Research on the influence of computer network technology to the current economic development

Hongzheng Wang
Shenzhen Polytechnic, Shenzhen, 518055, (CHINA)

ABSTRACT

The computer technology has been developed rapidly and the network has been popularized promptly since the 21st century, which leads to the great change of the society and people's lifestyle. The development of computer network technology has its huge effects on the economy, specifically showing as the change in the direction of employment, economic structure, forms of trade and international economic forms. It also requires higher computer network technology to meet the needs of the economic development.

KEYWORDS

Computer network technology; Economic development; Impact.
INTRODUCTION

The primary driver of economic and social development is science and technology, which can enhance our country's national strength. The development of computer network technology has promoted the reform and development of the economy, which changed the economic structure. The e-commerce has become a very important part of the current economic structure, especially the successful listing of Alibaba Corporation really influences the actuation of the global economy a lot. At the same time, the continuous development of economy also needs the support of more advanced computer network technology. We should make full use of the computer network technology to promote economic development and make our country's economy stronger and more prosperous.

THE CURRENT SITUATION OF THE DEVELOPMENT OF COMPUTER NETWORK IN OUR COUNTRY

Computer network search function remains to be perfect

When people are shopping on the Internet, they often face a common problem, that is how to find the item you want quickly in so many sites and to pay the least money for it. This needs the support of the search engine. To be specific, when a user inputs keywords in the search box, the search engine could search in database according to the key words and submit the most appropriate WEB page links back to the user. Currently there are only 500 million pages indexed for search engine search, but according to the company's research shows that there are at least 1 billion web pages need index on the Internet. That is to say at the moment we can't index half of those web pages on the Internet. The cause of current situation is not a technical problem but because online merchants hope to protect commodity prices privacy. As a result, users need to search different web sites in the network shopping and make comparison until they find the satisfied ones.

The computer network security can't be ensured

Nowadays the development of e-commerce is under the influence of computer network security problems. Because of the quick popularity of the Internet, the computer network got everyone's attention. The computer network is believed to be the most potential IT industry in the future. However, because of the Internet's openness, processing trade on the network might appear security problems and purchase commodities online may be fraud (Figure 1 the distribution of online fraud commodity type), which suggests that shopping on the Internet will have the possibility of being fraud. Therefore, it needs the guarantee of online trading safety to comprehensive promote the computer network. So the research on the computer network security is an important topic.

![Figure 1: The distribution of online fraud commodity types](image)

Computer network technology

The reliability of the network and the speed of data transmission is the main problem of computer network technology. There are various unreliable factors on the Internet, including unreliable line, unreliable software, unreliable system etc. E-commerce needs payment and settlement, so you need to have efficient financial services and electronic security. However, because of the computer network technology and the effect of other financial policy, there are many kind of methods for the payment and settlement, such as online banking, alipay, we chat pay, and so on. In fact, we are lack of a large and unified platform.
People with talents

The computer network is the combination of business and information modernization, therefore computer network needs inter-disciplinary talents who have both a solid theoretical foundation and technical support for computer network and also master the modern information technology, e-commerce, business theory and practice knowledge, etc. If a country or a region wants better development, it is necessary to cultivate a large number of talents. This kind of talent cultivation is not easy as it needs to gradually establish the talent cultivation system, therefore there is a long way to go to China's computer network compound talent training. An important factor hindering the development of the computer network in our country could be the result of a talent shortage.

ECONOMIC DEVELOPMENT AND COMPUTER NETWORK COMPLEMENT EACH OTHER

The emergence and development of network economy is based on the rapid development of computer network

Today's fashion network economy is the inevitable result of economic network, which is a kind of specific information economy as well as a kind of network industries and closely linked to e-commerce. The electronic commerce is a very important content in the network economy. According to relevant data, it shows that the Internet economy gross income of the United States in 1998 was $301.4 billion while the energy income is $223 billion, post and telecommunications revenue was $270 billion. It can be seen that the Internet economy has more income than the postal service and energy, second only to the automotive industry revenue ($350 billion). However, the Internet economy ($250000) per capita productivity is higher than that of the automotive industry ($160000). What's more, the Internet economy also created a lot of jobs, as many as more than 1.2 million. All these contributions are provided by the Internet economy. Today, the Internet economy got a rapid development and there are many different kinds of e-commerce sites. In our country, there are shopping platforms such as Tmall, ID.COM, dangdang, shopping websites such as MeiTuan, Public Comments, NuoMiTuan. All these e-commerce platforms have a very large amount of trade and it has played a huge role in promoting our country's economic development.

Economic development has higher requirement of computer network

Computer network makes the network economy obtained the fast development and the continuous development of network economy, and then the electronic commerce, electronic government affairs, electronic money, etc. appeared. They all need higher support of computer technology and network. This not only needs to strengthen the network construction, but also need to provide a full public communication service of the construction of the network interconnection, which can be done based on TCP/IP and enhance web function as well. We need to intensify the development of software technology so as to make new form of commerce application environment building requirements are met, such as XML, Java technology, component technology and so on. Nowadays, electronic commerce activity is affected mostly by the network security problem, so we must accelerate the pace of the construction of network security platform and promote the establishment of a comprehensive network system as well as network transmission of data encryption. In this way, we can ensure the network information security through a variety of certification system, making online transactions can be accomplished in a safe environment. Only the network security can provide the most basic environment for the development of network economy, and network security also need the assurance of advanced computer technology and network technology. Therefore, the economic development has higher requirement of computer network.

THE INFLUENCE OF COMPUTER NETWORK TECHNOLOGY TO THE CURRENT ECONOMIC DEVELOPMENT

The new international relations

"Information standard" is the essence of globalization. Network economy has the very big charm and promotes the country's economic cooperation pattern and the way of changing. Computer network technology has promoted the international trade, international investment and international finance to network development. Along with the computer network technology in the more and more obvious role of economic development, it has initially formed an informational multilateral trade system and global sweep of the network financial agitation. In the area of international investment, the traditional funds have become more open, information, leverage. In the area of international finance, there are more electronic financial services such as "virtual Banks" and gradually replaced a lot of traditional bank business as trading between Banks and customers can be done through automatic teller machines, telephones, computers and other electronic technology. Now electronic financial futures trading has become very mature. In the respect of international investment, more global investors are attracted by network finance. They saw the network finance’s important position in the field of finance in the future, so they take the layout for investment for a better new international investment position, and emerging markets is that they are the focus of the international investment targets, such as southeast Asia. The development has changed the traditional mode of investment, as the results of computer network technology. In the area of international trade, the protection of intellectual property is of great importance for all these global manufacturers while the realization of information service integration is the result of "electronic data interchange ". Now the e-commerce is the most vigorous development of Internet economy, whose development has caused the extensive and profound changes in the international trade mechanism, especially the success of Alibaba Group has caused significant interaction on Wall Street, London, China
and the world. Its brightness shows the huge development potential and the important position in the economy in the electronic commerce.

**Optimize the economic structure**

The continuous development of network economy makes industrial structure adjusted and the national economic structure fundamentally changed which has developed to the informationization and advanced. Because of the information industry's own characteristics, it has become a leading industry and pillar industry in national economy in parallel with steel, automobile, energy and so on. Its specific performance is as follows: in the process of the continuous development of information industry, the continuous mixing and infiltration of the traditional industry makes the traditional technology has been improved, and the transformation and upgrading of traditional industries is the push of the economic structure to the fundamentals and "softening" development; The formation and development of other high-tech industrialization also need to rely on the information industry; Evolution of industrial structure in the center of gravity to the high value of information network. The continuous development of network economy optimized the economic structure, main showing as follows: make the industrial structure to the development of high-grade, consumption structure to the development of service, labor structure to the development of intelligence. In many respects, the development of network economy affects the economic structure, for example, investment structure bias of the information industry, the effect of small business in enterprise scale structure have been improved, in the regional economic structure of small and medium-sized town is faced with more opportunities of development and these show that the economic structure of the development of information network. Network information industry to economic contribution rate is growing year by year, we can clearly see from Figure 2, it also shows that the optimization of industrial structure in our country.

![Figure 2: Beijing industry contribution to economic development in 1978-2007](image)

**Employment direction**

Currently a lot of people think that the jobs decline is caused by the lack of computer technology. Therefore, when some companies decided to downsizing, they tend to take the ability of one’s computer technology as a very important reference target, which was obvious in many industries like banking, insurance, etc. With the continuous development of network automation, it will make a lot of traditional types of jobs disappear gradually. Nowadays many recruiters in recruitment will indicate that people with skilled computer technology is preferable, which shows that the great changes in employment. But there is no obvious evidence to indicate that mass unemployment is caused by computerized situation. The bureau of labor statistics economist And reason believes that "the problem is no longer about whether science and technology caused the decline of jobs, but about science and technology structural affects on the economy". The development of science and technology indeed replaced some of the traditional handicraft industry, but it also provides a large number of new job opportunities, especially the development of e-commerce has brought a lot of jobs and entrepreneurial opportunities, so in general the development of computer network technology is positive. Let us analyze this situation from the software industry and the cars industry. There are about 800000 employment in the current U.S. auto industry, which is also the same statistics in the mid 1950s. However, we should know that the increase of population in the United States is about one hundred million people in the process of the 40 years of development, so we can say that the current jobs created by automobile manufacturing industry has dropped. On the contrary, the high-tech industry of American computer industry employment has increased from 1994 in 1994 to 2005 in 1.8 million, by 2013 the American computer industry employment is about 2.7 million, so the development of computer network technology has brought many jobs. We should say that the development of computer network is changing the direction of employment, prompting some low efficiency of traditional handicraft industry was replaced by the automation network, but also it provides a large number of jobs in computer technology, especially the electronic commerce development led to the development of many industries. Therefore, the development of computer network technology promotes the change of employment direction. We can see that the development of computer network technology provides many kinds of new jobs from TABLE 1.
TABLE 1 : New jobs and skills required

<table>
<thead>
<tr>
<th>jobs</th>
<th>Skills required</th>
</tr>
</thead>
<tbody>
<tr>
<td>technology-based</td>
<td></td>
</tr>
<tr>
<td>Web content editor</td>
<td>Be familiar with the website text editor and relevant laws and so on</td>
</tr>
<tr>
<td>Web developing technology</td>
<td>Be familiar with the website development technology and the server maintenance, etc</td>
</tr>
<tr>
<td>Web graphic designer</td>
<td>Be familiar with graphic tools and the man-machine engineering</td>
</tr>
<tr>
<td>Logistics tracking</td>
<td>Be familiar with electronic business financial system and logistics procedure processing, etc</td>
</tr>
<tr>
<td>finance-based</td>
<td></td>
</tr>
<tr>
<td>Web money management</td>
<td>Be familiar with electronic business financial system etc</td>
</tr>
<tr>
<td>Export sales</td>
<td>Be familiar with the Internet popularization and international trade, etc</td>
</tr>
<tr>
<td>Domestic trade sales</td>
<td>Be familiar with the Internet promotion and marketing, etc</td>
</tr>
<tr>
<td>Website promotion</td>
<td>Be familiar with the Internet promotion, Internet advertising, public relations, etc</td>
</tr>
<tr>
<td>Trade-based</td>
<td></td>
</tr>
<tr>
<td>PA&amp;SALES-based marketing</td>
<td>Be familiar with electronic commerce system and marketing, etc</td>
</tr>
<tr>
<td>Public relations</td>
<td>Be familiar with the Internet communication, the Internet advertising and public relations, etc</td>
</tr>
<tr>
<td>Customer service</td>
<td>Be familiar with electronic commerce system and marketing, etc</td>
</tr>
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</table>

DEVELOP THE COMPUTER NETWORK AND PROMOTE ECONOMIC PROSPERITY

In order to adapt to the needs of the development of the network economy, we need to promote the development of computer network technology

With the application of computer technology everywhere, computer technology is gradually changing our way of life. The development speed of computer technology is very fast, at the same time, the rapid development of economy also needs the support of a higher level of computer network technology, so we need to constant innovation and development of computer network technology. At present, the development of network economy, e-commerce, electronic banking, electronic banking to the deeper development, there are kinds of problems have effects on online transaction security. There is the question of network speed, which has important influence to people good Internet experience, we need to solve all these problems and constantly promote the development of computer network technology is the only means. Therefore, we should attach great importance to the development of computer network technology, providing reliable guarantee for the prosperity of network economy.

The establishment of the enterprise for its own network to seriously, we should make the innovation of marketing channel

At present, the spread of the Internet area is very large, the network user group continuously increase, so this provides quite a lot of business opportunities for the Internet.Therefore, each enterprise should realize the importance of developing network marketing channel under the network economy, the enterprise to develop the network marketing channels, and to establish its own network system. Now many of the traditional large home appliance chain stores are aware of the huge impact to the traditional trading online transactions. They all try to build the establishment of the network marketing channel, such as sunning appliance to establish online sales platform, some online sales platform, set up network with the popularity of the Internet and deepening. People’s consumption patterns are changing, now online shopping population has increased dramatically, if the traditional enterprise don't attach importance to the establishment of the network marketing channel, then will surely be buried along with the development of the time in the e-commerce giant torrent. Therefore the establishment of the enterprise for its own network is serious and companies need to expand marketing channels innovation to ensure that enterprise can follow the development of the times and create more economic benefits.

We should focus on the cultivation of talents and education

Combining people and electronic tools is based on the implementation of network economy. Network economy is huge social system engineering. It needs to change the level of talents, construction of information infrastructure, the construction of digital standards and processing, tax, trade, marketing, e-commerce, transportation and other industries. Network economy talented person need to work hard to achieve it. If the network is lack of talents, it will inevitably lead that the network economy is difficult to run. The use of modern information technology is the base of network technology. If there is no technical talent, there will be no development of network economy. Therefore, network needs a large number of talents for economic development. We should pay attention to the cultivation of the talent and education by establishing a scientific and reasonable system of talent so that we can do good things for the development of network economy in China.

Perfect and supple the laws and regulations

The development of network economy promotes the change of society and provides conditions for the development of social economy, but also it causes the emergence of a series of new social relations, which has led many problems came
out. Relations regulator is the law in society. Social productivity development level restricts the development of the law, at present, we have clearly felt the laws and regulations to solve the social problems caused by new information technologies in some deficiencies. Therefore, in order to make the network economy be more healthy, we need to perfect and supple legal laws and regulations, promoting the healthy development of network economy.

CONCLUSION

The continuous development of computer network technology has a very important influence on the economy while the development of network economy needs the support of a high level of computer network technology. The two are complementary to each other. First of all, this paper introduces the present situation of computer network development in our country. There is a computer network search function still need to improve, computer network security cannot ensure, computer network technology, talent, etc. These have hindered the development of network economy in our country. Then the writer talks about the computer network technology and discusses the relationship between economic development, then discusses the computer network technology's influence on China's current economic development, including the new international relations, optimizing the economic structure, employment direction transfer, etc. Finally, there are several suggestions on the development of computer network and how to promote economic prosperity. In order to adapt to the needs of the development of the network economy, we need to promote the development of computer network technology and to establish the enterprise for its own network seriously. We need to make innovation, marketing channel for talent training and education should attach importance to and to perfect the laws and regulations. I believe that the development of computer network technology will make our economy more prosperous.

REFERENCES

