Imitation Model of Development of Communication and Information Services for The Population of The Region

Nosirov Bakhtiyor Nusratovich

Senior Teacher, Department Software of Information Technology, Karshi Branch Tashkent University of Information Technologies named after Muhammad al-Khwarizmi
nosirovbn@gmail.com tel: +998914543499

ABSTRACT

The article discusses the areas of services, econometric models for the development of communication and information services to the population, in particular, the model of imitation, and makes suggestions and recommendations based on the results obtained.

Keywords: Service sector, econometric modeling, imitation model, communication and information services, economic calculations, engineering communication, static and dynamic parameters, synthesis, optimization, multifactorial empirical models, regression equation.

Introduction.

The issues of developing a social-market mechanism through the use of modern information and communication technologies in our country are controversial and of great scientific interest. An important feature of this direction is that it focuses on linking the solution of the problem of shaping the market of intellectual products and services with the conceptual issues of using e-commerce in improving quality and management mechanisms in this area[1]. [5]

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 high-tech industries of enterprises, increasing the efficiency of production capacity.

In recent years, the government has paid great attention to communication and information. The Ministry of Information and Communication Technologies has been established in the country, and an innovative development strategy for communication and informatization is being implemented. For this reason, new scientific, technical and intellectual activities are evolving in our country. Most intellectual products are developed by highly experienced specialists in the Academy of Sciences, research institutes, higher education institutions, as well as in the regional communication informatization state unitary enterprises, and communication and

[1] www.gov.uz - Government of the Republic of Uzbekistan official site.

information services are provided on a contract basis[2]. [4]

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 government agencies and other organizations. At the same time, the analysis of the real state of affairs in the field shows that the software documents are scattered due to the lack of a single information technology platform that provides integration into a centralized data system [5].

Material and methods.

In the article, we use the imitation method, the existing systems for evaluation are based on taking into account future planning cycles. An automated information imitation system is used to illuminate the qualitative and quantitative indicators of the past, present and future periods of activity of service enterprises[3]. [2]

Accordance with the principles of system analysis, we propose to build an imitation model of communication and information services (SIC) according to the following block diagram (Figure 1).

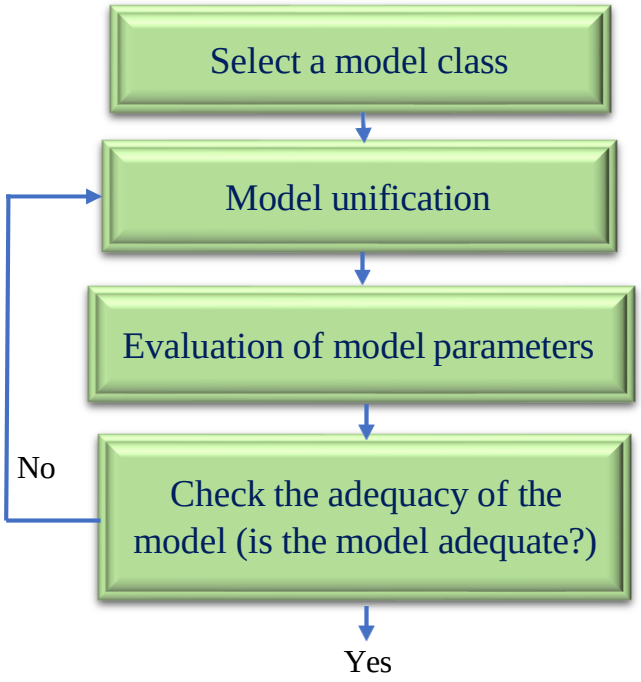

Figure 1. Communication and information services imitation model (block diagram)

Creating a model is done in four stages:

1. Based on the interaction of theory and practice, the appropriate class of models is selected to achieve the SIC goal.

2. The selected class of SIC models turns out to be too broad to fully correspond to real data, so approximate methods of identifying the corresponding subclasses of these models are developed. Such methods use the results of existing natural research, a priori knowledge of the system, and provide appropriate economic subclasses of models for testing.

In addition, the unification process can be used to obtain initial (approximate) estimates of SIC parameters.

3. Approximate estimates obtained during the identification process can be used in precise iterative methods of parameter estimation.

4. Checking the compatibility of the SIC model allows to identify possible defects of the adaptation and their causes. If such defects are

[2] Mukhitdinov Kh.S., Nosirov B.N. Communication and information services to the population of the region. Journal of Management Value & Ethics Jan.-March. 2021 Vol. 11 No.01. SJIF 7.201 & GIF 0.626

[3] Экономика недвижимости: учебное пособие / Под ред. Сергеева С.П. – 2-е изд. - М.; Дело, 2010. – 328 с.

not detected, the SIC model is ready for use. If any discrepancies are identified, iterative cycles of conformity identification, evaluation, and verification are repeated until a suitable representation of the SIC model is found [4].

Results.

Volume of sales of products (services) by R^1_{nk} service enterprises is determined by the following formula:

$$R^1_{nk} = \sum_{i=1}^{I1} A_{ki} * B_{i,} \quad (1)$$

Where n is an indicator of the object of communication and information services that provide the product or service (*n = 1, 2, , N*);
k - indicator of the product or service (*k = 1, 2,,*);
i is the index of the object of the enterprise of communication and information service of the consumer of the product or service (i = 1, 2, ,);
A_{ki} is the specific level of consumption of a product or service by the consumer *i*;
B_i is the number of consumers.
Sales volume of infrastructure facilities:
Sanitary and electrical equipment in m2 of the total area of the building , sales volume $R2$ determined by the following formula: n k

$$R^2_{nk} = \sum_{i=1}^{I2} a_{ki} * s_i \quad (2)$$

where a_{ki}- the standard of service of household appliances;
s_i- area of serviced buildings of object *i*;

Sales volume of engineering communications R^3_{nk} determined by the following formula:

$$R^3_{nk} = \sum_{i=1}^{I3} b_{ki} * v_i \quad (3)$$

Where b_{ki}- the standard of engineering communications service;
v_i- length or number of customer *s* engineering communications facilities.

The volume of sales of goods (services) in the form of value V_n is determined as follows.

$$V_n = \sum_{i=1}^{I_1} \sum_{K=1}^{K^1} R^1_{nk} * d^1_{ki} + \sum_{i=2}^{I_2} \sum_{K=2}^{K^2} R^2_{nk} * d^2_{ki} + \sum_{i=3}^{I_3} \sum_{K=3}^{K^3} R^3_{nk} * d^3_{ki}$$

The sales plan of the object of service enterprises reflects the sales revenue, the volume and structure of product deliveries, the income from the sale of goods and services.

Thus, the use of information technology in economic calculations, with a rational approach, allows the firm to increase the area of information flows, accelerate information flows, reduce losses and secure its operations.
Based on the above data and indicators, it can be said that in this area, too, the automation of modern national innovation systems, the use of high technology is one of the key factors in digital and innovative development and improvement of a particular industry.

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