

# An Empirical Study of Computer Network Technology in Enterprise Production Efficiency and Innovation Strategy

DongkunLi<sup>1,\*</sup>

<sup>1</sup>School of Economics, Central University of Finance and Economics (CUFE), Beijing, China, 100081

## Article Info

Volume 83

Page Number: 5196 - 5200

Publication Issue:

July - August 2020

## Abstract

The application of computer network in life is also the result of the effective development of life. In terms of the current use of computer networks, the effect is still very good. Coupled with the development of science and technology, many computer networks have appeared. The characteristics of people's lives have basically changed. Moreover, the use of computer networks in life has both advantages and disadvantages. Therefore, computer networks cannot accurately guide people's lives. Therefore, computer networks should be used reasonably in current life. Nowadays, science and technology have promoted the development of people's lives. Although computer network technology has not taken a long time from its appearance to the current universal application, it cannot be separated from life and computer networks have also promoted the development of society. In general, computer networks are closely related to people's lives and computer networks have now become an indispensable part of people's lives. Computer technology can process and analyze massive amounts of information content. With the development of society, the information involved in business operations is getting larger and larger. Traditional text records are no longer suitable for the current work style. Computer technology can greatly improve the efficiency of economic management, To provide an effective carrier for business operations and help us obtain more information.

## Article History

Article Received: 25 April 2020

Revised: 29 May 2020

Accepted: 20 June 2020

Publication: 28 August 2020

**Keywords:** Business Management, Production, Efficiency;

## 1. Introduction

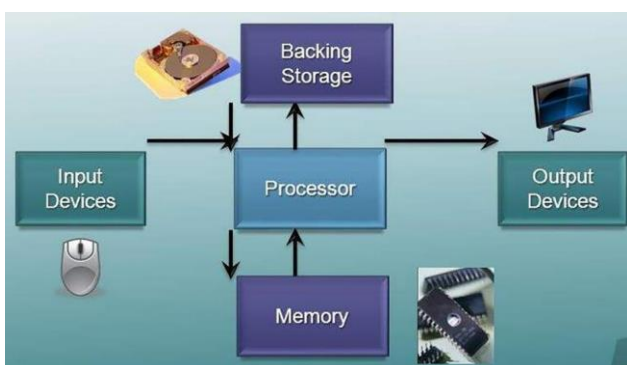
Enterprises are always facing opportunities and risks in the process of production and operation. Enterprises need to deal with these problems through the analysis of business information. Moreover, there is a large amount of information in their own operations and management. The work of enterprises in economic management It is extremely complicated. How to achieve correct and efficient information processing and management methods is a problem that our company needs to consider in its operations. This article explains through the viewpoint of the application of computer technology in enterprise economic management. As far as the current development of business operations is

concerned, the overall difficulty of economic management has increased and the scale of information has continued to expand. What follows is an increase in work, various types of information on business economic management, customer information, company decisions and so on. It can be seen that the information generated by the daily operation of the enterprise is extremely large and the cost of manual management of this information is extremely large. Once the efficiency of the staff is too low, it will have a great impact on the operation of the enterprise. It will even directly cause and use losses, which will have a negative impact on the future development of the company<sup>[1]</sup>.

## 2. Computer network technology

### 2.1. The application field of computer in society

The application fields of computers in society are mainly embodied in the following five aspects: scientific computing, process detection and control, data processing, computer-aided systems and artificial intelligence. The emergence of computers represents the arrival of high technology. The powerful technical support enables computers to have high computing speed, accuracy and logical judgment capabilities. Extending them to disciplines produces computational mechanics, computational physics, computational chemistry and other disciplines; computer detection systems It means that the computer detects certain signals in the industrial production process, processes the data by storing the data and applies the automation of industrial development to production; computer information management refers to the use of computers to process and manage data . It is embodied in the construction of management information systems in domestic institutions; computer-assisted systems can be used for engineering design, product manufacturing and performance testing; computing and artificial intelligence show the extreme ability of computers to imitate human logical thinking and action. Great charm<sup>[2]</sup>. The computer network system is in the figure below.



**Figure1.**Computer network system.

### 2.2. The role of computers in social development

The role of computers in social development is mainly reflected in two aspects: promoting the informatization of social development and

increasing social communication. With the application of computers in production in our country, a series of functions of computers support the smooth and orderly progress of various tasks. Computers store more data and information in the computer to realize resource sharing and provide basic conditions for the development of enterprise informatization; computer applications have greatly improved the original communication methods of human life. In traditional social development, people rely on letters to communicate , Its transmission time seriously affects the timely transmission of information and even causes the loss of information and the information-based communication method changes the shortcomings of letter transmission and communicates with people<sup>[3]</sup>. The computer network user system is in the figure below.

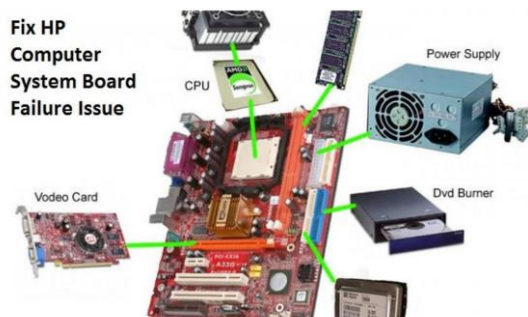


**Figure2.**Computer network user system.

### 2.3. Problems to be solved in the future development of computers

At present, the level of computer application development in our country is relatively low. In the development of our society, the level of application of enterprise development to informatization is limited and in general, computer users in our country are at a relatively low level and there is a certain degree of computer penetration and developed countries. The difference. The application of computers in my country has regional differences and the popularity of information varies among regions, which seriously affects the balanced development of computer use. Although the development of computer technology has high

technical requirements, my country as a whole has insufficient investment in R&D in the information industry<sup>[4]</sup>. In terms of application systems, foreign application system software is relatively developed and equipment is relatively complete. However, my country's R&D process is generally slow and the policies are not perfect and need to be further strengthened. The computer network hardware is in the figure below.



**Figure3.**Computer network hardware.

### 3. Opportunities and challenges of enterprise production

#### 3.1. Opportunities

In the era of big data, enterprise computer processing technology has got many opportunities. The first manifestation is the emergence of data mining. Data mining refers to in-depth analysis of different data and find out the law of development by analyzing the data. Data mining consists of three aspects: data preparation, finding rules and showing rules. These three aspects can effectively improve the ability of information processing and process information accurately and effectively. After enterprises conduct data mining, they can obtain data through data mining. The conclusion drawn is to intuitively understand the problems that the company has in data processing, find and solve problems in time, avoid risks, eliminate hidden dangers, promote the long-term development of the company and enhance the competitiveness of the company. In addition, through data mining, business managers can use data to make correct decisions. Through data mining, business managers can understand the hidden business opportunities behind

the data and the information transmitted, such as consumers through data mining<sup>[5]</sup>. Based on consumers' online browsing records, they can learn which products are most popular with the public and what types of products the public likes. According to the public's preferences, timely adjust their strategic goals and make targeted adjustments. The second opportunity faced by enterprise computer processing technology is the new development guidance and new development concepts brought by the development of the Internet of Things. The development of the Internet of Things is the product of the times and an inevitable trend in the future development of the times. Enterprises must keep pace to gain a firm foothold in the fierce market competition. The Internet of Things realizes the interconnection of all things and includes very cutting-edge technologies. Form has become an important part of emerging industries. In the era of big data, there are many emerging industries that have evolved from the development of Internet of Things technology, such as the well-known WeChat red envelopes, Didi taxi, Taobao and many other new industries are all products of the era of big data. Therefore, enterprises must seize development opportunities and develop in accordance with the trend of the times. The computer network software is in the figure below.

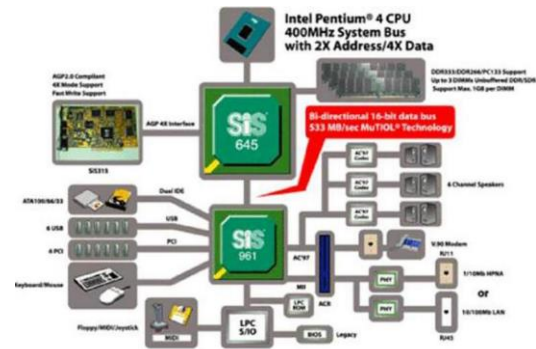


**Figure4.**Computer network software.

#### 3.2. Challenge

There are many development opportunities in the era

of big data and it is bound to face many challenges. In the era of big data, companies have already bid farewell to traditional operating models and significant changes have also taken place in daily office work. In the past, companies usually sorted various office data and related office content into paper data and put them into data storage. The place is sealed and stored, which consumes manpower, material and financial resources and reduces the office efficiency of the enterprise<sup>[6]</sup>. However, in the context of big data, the enterprise has stored a lot of office information in the computer for preservation, which can achieve information sharing and is efficient and convenient. , Which is conducive to the development of enterprises. But at the same time of convenience, computer storage also faces many problems. For example, the storage of information and data is easy to lose. Once lost, it will cause major losses to the enterprise and it is very difficult to make up for it. It is also possible to be attacked by viruses and hackers. In such a situation, it is easy to reveal the secrets of corporate development and being known by competing companies will cause severe damage to the competitiveness of the company. In severe cases, the company will fall into crisis. Therefore, the computer processing problems faced by enterprises are very serious. Enterprises must establish information security awareness, strengthen the protection of information security and regard information security as a link that cannot be neglected in their work. The country has also issued relevant laws and regulations to ensure the legitimate rights and interests of enterprises. At the same time, relevant departments have also increased law enforcement, strengthened the supervision of information and reduced the occurrence of information crises. The computer network connect system is in the figure below.

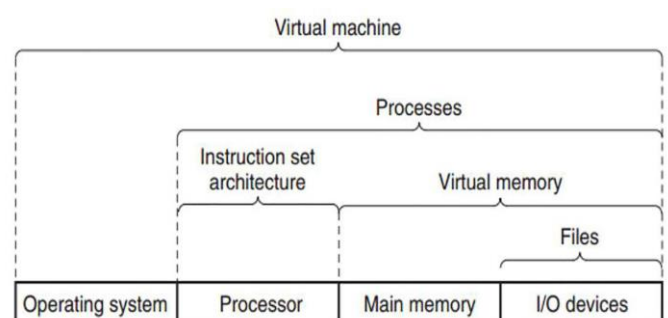


**Figure5.**Computer network connect system.

#### 4. Enterprise innovation strategy model

##### 4.1. Accurately grasp computer technology management objectives

Enterprises should combine their own actual operating conditions to formulate more feasible computer management goals and then based on this, unified arrangements for corporate computer technology management. For enterprise computer technology management, whether the efficiency of computer technology management can be significantly improved is the key to its management. The proper introduction of computer technology can provide strong support for the orderly implementation of cost accounting and the significant improvement of enterprise resource management efficiency. At the same time, it can also provide a strong guarantee for timeliness. In the actual operation process, through the scientific introduction of computer technology, companies can save more human resources and then appropriately increase the investment in computer difficult technology, so as to expand more ideal development prospects for the company. The computer network management system is in the figure below.



**Figure6.**Computer network management system.

#### *4.2. Build a perfect and suitable computer technology application management model*

In terms of the management model of the use of computer technology in enterprises, its implementation is usually affected by the level of Internet construction. It can be seen that, in terms of enterprise data transmission and various management tasks, computer network technology makes it an important technical guarantee that cannot be ignored. Through continuous optimization of its management model, it can ensure that managers can get more and more valuable suggestions and can reflect their own development status in a timely and true manner and can ensure that leaders can timely understand the existence of corporate management. What needs to be improved will then be compensated in time. Therefore, for enterprises, if they want to give full play to the advantages of computer technology, they must pay attention to and improve the scientific construction and continuous improvement of related application models.

#### *4.3. Enhance the enterprise's awareness of computer technology application*

At present, enterprises still have a large room for the development of computer technology applications, but at present, many enterprises lack the corresponding application awareness. Mainly because of the inertia of business leaders. In this regard, in order to ensure that the advantages of computer technology can be fully utilized, business leaders should pay full attention to the application of computer technology. At the same time, continuous strengthening is given from the personnel level and employees are regularly organized to participate in various training activities, thereby enhancing the overall awareness of the use of computer technology by corporate staff.

### **5. Conclusion**

In order to obtain oriented application results, enterprises should appropriately increase some capital investment in the process of citing computer technology based on specific conditions, but all

enterprises should also fully realize that their investment must avoid blind pursuit of system efficiency and high speed, otherwise Not only is it difficult to obtain the desired results, but also a lot of funds are wasted. Therefore, for enterprises, in the daily operation and management process, they should always adhere to the concept of "do more with less", grasp various opportunities and explore different levels of suitable computer technology application systems. and only in this way can we ensure that the positive role of computer technology can be fully brought into play in business operations and management.

### **References**

- [1] Sandvine Corporation; Patent application titled "system and method for detecting sources of abnormal computer network messages" published online (USPTO 20200274785)[J]. Computer Weekly News,2020.
- [2] Alsid; Patent application titled "method for protecting a private computer network" published online (USPTO 20200274889)[J]. Information Technology Newsweekly,2020.
- [3] Chuanhe Wang. Analysis of computer network information security and protective measures in the era of big data[J]. Advances in Higher Education,2020,4(8).
- [4] Callahan Cellular LLC; Patent issued for automated annotation of a resource on a computer network using a network address of the resource (USPTO 10,740,546)[J]. Computer Weekly News,2020.
- [5] Bartosz Belter,Marek Mika,Jan Węglarz. Scheduling of network tasks to minimize the consumed energy[J]. International Transactions in Operational Research,2021,28(1).
- [6] Hui Xiao,Kunxiang Yi,Gang Kou,Liudong Xing. Reliability of a two-dimensional demand-based networked system with multistate components[J]. Naval Research Logistics (NRL),2020,67(6).