

Scientific articles



On the Technical Inventions in the Economy

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Abstract. Urgency of technical inventions in economy grows every year. This article explains the essence of an invention, its novelty, practical significance. A system of managing multiple variable data on consumer product characteristics consists in modeling a list of system sequences that consists of 6 stages. Every stage includes its own stages, operations, and tools of data management, but they are connected and united into an integrated system with a common scheme and have their contribution in the achieved technical result. A technical result of an invention consists in increasing effectiveness, reliability, and accuracy outcome data for situational-strategic of the product program. Coordination of strategic and current programs in order to achieve situational balance between supply and demand will lead to an increase not only economic but also social efficiency.

Keywords: invention, model, tool, situational-strategic program, products, a synergistic result, the list of sequences of system.

Nowadays only research on a verge of several scientific directions can create a real progress in science. Therefore, from my point of view, technical inventions in economy are more urgent today than they have ever been. It is critically important for creating economy of future.

So far, the view prevailed that the technical solutions and the results are not possible in the economy, and only economic effect is real. The use of models for management synthesis, generation and conversion of the plurality of variable data of

the product offers opens wide prospects for technical inventions in the economy. A special urgency in this case obtains solution to technical problem of managing a plurality of variable of the product data as a result of the interconnected synthesis, which generates the best possible synergistic result. Technical solutions in economy have significant distinguishing features: first of all, inventions in economy always are dealing with economic processes taking place on the basis of economic laws and economic logic, and therefore, one should consider not only laws of technics, but also economy; secondly, any invention in the economy depends on the subjective factor, because any technical solution always relate to the function of the economic system, which includes not only the object but also the subject; thirdly, any technical decision within economy is always studied within a system of temporary and spatial coordinates that are mutually related, since all the processes in the market economy are integrated in space and time; thirdly, any technical decision within economy is always studied within a system of temporary and spatial coordinates that are mutually related, as all processes happen within an I integrated space and time in market economy; fourthly, any invention in the economy reaches not only the technical result, but also economic effect, since increasing the technical performance and accuracy of the process is necessary in order to provide greater economic benefit.

It is important to distinguish methods and rules of economic activity from the tools to manage the data. From the first sight it might seem that methods that define methodology of any process and tools of this process are closely related and can be hardly separated. In reality they are easy to distinguish from each other. Methods and rules of economic activity are not material substance, whilst tools have their materialized essence. For example, to manage an economic system I recommend use methods of the national-economic, systemic, comprehensive, commercial, dynamic approach. Methods of price-formation, prediction, economic-mathematical analysis, economic stimulation, etc. are widely used in economic practice.

What is the instrument? The tool has a material substance; it is a material object, a mechanism, a machine. For example, an algorithm of comparing and evaluating data, matrix of data synthesis and transformation, machine for situational correction of data, materialized in process of implementing a certain invention. Thus, the tools are material objects, with help of which control the output data of the product offerings

In process of developing a claim for invention: "System controlling a plurality of variable data of consumer indexes of products in order to optimize them considering temporary and spatial parameters», innovation are designed in two aspects. On the one hand, process was modeled and list of system sequences was developed, on the other hand, special tools were created at each stage of the system controlling a plurality of variable data of consumer indexes of products. The invention consists in the management of the officially registered data, which is a material object, with the help of tools materialized impact on the data in order to enhance the beneficial effects of the product, which is also a material object. Thus, the invention is absolutely material substance. This invention solves the technical problem of finding the best synergetic result in the process of managing a plurality of variable data due to increasing number of possible solution variants as well as by increasing the speed, accuracy, efficiency, economy of choosing the optimal solution. The invention has a scientific novelty, since the first time the author has described the economic process in the form of a digital model.

During the modeling process of data management each element was presented as a multiplicity of related system values. It is appropriate to recall definition of a system. If an object consists of totality of mutually-related elements, and sum of their characteristics does not equal to sum Characteristics of the object, we are dealing with a system. As a result, a list of sequences was generated, and it includes 6 stages of management process a plurality of variable data, each of them was described by a scheme and included its own interrelated stages, each of them consisted of a list of sequential operations.

My invention provides unity, as characterized by the final scheme, linking all stages, sub-stages and operations into an integrated system and is characterized by such a list of the operations sequence, in which each operation is a necessary step for a subsequent operation. Technical result, received after each stage, is logically connected to carrying out operations and receiving technical result of the next stage. The invention includes informational block that generates the required database and system of managing it (stages 1 and 2); bloc of analysis and forecast dynamic series of demand data, which serve as a basis for forecast data of the product offerings (stage 3); block of strategy that generates perspective

and current product strategy (stage 4); block of forming the products programs that generates multiplicity of output data within strategic development program (stage 5); block of transformation, an situational data correction, that generates output data of current programs, but within limits defined by strategic development program (stage 6).

At each stage, generated special tools for data management. A database is a tool of storing and systematizing data. Object-relational model is a tool to establish relationships between different databases. Graphs of dynamic prediction are tools of defining supporting data of demand for a product during its life cycle. Graphical informational models are tools of forming a block of strategies. The constructed algorithms are tools of comparing, evaluating data, and selecting optimal variants of data correction. Graphs of multi-dimensional modeling are tools of finding solution variants considering optimization of several parameters. Matrices are tools for optimization, balancing, planning and maneuver a plurality of variable data, as well as the machines of their situational adjustments in order to find the best synergistic effect. It is recommended constitute different variants of the matrix not only in terms of price, quality, volume goods positioning, but also in terms of time and spatial parameters for further selection of an optimal variant. The matrices allow us to establish a balance on many parameters between supply and demand is largely due to synchronization of time cycles and to maneuvering on the market of the segments of the product positioning.

Thus, on the one hand, each tool was created and materialized at the recommended system generating data, and on the other hand, each of them on his stage of the process is a tool effects on the data in order to generate a plurality of output data of the final document – situational-strategic product program. All of the listed tools of systematizing, predicting, planning, synthesizing, and transforming data are founded on the use of IBM for information processing that increases efficiency, speed of data procession, and allows developing and evaluating a greater number of solution combinations.

Technical result of an invention consist in such basically new content and sequence list of the modeled system and materialized tool of data management, which allows to find the best synergistic result, achieve greater than that of all known analogues of accuracy, reliability of the outcome data of strategic and situational (current) product programs, and also to provide greater speed and effectiveness of program documents formation. With the use of matrices that are reflected on the interactive display with replaceable panels will be possible to correct data of the current program in real time but within limits, defined by strategic development program. The invention has great practical significance. An invention can be in demand by various sectors of national economy, but mostly by industrial enterprises.

The invention opens up broad horizons for the formulation and solution of technical tasks in the economy. This will increase the return on economic processes, the useful effect of the product, and lead to growth in social effect due to achieving balance between demand and supply in time and space that, in its turn, will provide for increase in efficiency of specific enterprises and the national economy as a whole.