Research on the Impact of Computer Technology on Traditional Finance and Accounting during the Internet Age

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Abstract: With the continuous development of the Internet, computer technology has been widely used in traditional finance and accounting, and has gradually replaced the traditional way of manual bookkeeping. At the same time, it has become increasingly important in traditional finance and accounting. Computer technology can promote the further development of traditional finance and accounting, and facilitate the company and accounting staff to carry out related work. This paper mainly analyzes and discusses the impact of computer technology on the traditional finance and accounting theory and accounting practice, and puts forward corresponding thinking and suggestions for reference only in the industry.

1. Introduction

As we all know, accounting work is a kind of management activity, and scientific progress has great impact on accounting work. The rapid development and widespread use of computer technology represented by computer technology has had a huge impact on traditional finance and accounting. The accounting environment refers to the objective conditions and conditions that have significant impact and dependence on the existence and development of accounting theory and practice. The birth and development of accounting are inextricably linked with the environment in which it is located. Computer technology innovation has also had an impact on the accounting environment.

2. The Impact of Computer Technology on Traditional Finance and Accounting during the Internet Age

2.1 Theoretical Analysis of Application of Computer Technology.

This paper mainly analyzes the theoretical basis of computer technology for financial management, and helps to understand the theoretical premise that computer technology has an impact on all aspects of the company. Computer technology is the next-generation technology for computing manufacturing resource planning. Its connotation is to break down the barriers of the enterprise, and expand the scope of information integration to the upstream and downstream of the enterprise, and manage the entire new type of accounting, and realize new types of financial accounting. Computer technology combines the subsystems of production, sales, finance, technology, and control into an integrated system. It is a scientific method of planning and monitoring and managing all resources of a company. Manufacturing resources include production resources, market resources, financial resources, and engineering design resources. From a definition point of view, computer technology is a financial system solution that spans the entire enterprise, and integrates various business information of the enterprise, and provides a centralized database of a single reference program, and a unified user interface to provide to stakeholders. The use of human resources, finance, sales, manufacturing and other activities in the enterprise are closely coordinated, as shown in formula (1):

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$$Integration(L(i)) = \sum_{j \in \Gamma(i)} \sum_{u \in \Gamma(j)} N(u) \tag{1}$$

Computer technology is a financial accounting-oriented computer financial system. Its main function is to effectively integrate and plan corporate resources so as to expand overall operating performance and reduce costs. One of the characteristics of computer technology is the integration of business units. Computer technology integrates small, decentralized systems to integrate information resources across the enterprise and upstream and downstream companies. Computer technology can reduce conflicting information and redundant data, and make financial business processes clearer and more transparent, and acquire data more securely and timely. Therefore, computer technology inherits the characteristics of the original resource manufacturing system, and expands and optimizes functions from both internal and external integration. The internal integration improves and enriches the internal management functions of the company, such as quality management and fund management. The external parties have increased the ability to optimize new types of accounting and distribution channels and increased customer relationship management. Computer technology integrates financial business processes and eliminates islands of information. Computer technology typically includes a number of core functions, including finance, human resources, manufacturing, internal accounting, and an enterprise knowledge base, as shown in Figure 1.

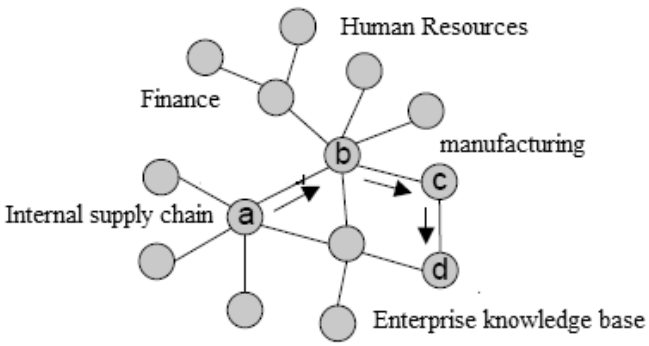

Figure 1. Application structure of computer technology

2.2 Computer Technology Influences the Theoretical Premise of Traditional Finance and Accounting.

The development of computer technology is gradually formed with the development and development of modern enterprise management theory, and the new accounting management as a guiding ideology. After the introduction of new types of financial management, a series of ideas emerged in corporate accounting management science. The main management ideas of computer technology are reflected in:

(1) The core management model of new accounting resources for enterprises

The competition of modern enterprises is not a competition between a single enterprise and a single enterprise, but a competition between a new type of accounting of a company and a new type of accounting of another company. Not only must companies rely on their own resources, but they must also include relevant parties in the business process, such as suppliers, manufacturing engineering, distribution networks, and customers, in a tight new type of accounting, and view all the links involved in new types of accounting as collaboration. The social system, using communication technology and network technology, ensures effective information exchange and communication between the sentimental sentiment and the sentimental upload in order to gain a competitive advantage in the market, as shown in formula (2):

$$\Pr iority(\lambda) = \frac{1}{n} \sum_{i=1}^{n} \frac{(A\omega)_i}{\omega_i} \tag{2}$$

(2) Financial applications of computer technology in production, synchronous engineering and agile manufacturing

Computer technology supports the management of mixed production methods in two aspects: One is the idea of lean production of LPs. That is, the company integrates customers, sales agents, suppliers, and cooperatives into the production system and establishes profit sharing with them. The second is the idea of agile manufacturing. Partnerships form a new type of accounting for a company.

(3) Computer technology is planned in advance in the corporate finance, and the control and feedback in the event

Computer technology defines transaction-related accounting subjects and accounting methods, and automatically generates accounting entries at the same time as transaction processing occurs, ensuring the simultaneous recording of capital flows and logistics and the consistency of data. Therefore, according to the current status of financial funds, the origins of retroactive funds can be traced, and related business activities that occurred can be traced back to facilitate control in real time and make decisions in real time. The modern new type of financial management should manage the logistics, information flow and capital flow in the network formed by suppliers, manufacturers, distributors, retailers and customers, and plan and coordinate all activities related to the above-mentioned third-rate, making it a The seamless process, as shown in formula (3):

$$FManage(U(M))=\sum_{i\subset\Gamma(M)} H(i) \tag{3}$$

Computer technology is gradually developed for the realization of new types of financial management. It provides enterprises with a platform for information sharing, and strengthens the links between various links in new types of accounting through computer technology, and balances the production capacity of internal and external constraints. The coordination and dynamic balance between all aspects of a new type of accounting must be achieved through computer technology. Computer financial systems are crucial to gaining competitive advantage from contacts. Computer technology provides a means to simulate various new types of financial activities. The use of effective computer technology can help companies achieve a unified, collaborative large system and achieve information sharing among organizations. An important aspect of computer technology is the optimization of financial business processes. Computer technology provides businesses with an opportunity to redesign their financial business processes. Through process reengineering, financial business processes are simplified and business rules are improved, as shown in Figure 2.

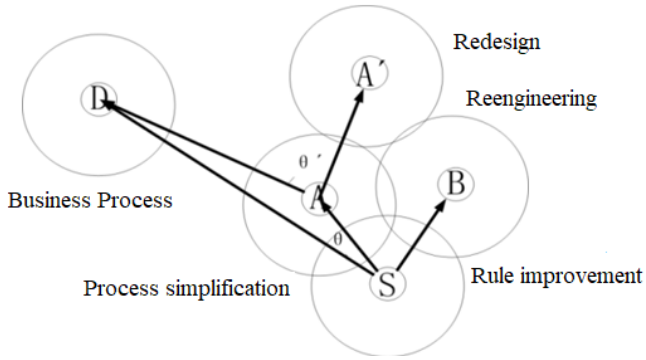

Figure 2. Computer technologies to achieve new financial management process structure improvement

Financial business process reengineering can also bring many new opportunities for enterprises. Their financial business processes will be changed once in two years, while the financial business processes of enterprises and SMEs in developing countries will change more frequently. Whether the enterprise's financial business process can be successfully changed depends to a large extent on the ability of the computer's financial system to adapt to a rapidly evolving business environment. The reengineering of financial business processes means that existing financial business processes will change, and basic rethinking and redesign of business processes will be carried out in order to achieve major improvements in key performance such as cost, quality, service, and speed. Businesses are made up of financial business processes. Financial business process refers to how to

do things. It is a set of activities that jointly create value for customers and are related to each other. Designing a financial business process is a basic condition for business success, as shown in Equation (4):

$$Condition(G)=\left(N,E\right) \tag{4}$$

Implementing computer technology may force critical financial business processes to be transformed, or open up new financial business processes to support the company's development goals. In order to ensure the effectiveness of the reorganization process, the redesigned process requirements correspond to the rearrangement of the organization. The implementation of computer technology is very costly and the risks are great. The implementation of computer technology projects requires a lot of time and cost, and the benefits of computer technology may be reflected in a longer period of time.

2.3 Computer Technology Impact Traditional Financial Evaluation Research.

This paper further analyzes and demonstrates the financial benefits brought by computer technology, and elaborates how it influences all aspects of the enterprise and the driving role of the enterprise value through constructing the framework of value creation and the way that computer technology generates revenue.

(1) Computer technology influences the analysis of traditional financial models

In the early studies, some scholars conducted a framework study on the evaluation of the effectiveness of computer technology, which can also be used as a reference here. After analyzing the deficiencies of previous studies, scholars constructed a framework for assessing traditional finances and identified a variety of approaches to traditional finance, as shown in Equation (5):

$$Path(\overline{U}(M)) = \frac{U(M)}{U(N)} \tag{5}$$

The impact of computer technology on enterprises is indirect, and computer technology follows this path. Computer technology penetrates the financial business process of the enterprise and enhances the efficiency of resource utilization to improve the performance of the company. As for the evaluation of enterprise computer technology, the impact on the enterprise is also a route to computer technology, and there are different channels for evaluating it. This paper combines traditional financial methods to analyze in depth the impact of computer technology on each business unit of the company. Porter's traditional financial theory reveals that the competition between enterprises and enterprises is not just a certain link but the entire traditional financial competition, and the overall competitiveness of traditional finance determines the competitiveness of enterprises, as shown in formula (6):

$$\text{Competition}(L_i) = \sum_{i \neq j} \frac{s_{ij}(k)}{s_{ij}} \tag{6}$$

This study focuses on the relationship between computer technology investment and revenue, and combines the impact of computer technology on financial business processes. This allows us to focus on the origin of performance, and distinguish the impact of computer technology on financial business processes and the impact of different companies. In conjunction with Porter's traditional financial theory, scholars propose an improved conceptual framework model. The simplified model helps us verify the benefits of computer technology. Each of these elements represents how computer technology generates value, and these elements are reflected by some appropriate financial performance indicators and ratios. The improved model has only three key factors. Computer technology integrates the elements of the chain with the horizontal chain and supporting functions, and drives the generation of value through these elements. It automates the production process and brings the process changes to the best practice for the company, thus improving business performance. From the value model we can see that computer technology itself cannot create value. It integrates the company's business units, integrates resources to influence every

aspect of the financial business process, and improves asset operating efficiency, and improves performance, as shown in Equation (7):

$$Achive(\bar{R}) = \sum_{i=1}^{n} \left\{ R_i^t - R_i^0 \right\} \tag{7}$$

(2) Computer technology influences the curve analysis of traditional financial relations

In general, the pre-investment in computer technology projects is very large, and the expected application life cycle is also about 10 to 20 years. Computer technology as an investment often accompanied by a long return on investment, and the potential benefits in reducing costs and improving performance cannot be achieved in the short term. It takes about 2 to 5 years or even longer for computer technology to have a positive impact on business performance. Businesses admit that their computer technology has been difficult for a period of time before they come into play. After the new system is fully established, it will take about 8 months for the company to begin to see revenue. We have summarized four phases: planning period, financial business process reengineering period, design period, configuration period and test period. Reengineering financial business processes around computer technology software is critical to the successful implementation of computer technology projects. According to the phase analysis report, the benefits of computer technology can only be demonstrated when computer technology modules have been successfully deployed and companies can add advanced modules such as customer relationship management to computer technology. Figure 3 below is a graph showing the impact of computer technology on traditional financial relationships.

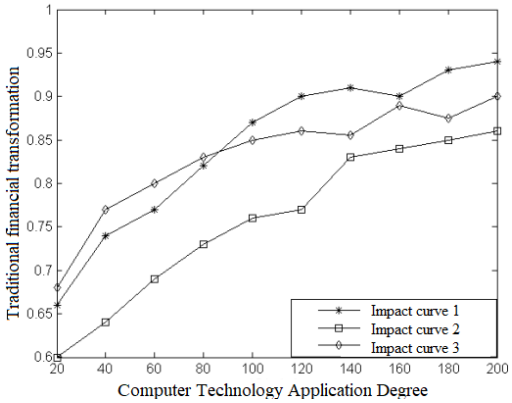

Figure 3. Computer technology affects traditional financial relationships

Benefits are for the implementation of computer technology. During the implementation of computer technology, due to the increase in hardware, software costs, consulting, and implementation of service fees, the company's revenue actually decreases. According to the survey, the most common cause of declining performance is that everything after computer technology appears to operate is completely different from the original. When people are unable to work in a familiar manner and are unfamiliar with new ways of working. Business is naturally affected. When the system officially began to operate at this time, and on the one hand, the degree of recognition of the system users from the system has gradually changed from the original resistance to accept and even satisfied, and on the other hand, with the basic function of computer technology on the promotion of enterprises, its benefits gradually came out and needed to be effectively obtained on the premise of continuous improvement by the company. The benefits of the application of computer technology in the implementation, operation of the various stages of its benefits are constantly changing, so the evaluation of the effectiveness of computer technology must be dynamic, and static performance standards and dynamic information implementation process of dynamic integration.

3. Conclusion

This paper studies the impact of computer technology on the traditional financial accounting in

the Internet era. The popularization of computer technology not only speeds up the process of accounting management, but also improves the quality and efficiency of financial management. The popularization of computer technology has great impact on the financial and accounting fields. It not only changes the traditional financial management work, but also greatly changes the accounting personnel and working environment. Therefore, it is necessary that accounting and management personnel be able to better learn relevant computer technologies, so that they can keep pace with the development of the times. At the same time, due to the delayed effect of computer technology investment, the application of computer technology has not been rewarded as expected at a certain stage. The contribution of high technology to productivity is not linear. Therefore, computer technology requires a constant investment and accumulation of certain resources, and after continuous improvement, a qualitative leap can be achieved.

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