INDICATIVE PLANNING OF ECONOMETRIC MODELING OF COMMUNICATION AND INFORMATION SERVICES OF THE POPULATION

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Annotation
The article deals with the spheres of services, econometric models of development of communication and information services for the population, in particular, methods of indicative planning of econometric modeling, as well as makes suggestions and recommendations based on the results obtained.

Keywords: service sector, econometric modeling, simulation model, communication and information services, economic calculations, static and dynamic parameters, synthesis, optimization, indicative planning, heuristic methods, economic and mathematical methods, regression equation.

The issues of development of the socio-market mechanism based on the use of modern information and communication technologies in our country are debatable and of great scientific interest. An important feature of this direction is that it is focused on linking the solution of the problem of forming a market for intelligent products and services with the conceptual issues of using e-commerce in improving the quality and management mechanisms in this area.

The Action Strategy for five priority areas of further development of the Republic of Uzbekistan for 2017-2021 identifies important tasks for "introducing information and communication technologies into the economy, social sphere, management system". Effective implementation of these tasks requires more effective use of e-commerce in the market of intellectual products and services in the country and expansion of the economic assessment of its effectiveness, further improvement of organizational and economic mechanisms of e-government.

The use of modern information technologies in socio-economic processes, the development of technological processes, the mobility of these technologies, the level of skills of employees in the use of technologies and other factors. The impact of social factors on employment is accompanied by the emergence of personal characteristics (mobility, motivation, desire for innovation, desire for professional development, the desire to meet qualification requirements), which are formed as a result of achieving a high level of well-being of labor resources.

Although communication and information services in Uzbekistan are not as developed as e-commerce in developed and developing countries, there are a number of indicators: attention at the government level, the growth in the number of Internet users, the improvement of hardware and software, as well as online shopping. the growth of interest and other indicators, it is possible to predict a high level of development of this sector in the near future. In the context of the global development of the digital economy, modernization of the economy, innovative development, building a knowledge-based economy are among the main tasks of today and the near future.

In the economy of our country, scientific research based on econometric modeling of production processes is becoming increasingly important in improving the mechanisms of promising and science-intensive industries of enterprises, increasing the efficiency of using production capacities.

In recent years, the Government has paid great attention to communication and information. The Ministry of Information and Communication Technologies has been created in the country, the Strategy for Innovative Development of Communications and Informatization is being implemented. For this reason, new scientific, technical and intellectual activities are developing in our country. Most intellectual products are developed by highly qualified specialists of the Academy of Sciences, research institutes, higher educational institutions, as well as regional unitary state-owned informatization enterprises, and communication and information services

are provided on a contractual basis.

Communication and information services developed or developed in state bodies, research institutes and higher educational institutions are mainly formed by the method of indicative planning, the implementation of informatization processes is observed.

The methodology of indicative planning is an important component of the methodology of indicative planning.

In recent years, Uzbekistan has been taking consistent measures to develop the digital economy, gradually introducing e-commerce systems for the exchange of electronic documents and services for individuals and legal entities in state bodies and other organizations. At the same time, an analysis of the real state of affairs in the sphere shows that the policy documents are scattered due to the lack of a single information technology platform that ensures integration into a centralized data system.

In the process of research, indicators of the distribution of the employed population by main types of economic activity are used in the calculation of indices. These include the following 11 main economic activities: agriculture, forestry and fisheries; industry; construction; trade; transportation and storage; accommodation and meals; communication and information services; financial and insurance activities; education; health and social services; art, entertainment and recreation. Activities that are not included in the main types of economic activity are generalized as other types of services, and the Calculations use the Dietrix method (Ditrix) based on the number of items for a total of 12 types of economic activity.

Dietrix's study of the relationship between economic growth and structural change is *based on the NAV (NORM of absolute value)* norm and is used by the Liliyen index.

The absolute value norm is the simplest indicator for measuring structural changes. This index is calculated using the following formula:

$$NAV_{s,t} = 0{,}5\sum_{i=1}^{n}\left|x_{i,s} - x_{i,t}\right| \qquad (1)$$

here $x_{i,s}$ and $x_{i,t}$ s and t at time i is the network (or employment) share in gross domestic product.

NAV ranges from zero to one, so it's very easy to interpret. This shows that the change in content is exactly equal to the movement of the share of industries in the economy as a whole. If the structure remains unchanged, the index will be zero. If the change in all sectors is maximum, it means that the whole economy has completely changed and the index combined is equal to one.

The Lily Index is an important indicator of structural changes in a number of areas of economic research. The Lily Index is widely used in the literature on the determinants of structural unemployment as a measure of structural changes in the composition of employment. Indirectly, it measures the degree of influence on labor demand of sectoral shifts in the composition of the product (economy).

Lillian developed an index that measures the standard deviation of a network's growth rate from period *t - 1* to period *t*. For each region of the country, the Lillian index measures the structural change in demand for the difference in the growth of the share of the network.

Based on the structural changes in the degree of the Lilien index, the modified Lilien index (MLI – *modified Lilien index)* is calculated as follows:

$$MLI_{s,t} = \sqrt{\sum_{i=1}^{n} x_{i,s} \cdot x_{i,t} \cdot \left(ln\frac{x_{i,s}}{x_{i,t}}\right)^2} \qquad (2)$$

A low MLI means a low rate of structural change in the economy, and a high MLI level means a high rate of change.

The method of indicative planning is a set of methods for developing, justifying and analyzing the timing of the system for calculating forecasts, programs, plans and planned indicators of all levels. The indicative method of planning is a specific method, a technical method by which planning tasks are solved and numerical values of forecasts, programs and plans are calculated.

Due to differences in the structure of indicative planning tasks, several methods are used to develop forecasts, programs and plans. These include: expert (evaluative) or heuristic methods; methods of socio-economic analysis; methods of direct engineering and economic calculations; balance method; economic and mathematical methods and models; methods of structural analysis and synthesis.

Thus, the use of information technologies in economic calculations with a rational approach allows the company to increase the area of information flows, accelerate information flows, reduce losses and secure its activities.

Based on the above information and indicators, we can say that in this area the automation of modern national innovation systems, the use of high technologies is one of the key factors in the digital and innovative development and improvement of a particular industry.

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