

Far East to create the green food processing base; Heilongjiang Province should use the opportunity of the Russian Far East Development Strategy to launch Sino-Russian Free trade zone negotiations as soon as possible. Therefore, in the economic development under the new situation, Heilongjiang Province should give full play to its strategic role in Sino-Russian trade, seize the once-in-a-lifetime development opportunities, and take advantage of the Belt and Road to break through Bottlenecks in trade development of Heilongjiang Province to Russia in recent years to achieve a mutually beneficial and win-win situation.

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THE MANAGEMENT SYSTEM OF INFORMATION PROCURING OF THE INNOVATION ACTIVITY AT THE ENTERPRISE

The analysis of information support of innovative activity of enterprises of the sphere of production and modern information technologies made it possible to determine that for enterprises it is necessary to continue work on the creation of software tools that in one

way or another contribute to solving the problem of management of innovation processes (IP) taking into account the risks. On the basis of the analysis of methodical approaches to the application of technologies for the development of the information control system (ICS) of the IP, a IMS for the control of innovation processes of enterprise (CIPE) was created [1]. Its aims are to implement IP-management at enterprises and is based on a comprehensive study of the relevant dynamic processes during the lifetime of innovation and processes of management decision-making, as well as on the development and implementation corresponding economic and mathematical models, methods and algorithms for solving optimization problems in IP-management using IT tools.

The work of many scientists is devoted to the study of theoretical and methodological aspects of automation of management, formation of economic, informational-analytical systems and information support systems in business planning. They describe the automated systems of information processing and management, processes, models and stages of the life cycle of software systems of information systems in the subject industry economy, approaches to software design. However, many applied issues related to the development and implementation of SIZs control IP enterprises, the economic efficiency of information provision, with the specifics of the introduction of IP in enterprises, still require a constructive solution. They are acquiring special acuity in the conditions of increasing influence of achievements of scientific and technological progress and innovative decisions on the competitiveness of enterprises and on the role of information provision in the control of IP of processing enterprises.

For this purpose, an economic-mathematical model of the problem of CIPE in the presence of risks has been developed [1]. A discrete dynamic system consisting of an object whose dynamics is described by a vector linear discrete recurrence relation is considered and is subject to the influence of controlled parameters (controls) and an uncontrolled parameter (the vector of risks or interference). The proposed method makes it possible to develop effective numerical procedures, which made it possible to implement computer simulation of the dynamics of the problem in the form of IMS_CIPE, to form adaptive minimax control of the CIPE and to obtain the optimal guaranteed result [2].

To solve the problem of optimizing IP management, we use a mathematical device to solve the IP management problem in the presence of risks described in the previous sections. The tasks of operational

control of the parameters of the innovation process are solved by dividing the set of all states of the technological cycle in the aggregate, which characterize the nominal state of the investigated object, which require interference in this process for its optimization. In the process of performing the task of transferring technological data to the production and dispatching service of an enterprise, it is necessary to pre-improve the system of indicators that characterize the corresponding technological process for compatibility with other components and modules of the designed information system

Taking into account all the drawbacks of the existing approaches to creating Enterprise Control Software, a system of information provision has been developed for solving the management problem of the IP of the processing enterprise of the AIC. A web resource is used to work with the system as an interface. The resource should have a modern, understandable interface, which a user could understand with the minimum knowledge and skills on the computer. The result should be displayed in the correct form, and in case of error there should be a corresponding message [3]

The system should combine a plurality of complex algorithms, calculations, while possessing high flexibility and extensibility with the ability to implement a high level of protection. An important aspect of developing a web application is to ensure an adequate level of security with the ability to configure data transfer through encrypted communication channels using SSL. No less important is the ability to work with the database. In order to increase the flexibility of the SIZ it is necessary that the interconnection with the database could be implemented as a separate module with the possibility of correcting it without affecting the main algorithm [4-6].

To implement the advanced requirements, it is advisable to use the object-oriented programming language Java, which is very popular today, primarily due to its flexibility. To distribute the entire program to individual blocks that can be easily corrected or completely replaced, you can use Spring MVC web technology, the main concept of which is the division of the entire program structure into three interconnected blocks - model, controller, view.

With the purpose of practical realization of the task of CIPE the methodical approach to the design and development of the modular software complex "The system of information support for the CIPE"

is substantiated. The software implementation of the IMS is performed in the Java environment using Spring MVC web technology [5]. The developed system is a web resource, which includes a set of object-oriented software modules, and provides transactions with a database. The system integrates a plurality of algorithms, calculations, characterized by flexibility and extensibility with the ability to implement a high level of protection.

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ОЦІНКА МОЖЛИВОСТЕЙ НАСЕЛЕННЯ КОРИСТУВАТИСЯ ПОСЛУГАМИ ІНТЕРНЕТУ: ПРОБЛЕМА ЦИФРОВОГО РОЗРИВУ

В Концепції розвитку цифрової економіки та суспільства України задекларовано: «Головна мета розвитку цифрових інфраструктур полягає в тому, щоб усі громадяни України без обмежень та труднощів технічного, організаційного та фінансового характеру (зокрема, соціально незахищені верстви населення) могли скористатися цифровими можливостями, незалежно від свого місцезнаходження чи проживання та не перебували в сегменті “цифрового