

STUDY ABOUT THE DEVELOPMENT OF THE PRODUCTIVITY IN INFORMATION SOCIETY

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Abstract: The information is inundant, lack of pertinence, not visual and hard to understand in information society. These problems can lead to difficult network cooperation of affairs and directly affect the productivity level of an organization. This paper conducts an analysis upon the development of productivity, and puts forward the concept and features of the new generation productivity.

1 INTRODUCTION

In information society, constant development of Internet and high technology brings people a way to communicate, cooperate and obtain important data. It accelerates the development of productivity, causes the deep changes of its structure and connotation, forms productivity of new generation, and enormous change has taken place in terms of the way the information workers work. In new job world, cooperation, business intelligence and optimizing scarce time and attention are all important factors for success, so the new generation software for productivity should be developed, and the corresponding platform should be set up to manage varied information backstage by integrating, simplifying and applying new software and service, and to help people to get the meaning of the complicated data so as to improve human ability, thus improving the productivity (Gates, 2005).

2 ANALYSIS OF THE DEVELOPMENT OF THE PRODUCTIVITY

“Science and technology is the primary productivity”. In network society, information is the important resources for the development of modern productivity, and information technology and network technology have already become the most advanced and active productivity. Meanwhile, information society also faces an enormous

challenge which is how to raise information productivity effectively, how to make existing information meaningful, and how to make people centralize, optimize and employ their professional technique in order to make important data visualized so that people can understand data fast and thoroughly and try to decrease the time spent in dealing with numerous information in the environment packed with information, thus improving the productivity of the whole society. Therefore, new generation productivity should be developed in order to realize the transition from information productivity to the new generation productivity.

2.1 Current Development Situation of the Productivity

The development of the productivity is a dynamic course which develops constantly in produce with the interaction and progress of science and technology. Because of the development of science and technology, the development of productivity is accelerated day by day. Up to cyber times at present, the evolution of the productivity of human society can roughly be divided into four stages: Primitive era productivity, agricultural craft labor productivity, industrial machine productivity and information productivity in network information age. Though there are different tools and correspondingly different organizational form for production, the development of productivity in each stage is not independent. In network society, the internet becomes the information productivity in the new

generation as a tool of producing (Li, 2005), and meanwhile there also exists machine productivity and other productivity, so they develop all together and including each other.

With the pushing of new technical revolution, social productivity is developing at an unprecedented pace and demonstrating a lot of new features. For example, the factors that restrict and influence the development of social productivity are more and more complicated and form the complicated productivity system; the key element of productivity swells progressively, and the systematic structure changes deeply; the scientific and technological content in productivity increases and intelligentizes constantly; productivity keeps developing with higher speed; it crosses over areas and national boundaries and develops globally, etc.

2.2 Development Foundation of the New Generation Productivity

The productivity of industrial era is mainly shown as the traditional machines' using energy as resource. It enlarges the human's physical power through utilizing the mechanical tool of low intelligence, for instance the application of tools such as the cars, trains, planes, etc. It is the primitive foundation for the new generation productivity. Industrial era is the society of producing material goods, whose technicalization offers certain foundation for appearance and development of the information productivity of future generation too. However, the predicament which people face in industrial era lies in the relative difficulty of trans-regional and trans-departmental information acquisition. Therefore, in order to improve productivity, it is necessary to develop information technology. In accordance, information productivity based on network forms and develops naturally.

Network age regards service as the foundation. The most important factor is not the energy, but the information (W2003ang.). With the constant development of the network technology and information technology the information productivity of the network society appears on the basis of high development of industrialization. It is one type of production capacity driven by capital of knowledge, circling information technology as the core, and based on new and high technology. It regards Internet as the tool system and combines with high-quality laborers. Appearance and constant perfecting of information productivity makes the information resources the factor of primary importance to control economy progressively. It also narrows the digital

gap between all kinds of organization and man and realizes worldwide interconnection extensively, so that the productivity of the whole network society is raised. With the good development and support of the information technology, it is possible to further develop towards more advanced technology. As a result, the development of the information productivity in network age is the key factor for the development of new productivity, and offers the corresponding technological foundation for more intelligent information processing and the development of cooperation in network.

In information and network society, due to the constant development of the network and information technology, the amount of information that the mankind has produced in the past 30 years is the total in the past 5000 years, and it will still increase in the form of geometric progression in the future. But in the information storehouse only seven percent of the information is meaningful (Jia, 2002). Therefore, in the network society of information explosion, people again face the new predicament, that is the lack of yardstick to select information. They feel losing the thinking and rational guidance, and can only accept information superficially. The information surplus together with the instant reaction of information spread makes the region difference and the time difference nearly zero, the control of information quality difficult, and information workers' ability dropping.

Try to utilize the existing information and knowledge to analyze the information with intelligence and to make information productive by carrying out pointed application, visualized and efficient using, etc. Set up the synergy platform through network, and make information workers share information very well with synergy software. Realize cooperation in work and finally, really promote productivity of all kinds of organization and people, thus constructing the new generation productivity.

3 THE CONCEPT AND FEATURES OF THE NEW GENERATION PRODUCTIVITY

On the basis of analyzing the features and developing trend of the new generation productivity, the paper in the following part will introduce the concept and features of the new generation productivity.

3.1 The Concept of the New Generation Productivity

New generation productivity is a kind of advanced productivity in the background of information economy and network economy. It developed from the information productivity and based on the software and hardware technology and high security of the network, and helped information workers to find or build the special files they need quickly through developing knowledge ware which could filtrate, classify and choose intellectually to make people understand the information correctly and rapidly by multidimensional presentation, communicating and transporting with other information workers who is far from each other in the synergy platform to realize the optimization of work efficiency.

Network technology and intellectual application technology are the key to the development of new generation productivity, its rapidly development and extensive application had a deep impact on the development of society and economy, enabled the production high-speed, high-efficient and low consumption, saved the working time, and accelerate the development of productivity. Among them, compared with the information productivity in cyber times which is for information sharing and information application, the intellectual factor in the new generation productivity is stronger and more valuable than the information factor in information productivity. So the expression form of the new generation productivity which takes intellectual application technology as the important sign is a mutual intelligence system based on the Internet, it has two basic key elements, i.e. the high intelligence of people and that of the software. The interaction and working in coordination of people and software intelligence can enlarge the human intelligence, fully play an intellectual role and make the new generation productivity become advanced productivity of promoting the development of economy.

3.2 The Features of the New Generation Productivity

Based on the needs of development of information society and urgent request to fully enhance the production efficiency, the new generation productivity certainly has the common characteristics with the original information productivity on the basis of it, such as the complexity, rapid development and globalization,

etc. Also it will show a series of new features.

Forward-looking. The new generation productivity is a productivity which developed on the basis of information productivity, its research content is how to make full use of the information technology and how to further optimize the display and applications of network resources on the basis of the existing resources to improve the productivity of organizations and individuals in the existing information and network economy background. Therefore, the new generation productivity is for the times and lead the development trends of social and science technology, forward-looking and can guide information workers working differently, so that it developed from information technology to the intelligence application technology, strengthen people's awareness of new-style work, inspired the potential for thought into value, and strengthen the competitive advantages.

Synergy of Network. With the matures of network technology, shared work space has grown up gradually, tools for automation of work flow become richer, and the connection of people, information and resources can make them fully understand the information to help organizations and individuals achieve high synergies to avoid duplicate work. The new generation software which has the feature of the new generation productive and gradually being recognized with the enterprises makes all separate persons, organizations and systems together, breaks the information island between people, organizations and system and reaches synergy and implements the application object of management. At the same time, security infrastructure also should be built in the technical support of network security technology to facilitate anyone to do security work with the documents and operation procedure.

High Intelligentization. Intellectual technology is the key of the new generation productivity, which takes the Internet and corporate Intranet as a platform and develops knowledge ware for data visualization, intelligent filtering, classification and selection of information, achieve functions of multidimensional data display and other, so that information workers can quickly find or create the necessary professional files and fully and accurate understanding to achieve the maximum efficiency in the future. Therefore, the new generation productivity is highly intelligent, able to achieve people's day-to-day operation of a self-adaptive and automatic processing of relevant information to help people understand the meaning of the complex data in order to meet people's request, and then enhance the capacity and productivity of people.

Integration. New generation productivity provides a single "entry point" with access to the Internet world through integration of communications, which point is consistent at different places of application and equipment. Information workers can get all the information needed in a single type view regardless of where they are and many different kinds of information can be in a separate, identical type of view. Therefore, high integration of the new generation productivity can avoid the duplication of information workers to a certain extent, and improve the productivity of the organizations and individuals.

High Efficiency. The new generation of productivity has higher output efficiency than any previous one and help information workers get rid of the tremendous pressure of the complicated work of information selection in order to do more valuable work which the new generation software can't do. So it can also improve the productivity of individuals and thereby enhance the productivity of society as a whole.

4 CONCLUSIONS

The development of productivity is a systematic project to enhance the productivity of a city, which would impact powerfully on the city's economy development. The new generation productivity has not been complete enough in many areas, and it still needs further exploration and advancement on the foundation of existing information productivity, to discover more great potential of new generation productivity and boost the total productivity of the whole network society.

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