

How to Quantify Information Economy

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Along with today's economical globalization, intellectualization and numberization, all trades and professions, various subjects and all areas have been informed. Information has connected all aspects of human beings' survival life and practice. It does not only conclude all the past experience, but also provide some original thoughts for the future. Nowadays information industry has occupied a position of distinguished importance. If it can be accurately estimated, it will greatly surpass the primary industry, approach the secondary industry and exceeds other service trades in tertiary industry. But compared with the development of national economy, the statistics of information industry have fallen behind, which need urgent solution by workers of the whole statistics system of our country.

I Challenges to National Economy by Development of Information Industrialization.

Since reform and opening to the outside world, many people have felt it is very possible to establish an independent industry-information industry to work out national economy.

The industrialization of information accelerates the economic increase. The united and Japan are the most important trade countries of information technology and service. The information industry has developed quickly since marched in the 1990s. But in the index assess system of national economy, information industry index does not exist.

In the past ten years, the global technological information market computer hardware, software and some relevant service increase by the growth rate of 8%. However more than 90% concentrated in the countries of OECD, among which the growth rate exceeds 80% in Britain, Japan, Germany, France and the United stated. It shows clearly the different of industry structure of developed countries and other ones.

From the objective laws of social and technological development, information society will surely replace industrial society. Meanwhile it will change human beings' ways of producing, work and life. We have marched into a new century, and are facing a new revolution. Which requires us to bring lively information economy before our minds in the asses of national economy.

II Essential Factors' Analysis of information Economy.

The first question we meet with is how to explain and qualify the concept of "information activities" which is the basic factor of information economy. Information capital is the second factor the third factor is information workers in information economy analysis and the last one is information professions.

III How to Quantify information Economy.

Information activities involve many aspects and fields. Such as national income, production assess and social statistics, which decides the complicity of the measurement of information economy. We investigate production and consumption and call the Units which take part in the provision of information commodities and service "class one information sectors". They are the main body of information market Except these, there exist information production and consumption in government departments and in enterprises. These sectors produce and consume information, but don't trade in market. We call them "class two information sectors".

For "class one information sectors", we may establish class one information sectors' account system according to certain concepts and Unify it with national income account and produce account because the central and local economic statistics are classified in great detail, For "class two information sectors", we may use the detailed information of labour income to get the income of non-information industry worked, and through many supposed conditions work our the labour income of information industry workers and information capital depreciation. In this way can we work out the output value of "class two information sectors".

Today's social economic sectors have the tendency to classify four main departments: Primary industry (agriculture) secondary industry (industry) tertiary industry (service) and the fourth information industry. The influence of qualifying the information industry is hard to estimate.