# USE OF INTELLIGENT INFORMATION SYSTEMS IN ENTERPRISE MANAGEMENT AND DECISION-MAKING

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**ANNOTATSIYA**

*This article discusses the use of modern information systems in the management of corporate enterprises. In particular, the basics of using information systems in the data mining of an enterprise based on artificial intelligence in the process of digitalization of the econom yare set out on the example of the program1-C Enterprise 8.3. Currently, due to the fact that enterprises have a very large flow of information, the processof managing such corporate enterprises and making decisionsin them remains a ver y complex process.In the face of increasing uncertainty, business increasingly requires new, high-quality methods and tools that allow automatic data search based on previously incomprehensible algorithms and rules and identify unknown parameters. This will become the basis for the creation and implementation of new intelligent information systems based on artificial intelligence for enterp rises. In this context,the article examinesthe role and importance of information systems based on artificial intelligence in deterministic, unstructured and weakly structured situations in the process of management and decision-making in corporate enterprises.*

**Kalitso'zlar:***Artificial intelligence, corporateenterprise, intellectual analysis,information systems, st ructured and unstructured data, integration.*

## INTRODUCTION

Today, the application of artificial intelligence to all areas of the economy remains a requirement of the time. Because, at present, the rapid development of modern information and communication technologies is creating the necessary

conditions for digitalization of the economy. Undoubtedly, one of the main ways

of digitalization of the economy, if possible, is the use of artificial intelligence and its application in the management of the economy. We know that in the conditions of the market economy, any enterprise has a very large flow of information of various types, forms and formats. It is difficult for any specialist to process this information, process it and make the right decision based on it. Therefore, the demand for intelligent information systems that analyze the employees of enterprises and organizations with the use of data processing tools that ensure the adoption of management decisions, which is one of the main trends in the market of accounting and management systems, is constantly increasing. However, industry professionals are not satisfied with the traditional tools currently in use, which allow for the creation of various reports, tables and charts with predefined indicators and manual analysis. Enterprises are increasingly demanding qualitatively new methods and tools that enable automatic search of data and determination of unknown parameters without pre-defined algorithms and rules in conditions of increasing uncertainty. This can be basis for the creation and implementation of new intelligent information systems based on artificial intelligence for enterprises.

The basis of intelligent information systems is a knowledge base according to certain rules and procedures. Intelligent systems based on artificial intelligence are systems focused on processing unstructured or less structured information and making decisions based on it, unlike deterministic systems. Therefore, when companies analyze supply and demand based on market conditions, they use artificial intelligence-based information systems to determine what types of products to deliver to customers, or what types of services to provide, market segments, and other indicators. It acquires meaning and importance separately. As a result, it allows to increase business efficiency based on making the right decision in the management of business processes.

## LITERATURE ANALYSIS AND METHOD

Scientific researches devoted to the intellectual analysis of the data of corporate enterprises were studied. Including methodological aspects of development of information systems for various sectors and sectors of the economy, intellectual analysis and decision-making mechanisms Chernishova G.Yu. [2], Matveykin V.G., Dmitrievsky B.S., Lyapin N.R. [4], Maslova N.A. [5], and it is described in detail in the researches of other scientists. Among the scientists of our Republic Gulomov S.S., Begalov B.A., Zhukovskaya I.E. [6], Kuchkarov T.S. [7] and others' scientific research has highlighted the theoretical and methodological aspects of effective use of information systems in various sectors and areas of the economy and the formation of management strategies based on them.

Currently, several types of information systems with different functions, structures, methods and metadata are used in the management of corporate enterprises. Among them, we can include CRM, ERP, MRP, SAP, SMART AP, 1-S Enterprise, 1-UZ and other information systems. Each of the above systems has its own merits and demerits. In this article, we will consider the role and importance of the 1-S Enterprise system in the management of corporate enterprises and the intellectual analysis of their data.

**DISCUSSION AND RESULTS**

Since its creation, the enterprise program has been constantly improved, taking into account the demands and wishes of users, as well as changes in laws and regulatory documents. Especially in its 8.3 version, many functional issues have been added, including intelligent data analysis issues. As mentioned above, the function of intelligent data analysis allows users (economists, analysts, etc.) to search and analyze the information collected in the database under uncertain conditions, and to perform the following operations:

- to search and determine some kind of connection, i.e. relationship, between the initial primary information in the database;

- control parameters of the performed analysis both programmatically and interactively;
- software access to the analysis result;
- expressing the result of the analysis in the form of an electronic table, diagram or graph;
- automatically identify further processes or new objects based on certain characteristics and create predictive models as a result.

For example, the analysis of the demand for what kind of products allows analysis in the section of the nomenclature group of goods. On the other hand, integrated with the CRM system, it provides an opportunity to analyze certain indicators (gender, age, interest, social status, etc.) of customers who have purchased products and make decisions on the future course of business processes based on the analysis.

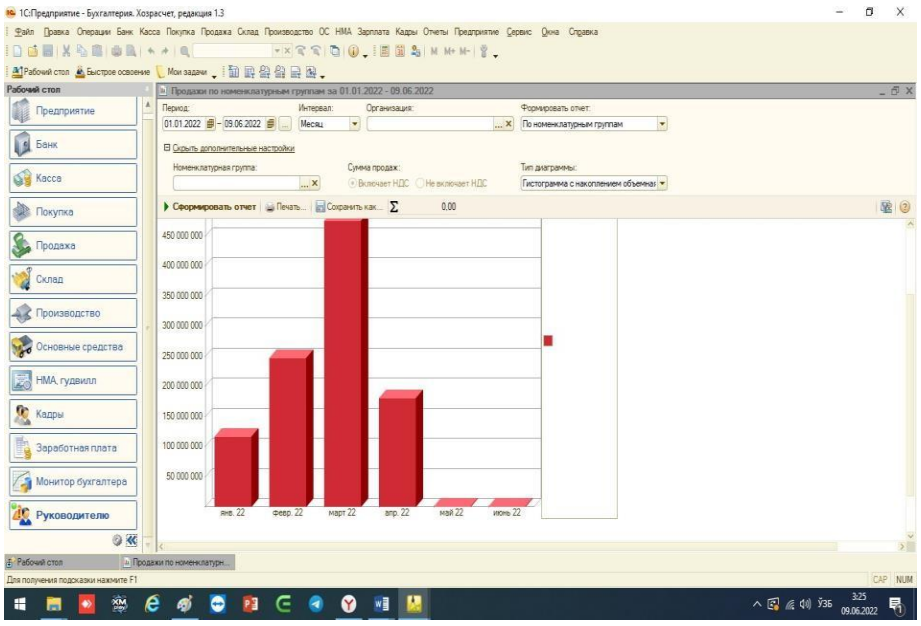


*Figure 1. Analysis of the volume of sales in the section of goods.*

In addition, in the cross-section of the region, to determine the market segments according to the demand for types of goods, according to the delivery of goods, according to the forms and mechanisms of payment for goods, or according to the indicator of purchasing power and other parameters gives the

opportunity (Figure 1).

It provides an opportunity to analyze profit or loss for a certain period of time, and based on it, develop a forecast model for the next period of the enterprise. In this case, the factors leading to profit or loss are dynamically analyzed on the basis of certain indicators, and then a decision is made on the perspective of the enterprise (Figure 2).

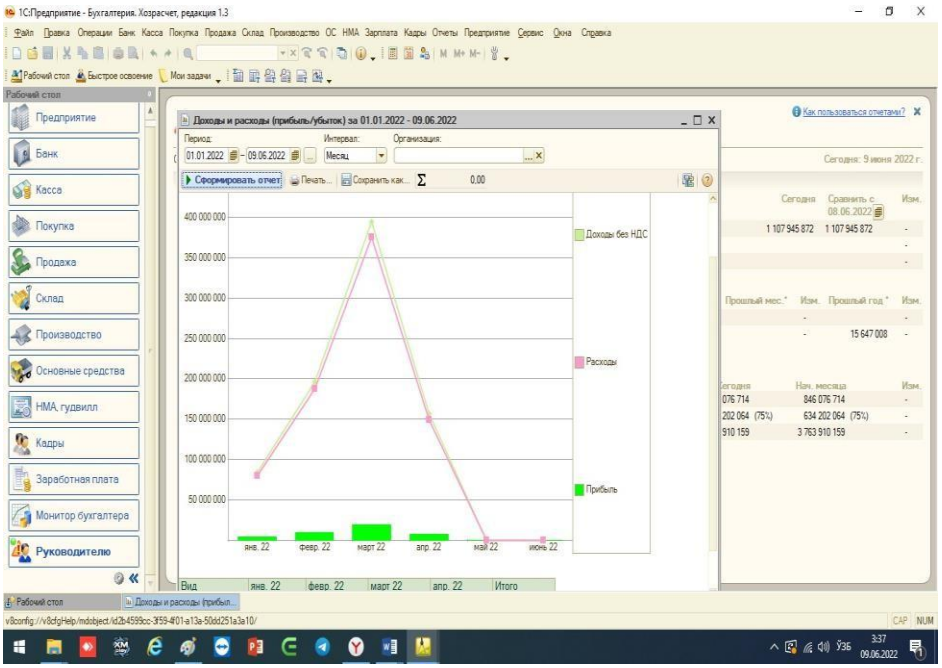


*Figure 2. Benefit and loss analysis.*

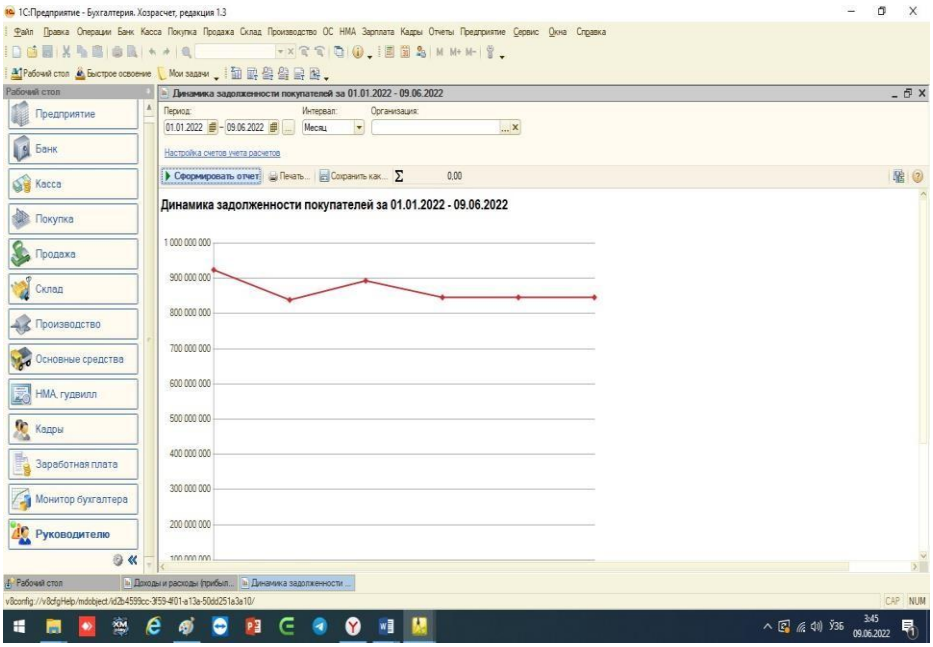

*Figure 3. Analysis of the dynamics of customer indebtedness.*

The program represents relations with buyers in a fully automated way. It provides an intellectual analysis of goods purchased by customers, contracts, invoices, paid funds and other indicators. Based on the analysis of the debt dynamics of customers, it provides an opportunity to make a decision on how to work with these enterprises and establish relations (Figure 3).

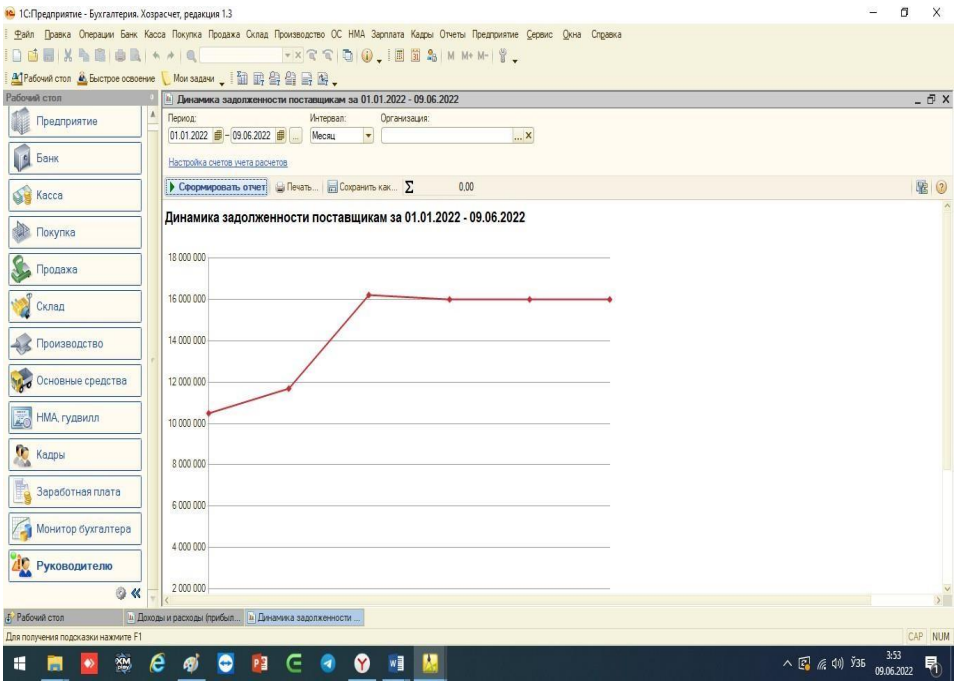


*Figure 4. Dynamics of indebtedness of goods suppliers.*

With suppliers of goods, as well as with buyers, there will be an opportunity to analyze all indicators (Figure 4).

In addition to the above, it is possible to analyze the income and expenditure of funds in terms of income and expenses for certain periods, and on the basis of this, it becomes possible to create cost optimization models. Also, it is possible to analyze the employees working in the enterprise in terms of personnel, and form the dynamics of their dissatisfaction.

## CONCLUSION

In conclusion, this article covered some aspects of the use of information systems, including "1-S Enterprise" version 8.3, in the management of corporate

enterprises for intellectual analysis of data and decision-making based on it. The possibilities of this system are very wide, it can be used on a large scale in managing corporate enterprises and improving business efficiency, and it can be applied in business management. In the following articles, the scientific research carried out by the author is expressed on the example of specific enterprises and the application of intellectual information systems based on specific data.

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