of vitality that the old things cannot accommodate. The trend of social development is irreversible, and the rapid development of artificial intelligence and its impact on the accounting industry are unstoppable. For the accounting industry, the development of artificial intelligence is not only an opportunity, but also a challenge. In the constant replacement of the accounting industry, people must play a special role in it. This requires people to maintain a dialectical thinking about the emergence of new things, understand the inevitability and connection of new things, and trigger the old things. Thinking is not limited to inherent thinking. What the accounting industry has to do is to embrace the times, adapt to changes, and advance with the times, rather than stick to the old and fight against machines. Traditional manual accounting will inevitably be eliminated gradually. Only by constantly combining artificial intelligence with the unique attributes of manual accounting can the accounting industry continue to develop into a more intelligent and intelligent platform. In the near future, accounting The era of industry intelligence and intelligence is about to come.

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