ROLE OF SYSTEM OF INDICATORS IN TECHNOLOGY OF OPTIMIZATION AND BALANCE OF A PLURALITY OF DATA OF SUPPLY AND DEMAND

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Article is devoted to significant problems of creation of system of the indicators for stimulation of balance of supply and demand of products. It is very important for increase of competitiveness of products. The new methodology of calculation of target function of a product and indicators of its efficiency is offered in article. The special place in article is devoted to methodology of definition of an indicator of aggregate useful effect, which includes useful effect of the producer and consumer and promotes balance of their interests. All offered indicators of efficiency of a product are interconnected with each other and only in united system possess the stimulating mechanism of balance of supply and demand. They promote increase of effectiveness of process of planning and allow to find reserves for increase of competitiveness of products.

Keywords: balance, indicators, system, product, demand, offer, useful effect, producer, consumers

Efficiency of modern economy of various countries of the world is inseparably linked with increase in competitiveness of products. Competitiveness of products depends not only on opportunities of resource base and rationality of production, but also from mechanisms of balance of supply and demand. Methodical questions of assessment of economic balance and competitiveness of products were researched on the basis of analysis of theoretical elaborations of foreign and Russian scientists [1– 6, 10]. Various mechanisms of balance of supply and demand were developed, which all together are system, and they only in system can lead to effective result. However, improvement of system of the planned indicators has special importance, because it influences optimization of data of the offer of any product, its competitiveness.

Materials and methods of research

During the conducted research, methods of the scientific analysis, system and comprehensive approach were used. The matrix technologies of balance of data were recommended for calculation of aggregate useful effect.

Results of research and their discussion

The system of the interconnected technologies and tools for balance of supply and demand was developed. One of such mechanisms is the developed system of indicators for assessment of efficiency and competitiveness of products. This direction of researches, certainly, is very relevant, because the offered system of indicators has to be used not only for forecasts and estimate, but has stimulating role, and this system of indicators creates a base for balance of data of supply and demand. The balance mechanisms based on essentially new system of the indicators interconnected with each other are a basis for formation of new economy of data. Process begins with formation of dynamic rows of the predicted data of demand and the planned data of the offer during long-term prospect and in current period.

Firstly, the indicator of target function is included in system of indicators of optimization of data of the offer of a product. Target function of a product is determined by the relation of effectiveness of a product during full life cycle of its use to costs of its creation, sale and exploitation. This indicator is very important for finding of an optimum ratio of the price and quality of a product. At the heart of target function not only price of the producer, but also effectiveness of a product and costs of its exploitation. Therefore, target function is an indicator, which connects interests of the producer and consumer. Optimization of target function is reached over means of balance of data of supply and demand. Other indicators are constructed over the analogous principle of action.

Secondly, interconnected coefficients of effectiveness of a product for the producer, consumers and intermediaries (marketers, resellers, financiers) are offered for calculation. These indicators are relative. Coefficients are calculated by the relation of aggregate effect to cumulative expenses of each of participants of process: “production – sale – consumption”, namely: producer, resellers and financial intermediaries, consumer. Coefficient of effectiveness of a product for the producer is the relation of the price of a product for the producer to cumulative expenses of all stages of its creation and sale, since research and development. Coefficient of effectiveness the of a product for the consumer is the relation of effect of the consumer in form of saving of costs in the markets of services, as benefit from purchase of commodity to cumulative expenses of the con-

sumer. Cumulative expenses of the consumer are the price of purchase of goods and cumulative operational costs for all guaranteed product service life. Coefficient of effectiveness of intermediaries is defined by the relation of the benefit received by them to their costs of rendering intermediary services. The cumulative indicator of all participants of process: "production – sale – consumption" will characterize economic efficiency of a product for national economy in relative expression. The purpose of calculation of these indicators – to balance interests of the producer, resellers, financial intermediaries and the consumers among themselves. Set of these indicators will allow to smooth disproportions in profitability from a product for different participants of process of its creation, sale and consumption. If the indicator of target function has to be predicted and planned, then this system of indicators has to be used for assessment of data. It can serve as an incentive for taking measures to regulation of proportions of the income of different participants and balance of their interests, and also for development of measures of antimonopoly regulation. Therefore, this system of indicators can become the effective regulator of increase in competitiveness of products. These indicators are indissolubly connected with indicator of useful effect. Useful effect of product has to be both by planned indicator, and valuation indicator at the same time.

The planned level of aggregate useful effect of a product is a reference point for transformation of data of supply and demand of a product and their balance. In this regard the methodology of calculation of an indicator of aggregate useful effect is of special importance. Theoretical and methodological bases of calculation of useful effect are offered in the course of scientific research [7, p. 204 – 217; 8, p. 225 – 232; 9, p. 68 – 74].

The useful effect (UE) – the effectiveness of the planned plurality of indicators of offering of products, which is expressed in cumulative usefulness of products for the consumer and the producer. In difference from relative indicator of economic efficiency of a product for national economy, at calculating useful effect from it the benefit of intermediaries and their contribution in the form of tax contributions to economic benefit is not considered. It is made specially, in order that the benefit of the non-material sphere, which is often not caused by consumer properties of a product and depends on a set of other factors, for example, from game on rise or drop in prices, excessive demand, competition level in the markets, exclusive role of marketing, monopoly of retail chain stores and other factors, did not distort of useful effect from product and did not influence the choice of an optimal variant.

The useful effect from product is defined by benefit of the producer, i.e. in the sphere of direct creation of material values, formation of effect of manufacturer from it and by benefit of the consumer, i.e. in the sphere of satisfaction of public requirements and formation of public effect of product. At calculation of useful effect from product not only for producer, but and for consumers, it is necessary to consider different requirements of buyers of different markets in volumes, the prices of purchases even of the same type of a product, because conditions of purchases and conditions of exploitation of products can differ. For example, purchases can be in result of wholesale, retail, sales of stocks, preferential sales at a discount, and consequently, various both at the price, and over volume. The various conditions of use of a product by consumers can have significant influence on the operating costs, or bring effect due to their decrease, or is no. However, on practice it is almost impossible to predict precisely features of acquisition and conditions of exploitation of product by each buyer. Therefore, segmentation of buyers is carried out over general signs, namely: at purchases prices, over channels of goods movement, features of purchases, conditions of exploitation of products. Strategic zones of sales of firm are defined in each market, because most often consumer inquiries differ over the markets. After that the firm predicts volume, price parameters of demand of certain consumer groups in each type of products on different markets, as well as their potential consumer effect and possible decrease of expenses. Different factors should be taken into account because not only spatial parameters (the different markets), but also temporary factors exert huge impact on the change in price and sales volumes of products, and consequently, not only on useful effect of manufacturer, but also on useful effect of consumers. Therefore, the consumer inquiries are classified not only over the markets, but also over temporary stages of demand. The indicators of the prices and sales volumes of products, possible decrease of expenses, and also indicators of useful effect as for producer, so and for the consumer have to be calculated for each market and the temporary stage of demand. The sales volumes of products in the market are defined over potential number of buyers of this type of products on it, taking into account the predicted norm of consump-

tion of a product by the buyer of this market with average inquiries. The producer defines part from all made product volume, which will sell in certain market during the planned period of time.

The useful effect of the producer is defined not only directly its by benefit from the price and volumes of realization of each type of a product, but also from decrease of expenses on its production and sale. The full life cycle of creation of a product begins with scientific research and includes design developments, the technological preparation of production, the organizational preparation of production and directly production. The extent of effect of a product (its profitability for the producer), but also possible saving of cost of its production and sales depends from temporary and spatial parameters. The expenses on publicity, sales promotion and sales volumes of products change on the different markets and during the different temporary periods. Besides, the different modifications of the same type of a product, different not only at the price, but also by costs on creation of product are offered usually in the different markets and during the different temporary periods. Therefore, at calculation of saving from decrease of cost of production and sales of products for each of markets the share of saving is calculated from each product, intended for realization in the certain market during a certain period of time.

Such approach was used not only for assessment of the expenses on production and sale, which are calculated from volume of each type of the made product, sold in the certain market during a certain period of time, but also concerning of costs of scientific researches, of technological and organizational preparation of production, which do not depend from volume of the outputs.

If separate modification of a product "$A_{1.1}$" was not developed for each market and costs of scientific researches, of technological and organizational preparation of production were not formed, and were defined in general for creation of product "$A_{1.1}$", then for definition of sum of saving over these articles of expenses, in the beginning the general saving over them was divided on total number of products of "$A_{1.1}$", i.e. the saving with of unit of product was defined, and then it was multiplied by products volume intended for realization in the certain market during a certain period. As a result, useful effect of the producer from realization, for example, offer of product "$A_{1.1}$" during a certain period in the local markets is defined over the following formulas:

$$E^1_{mA1.1} = P^1_{mA1.1} \times Q^1_{A1.1}\ ;\ldots;\ E^n_{mA1.1} = P^n_{mA1.1} \times Q^n_{A1.1}$$

$$\nabla C^1_{mA1.1} = (\nabla C^1_{SDA1.1} \times Q^1_{A1.1}) + (\nabla C^1_{CDA1.1} \times Q^1_{A1.1}) + (\nabla C^1_{TPA1.1} \times Q^1_{A1.1}) + \\ + (\nabla C^1_{OPA1.1} \times Q^1_{A1.1}) + (\nabla C^1_{PA1.1} \times Q^1_{A1.1}) + (\nabla C^1_{SA1.1} \times Q^1_{A1.1})$$

$$\nabla C^n_{mA1.1} = (\nabla C^n_{SDA1.1} \times Q^n_{A1.1}) + (\nabla C^n_{CDA1.1} \times Q^n_{A1.1}) + (\nabla C^n_{TPA1.1} \times Q^n_{A1.1}) + \\ (\nabla C^n_{OPA1.1} \times Q^n_{A1.1}) + (\nabla C^n_{PA1.1} \times Q^n_{A1.1}) + (\nabla C^n_{SA1.1} \times Q^n_{A1.1})\ (1-4)$$

where $E^1_{mA1.1};\ldots;E^n_{mA1.1}$ – effect of the manufacturer from acquisition of the offer of a product "$A_{1.1}$" by buyers on market, respectively: 1; …; n during a certain period;

$Q_{A1.1}$ – volume (number of units) of all the made products "$A_{1.1}$";

$Q^1_{A1.1},\ldots,Q^n_{A1.1}$ – volume (number of units) of products created and sold by the manufacturer on market, respectively: 1, …, n during a certain period;

$P^1_{mA1.1};\ldots;P^n_{mA1.1}$ – price of the manufacturer per unit of output "$A_{1.1}$", established for realization her by buyers, respectively: 1, …, n of market during a certain period (the price of the producer is not equal to the price of the buyer as it does not include extra charges of reseller and the value added tax);

$\nabla C^1_{mA1.1};\ldots;\nabla C^n_{mA1.1}$ – saving of the manufacturer at production and sale of the offer of products "$A_{1.1}$" to buyers, respectively: 1; …; n of market during a certain period;

$\nabla C^1_{SDA1.1},\ldots,\nabla C^n_{SDA1.1}$ – saving from rationalization of scientific research with of unit of offering products "$A_{1.1}$", of intended for realization, respectively on 1, …, n market during a certain period;

$\nabla C^1_{CDA1.1},\ldots,\nabla C^n_{CDA1.1}$ – saving from rationalization of the constructional elaborations with of unit of offering products "$A_{1.1}$", of intended for realization, respectively on 1,…, n market during a certain period;

$\nabla C^1_{TPA1.1},\ldots,\nabla C^n_{TPA1.1}$ – saving from rationalization of technological preparation of production with of unit of offering products

"$A_{1.1}$", of intended for realization, respectively on 1, …, n market during a certain period;

$\nabla C^1_{OPA1.1},\ldots,\nabla C^n_{OPA1.1}$ – saving from rationalization of organizational preparation of production with of unit of offering products "$A_{1.1}$", of intended for realization, respectively on 1,…, n market during a certain period;

$\nabla C^1_{PA1.1},\ldots,\nabla C^n_{PA1.1}$ – saving from rationalization and intensification of production with of unit of offering products "$A_{1.1}$", of intended for realization, respectively on 1, …, n market during a certain period;

$\nabla C^1_{SA1.1};\ldots;\nabla C^n_{SA1.1}$ – saving of costs from sale of a unit of products "$A_{1.1}$" to buyers, respectively on 1, …, n market during a certain period.

Final summary data of useful effect for producer are found by means of summation of components of this indicator over the markets and over temporary phases, namely:

$$\sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |E_{mA1.1}| = \sum_{z\in 1\ldots n}^{t\in 1\ldots 5} \left((P^1_{mA1.1}\times Q^1_{A1.1})+\ldots+(P^n_{mA1.1}\times Q^n_{A1.1})\right) = \sum_{z\in 1\ldots n}^{t\in 1\ldots 5} (E^1_{mA1.1}+\ldots+E^n_{mA1.1})$$

$$\sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |\nabla C_{mA1.1}| = \sum_{z\in 1\ldots n}^{t\in 1\ldots 5} \left(\nabla C^1_{mA1.1}+\ldots+\nabla C^n_{mA1.1}\right);\ UE_{mA1.1} = \sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |E_{mA1.1}| + \sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |\nabla C_{mA1.1}| \quad (5-7)$$

where $UE_{mA1.1}$ – useful effect of the manufacturer from creation and sale of all volume of the offer of products "$A_{1.1}$" in all markets during full life cycle;

$\sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |\nabla C_{mA1.1}|$ – cumulative savings of the manufacturer from decrease of cost of production and sale of all volume of the offer of products "$A_{1.1}$" in all markets during full life cycle;

$z\in 1\ldots n$ – the zones (markets) of positioning of product from the 1st to n, respectively;

$t\in 1\ldots 5$ – duration of life cycle includes stages of life cycle from the 1st to the 5th, respectively;

$\sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |E_{mA1.1}|$ – aggregate effect of the manufacturer from realization of all volume of offering products "$A_{1.1}$" in all markets during full life cycle.

The useful effect of the producer depends from finding of the best spatial positioning of a product over the markets. Therefore, only matrixes for determination of aggregate useful effect allow to carry out comprehensive analysis with more efficiency. It is necessary to estimate useful effect of the producer of a product on each of the markets, also a contribution of each of them into the general result. Besides, it is important to estimate potential, prospects of each product, as well as opportunities for transformation of indicators of its offer during life cycle on markets. Therefore, useful effect of the producer during full life cycle of a product is calculated on the basis of forecasts. Such calculation procedure allows to connect the data over different markets and temporary phases, as well as data from one cell with data from another cell of matrix and to optimize the parameters, taking into account their influence on each other, what allows to receive the best synergetic result. However, for calculation of aggregate useful effect from a product it is necessary to define not only useful effect of the producer, but also public effect from its consumption. Only assessment, which includes the consumer effect, will allow to define the most effective variant of configuration of a matrix.

The consumer useful effect from product is determined by degree of satisfaction of needs of buyers of the market during a certain period (of stage of consumer demand for this type of product), and it includes consumer effect and the saving of consumer on the prices and operational expenses. The consumer effect is defined by calculation of benefit of the consumer from satisfying its requirements at the expense of purchase of commodity. In this case a consumer prize means possible consumer expenses in the market of services, which the buyer reserves at purchase of commodity. Price list of the market of services (price multiplied on volume of the services similar by services volume of commodity) is the base of calculation of consumer benefit. This indicator can be calculated as for various temporary periods, so and it is predicted for full life cycle of commodity. Prices will often change during guaranteed service life of commodity, therefore price list of the market of services changes too. Thus, value of effect of consumers from purchase of commodity is the expected, predicted data, which characterize not only the current advantage, but also prospects for consumers of commodity.

The useful effect of consumers includes also the pure saving, which buyers of a certain market will be able to receive in result of fa-

vorable difference of the price and operational costs of product from analogs (or from average data him of analogs). Volumes and the prices of purchases, and also expenses on use of products can strongly differ among buyers of the different markets and during different temporary phases of demand. Therefore, at calculation of consumer useful effect from products, the segmentation of consumers, which was used at calculation of useful effect of the producer, is used. It is assumed that the buyers from one classification group of one market during one of temporary phases of demand gain consumer effect of one level from improvements of a product because have identical purchase prices and the possible savings on the price, as well the similar conditions of exploitation of product, what leads to savings on operational expenses of one level.

At the same time, in each consumer group of the local market pure saving from lower price and of decrease of operational expenses should be considered separately, because not all purchased products volume, which provides consumer effect, can participate in formation of saving, especially at the expense of different factors. At calculation of consumer useful effect from products, indicators of the consumer effect and pure saving only at the expense of that volume of products, which it provides, are considered. It can be described by means of the following formulas:

$$E^1_{c_{A1.1}} = E^1_{A_{1.1}} \times Q^1_{c_{A1.1}} \;;\ldots;\; E^n_{c_{A1.1}} = E^n_{A_{1.1}} \times Q^n_{c_{A1.1}} \quad (8,9)$$

$$\nabla C^1_{c_{A1.1}} = (\nabla P^1_{c_{A1.1}} \times Q^1_{c_{\nabla P A1.1}}) + (\nabla C^{\,1}_{oc_{A_{1.1}}} \times Q^1_{c_{\nabla Co A1.1}}) \;;\ldots;$$

$$\nabla C^n_{c_{A1.1}} = (\nabla P^n_{c_{A1.1}} \times Q^n_{c_{\nabla P A1.1}}) + \left(\nabla C^{\,n}_{oc_{A_{1.1}}} \times Q^n_{c_{\nabla Co A1.1}}\right) \quad (10,11)$$

where $\nabla C^1_{c_{A1.1}};\ldots;\nabla C^n_{c_{A1.1}}$ – pure saving of consumers, respectively: 1, ..., n of the markets on operational expenses and the price of consumption of all volume of product "$A_{1.1}$" during a certain period;

$z \in 1\ldots n$ – the zones (markets) of positioning of product from the 1st to n, respectively;

$\nabla C^{\,1}_{oc_{A_{1.1}}};\ldots;\nabla C^{\,n}_{oc_{A_{1.1}}}$ – pure saving of consumers, respectively: 1,.., n of the markets on operational expenses with of a product unit "$A_{1.1}$", which brings more saving in exploitation in comparison with analogs;

$\nabla P^1_{c_{A1.1}};\ldots;\nabla P^n_{c_{A1.1}}$ – pure saving of consumers, respectively: 1, …, n of the markets during certain period from acquisition of a product unit of "$A_{1.1}$", over lower price in comparison with analogs;

$Q^1_{c_{A1.1}};\ldots;Q^n_{c_{A1.1}}$ – volume of acquisition of a product "$A_{1.1}$" (number of units) by consumers, respectively: 1, …, n of the markets during a certain period;

$Q^1_{c_{\nabla P A1.1}};\ldots;Q^n_{c_{\nabla P A1.1}}$ – volume of a product "$A_{1.1}$" (number of units), acquired by consumers, respectively: 1, ..., n of the markets over lower price in comparison with analogs during a certain period;

$Q^1_{c_{\nabla Co A1.1}};\ldots;Q^n_{c_{\nabla Co A1.1}}$ – volume of a product "$A_{1.1}$" (number of units), acquired by consumers 1, …, n of the markets during a certain period, which brings more saving in exploitation of product in comparison with analogs;

$E^1_{A_{1.1}};\ldots;E^n_{A_{1.1}}$ – the effect, which consumers, respectively: 1, …, n of the markets receive during a certain period from acquisition of a product unit "$A_{1.1}$" in the sum of expenses in the market of services which it is possible to avoid;

$E^1_{c_{A1.1}};\ldots;E^n_{c_{A1.1}}$ – aggregate effect of consumers, respectively: 1, …, n of the markets from everything of volume of the product "$A_{1.1}$", which is acquired by them during a certain period.

Thus, the data of indicators of consumer benefit (of effect) and of pure saving can differ significantly from each other in the different markets and temporary stages of demand. Therefore, components of the consumer useful effect should be counted over each market and temporary phases of demand, what formulas reflect:

$$\sum_{z \in 1\ldots n}^{t \in 1\ldots 5} |E_{cA1.1}| = \sum_{z \in 1\ldots n}^{t \in 1..5} \left((E^1_{A_{1.1}} \times Q^1_{c_{A1.1}}) + \ldots + (E^n_{A_{1.1}} \times Q^n_{c_{A1.1}})\right) = \sum_{z \in 1\ldots n}^{t \in 1\ldots 5} \left(E^1_{c_{A1.1}} + \ldots E^n_{c_{A1.1}}\right)$$

$$\sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |\nabla C_{cA1.1}| = \sum_{z\in 1\ldots n}^{t\in 1\ldots 5} \left(\left(\nabla P^1_{c_{A1.1}} \times Q^1_{c_{\nabla P A1.1}}\right) + \left(\nabla C^{\,1}_{oc_{A_{1.1}}} \times Q^1_{c_{\nabla Co A1.1}}\right)\right) + \ldots +$$

$$+\left(\left(\nabla P^n_{c_{A1.1}} \times Q^n_{c_{\nabla P A1.1}}\right) + \left(\nabla C^{\,n}_{oc_{A_{1.1}}} \times Q^n_{c_{\nabla Co A1.1}}\right)\right) = \sum_{z\in 1\ldots n}^{t\in 1\ldots 5} \left(\nabla C^1_{c_{A1.1}} + \ldots \nabla C^n_{c_{A1.1}}\right);$$

$$UE_{cA1.1} = \sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |E_{cA1.1}| + \sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |\nabla C_{cA1.1}| \quad (12-14)$$

where $\sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |E_{cA1.1}|$ – aggregate consumer effect from acquisition by buyers of all volume of products «$A_{1.1}$" in all markets during full life cycle;

$\sum_{z\in 1\ldots n}^{t\in 1\ldots 5} |\nabla C_{cA1.1}|$ – cumulative saving of consumers on the price and operational expenses from all volume of the acquired products "$A_{1.1}$" in all markets during full life cycle;

$z \in 1\ldots n$ – the zones (markets) of positioning of product from the 1st to n, respectively;

$t \in 1\ldots 5$ – duration of life cycle includes stages of life cycle from the 1st to the 5th, respectively;

$UE_{cA1.1}$ – consumer useful effect from consumption of a type of product "$A_{1.1}$" by all buyers on all markets during full life cycle.

Thus, methodology of calculation is recommended for providing not over separate, but for coordinated planning of data of effect and saving according of producers and consumers over each product on various markets and temporary stages of its life cycle for obtaining the best cumulative result. Calculation of an indicator of consumer useful effect on the basis of assessment of expected data for full life cycle of a product is very important, as it characterizes prospects of implemented updating of the offer of products from the point of view of satisfaction with them of consumer demand not only in current period, but also in the long term. The aggregate useful effect from all offer of a certain type of a product "$A_{1.1}$" is gained by summation of the useful effect of the producer and of the useful effect of all consumers of this product, what characterizes advantage of this product not only for the producer and consumers, but also for satisfaction of public need for it.

$$UE_{A1.1} = UE_{mA1.1} + UE_{cA1.1} \quad (15).$$

where $UE_{A1.1}$ – aggregate useful effect from products "$A_{1.1}$";

$UE_{mA1.1}$ – useful effect of the manufacturer from products "$A_{1.1}$";

$UE_{cA1.1}$ – useful effect of consumers of products "$A_{1.1}$".

Conclusions

Thus, the aggregate useful effect is formed of a plurality of useful effects from product on different markets and various stages of positioning of a product in them, because not only there is a dependence between volume and price of offering product "$A_{1.1}$" on one market, but and they influence on data of these indicators in other markets. Planning in a matrix of all indicators of the offer of products in the different markets and during various temporary periods will allow to consider influence of data in different cells on each other and to find the best option of a plurality of data of configuration of a matrix that will allow to define optimum useful effect of the coordinated plurality of data of the offer of any product. The offered methodological approach to determination of optimum aggregate useful effect differs from its calculation in form of the simple sum of various effects of a data set of the offer of a product which are not optimized among themselves comprehensively. Forecasting of aggregate useful effect has to be implemented by means of planning the optimal coordinated plurality of data of the offer of a product. Assessment of the actual useful effect of a product will allow to establish bottlenecks and to transform data of the offer according to the current demand.

Thus, the matrix technology of optimization of a plurality of data and determination of optimum aggregate useful effect of a product provides finding of the optimum ratio of useful effect of his producer and consumers. It opens the new horizons for optimization of interests of the producer and consumers in compliance with each other. Relative coefficients of efficiency of a product and indicators of target function and aggregate useful effect from a product have to be used in united system, as each of them from the different parties promotes optimization of parameters of a product, but only them cumulative use can provide the

best synergetic result. The offered system of indicators is a necessary important part of new technology of optimization of a variable plurality of data on the basis of use of matrixes of multi-purpose optimization. This system contains mechanisms for stimulation of growth of competitiveness of products, achievement of balance of supply and demand in goals of the best satisfaction of public needs.

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