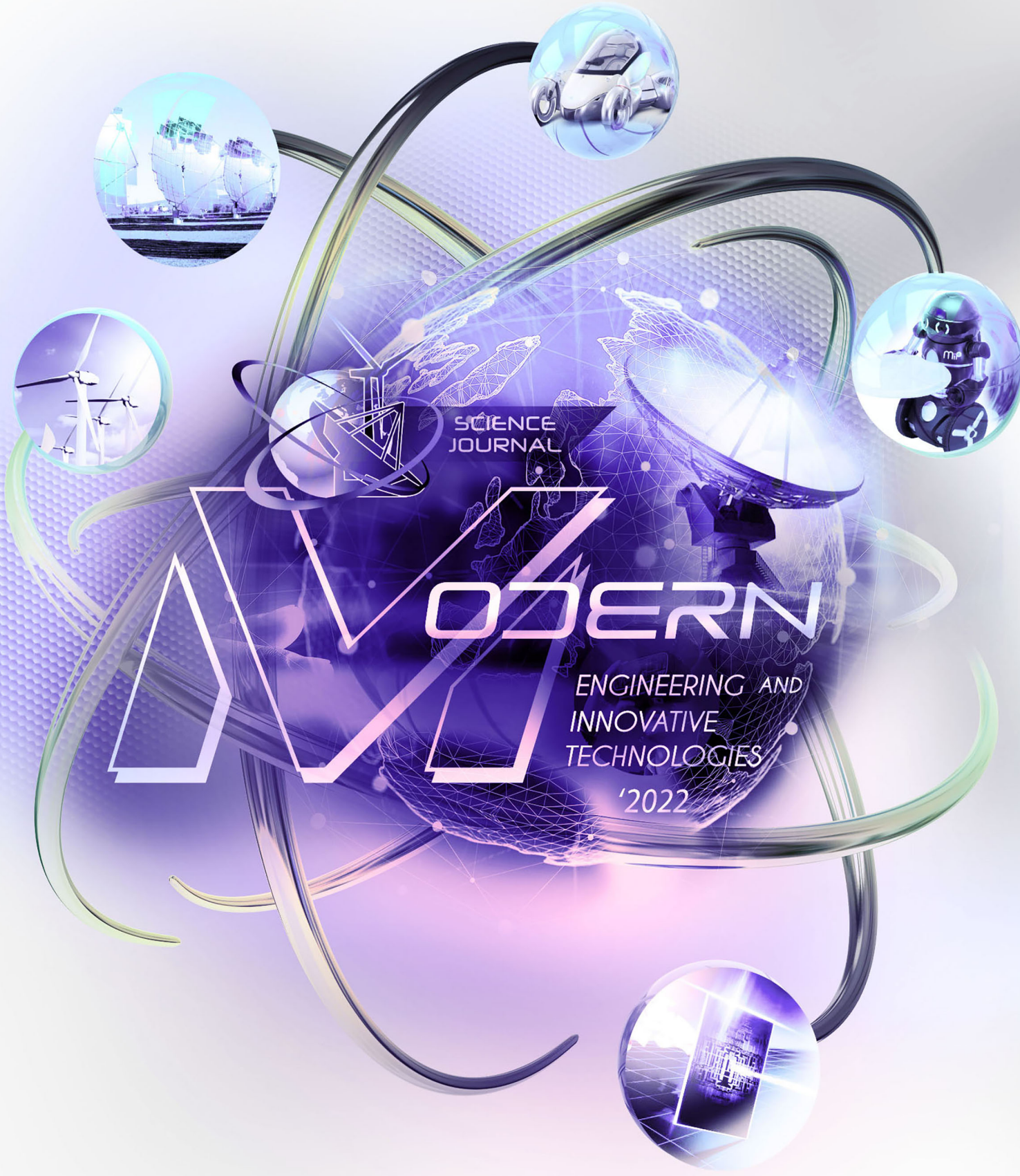

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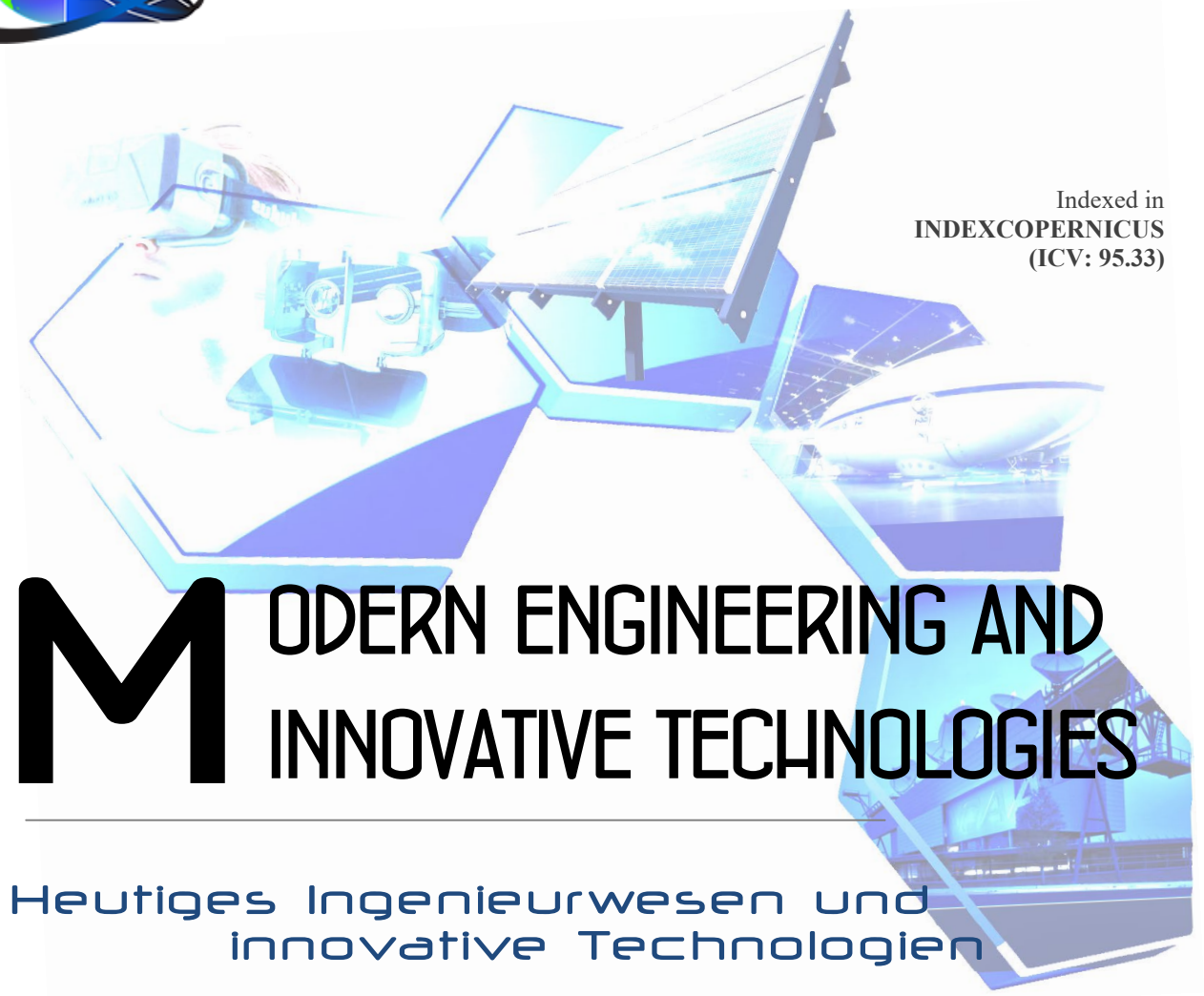

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INNOVATIVE INFORMATION MANAGEMENT TECHNOLOGIES AT SMALL BUSINESS ENTERPRISES

ІННОВАЦІЙНІ ІНФОРМАЦІЙНІ ТЕХНОЛОГІЇ УПРАВЛІННЯ НА ПІДПРИЄМСТВАХ МАЛОГО БІЗНЕСУ

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Abstract. *The current state of application of innovative information technologies in small businesses is considered in the article. The development of the interpretation of the term "innovation" has been studied. Factors influencing the development of information systems and technologies were grouped. Types of information systems and technologies have been studied. The problems facing domestic small businesses in the introduction of innovative information technologies have been identified. The analysis of software for management of small business was carried out. Software selection criteria were defined.*

Keywords: *innovation, information, small business, management, information system, information technology*

Introduction.

In the context of globalization, increasing the competitiveness of domestic small businesses is associated with the need to expand innovation as a factor in sustainable development. The effectiveness of innovation is due to the quality of information management. Information support includes a set of primary and consolidated data, the organization of storage of accumulated information, methods of its presentation and methods of transformation, the rules of organization of the data bank, methods of coding and retrieval of information. Today, the fact of formation and rapid development of the global information society is indisputable. The modern world is at a new stage of development, which is based on digital information technology.

Small-sized businesses, which are as dependent on information technology as large companies and corporations, are becoming more common in today's information economy. In modern economic conditions, an important factor in improving the efficiency of economic activity of small enterprises is to increase the level of their management. Improving forms of management in small enterprises is possible through the use of innovative information technologies that help to most effectively analyze, forecast and implement management decisions.

Well-known economists such as Antonyuk L., Baryutin L., Glukhova S., Pavlenko I., Savchuk V., Chorna M., and others interpreted the term “innovation”. The works of S. Golov, S. Ivakhnenkov, A. Kuzminsky, V. Larikov, E. Mnykh, V. Paliy, S. Ramazanov, A. Romanov, J. Sokolov, and others are devoted to the

development of economic information systems. Fundamental studies of the functioning of small businesses in Ukraine are reflected in the works of M. Butko, Z. Varnaliy, N. Galan, Z. Gerasimchuk, T. Gogol, S. Dryga, N. Krasnokutskaya, L. Chernyuk, M. Chumachenko. At the same time, the need and effectiveness of the introduction of innovative information technologies in the management of small businesses is still insufficiently studied.

The main text.

The concept of innovation, formulated by the famous Austrian economist Josef Schumpeter, which is based on the idea of "new combinations" is considered classic. It is important that among the combinations that generally form the structure of the innovation process, he singled out:

- release of a new product or a product of new quality;
- introduction of a new, still unknown to a particular industry method of production;
- penetration of a new market (known or unknown);
- obtaining new sources of raw materials;
- organizational restructuring, in particular the creation of a monopoly or its liquidation.

In the subsequent works of J. Schumpeter, the term "new combination" was replaced by the term "innovation", which became a scientific category [7].

The conclusion of V. Rassikhina, who as a result of studying the stages of the genesis of the interpretation of the category "innovation", determined that at the present stage the basis of innovation is the final commercialized result of innovation, embodied in various forms and spheres of human life and society, deserves attention [6].

In our opinion, the specifics of innovation activities of different economic entities are due to their organizational characteristics and the purpose of such activities.

Features of the introduction of information technology are determined by the needs of the management system of small businesses and users, as well as the availability of technical means. However, in any management information system, the tasks of assessing the situation, transforming the description of the situation and making decisions must be solved. There are the following factors that affect the development of information systems and technologies:

1) change in the external environment and globalization of markets;
2) lack of a stable environment;
3) change of organizational activity;
4) limiting the scale of the organization of management technology;
5) lack of quality information and professional knowledge [3].

According to the International Federation of Information Processing, different countries are at different stages of development of the use of information technology: automation, informatization or communication. The most modern stage involves the use of electronic networks, which allows for interactive user collaboration [4].

Information systems such as control, design, research, diagnostic, modeling, decision-making systems, are allocated depending on the functional purpose.

Depending on the field of use, there are administrative, economic, industrial, medical, educational, environmental, forensic, military information systems.

In turn, information technology in enterprises is divided into:

1) office automation technologies;
2) information technology data processing;
3) information technology management;
4) information technology to support management decisions at various levels of government;
5) information technology of expert systems [1].

The current trends in the development of information systems and technologies are:

1) increase the speed of processing primary documents by transferring the flow of documents from paper to electronic;
2) transition from work with a separate primary document to group processing of documents;
3) integration of disparate systems, devices, technologies of registration and processing of accounting information. Integration of auxiliary systems in one accounting program;
4) active use of contactless identification technologies in the accounting process;
5) use of cloud computing in the accounting process;
6) maintaining tax accounting on the servers of the State Tax Service;
7) electronic tax administration [3].

However, there are a number of problems facing domestic small businesses in the introduction of innovative information technologies. These include:

- additional costs associated with the purchase of software;
- training of staff to work with software;
- low level of scaling of the proposed solutions for business development;
- checking the level of satisfaction of technical support for new software with current legislation of Ukraine;
- convenience of the interface;
- possibility of additions, expansion of functionality;
- the need for additional software required for the operation of the accounting system;
- expanding the range of users with the ability to purchase keys for a specific function module or the entire program as a whole.

Analysis of domestic software for small business management allowed to combine existing software products into three groups:

1) traditional programs that contain full functionality for accounting automation. All products are supplied by the supplier as stationary solutions according to the PS model. These programs are well localized for certain activities and areas of business. Local configurations, such as trade, agricultural production, and the budget, are developing quite well.

2) new programs that appeared in early 2017 and have some advantages, namely a clear interface and the ability to work on any operating system of a modern device. The advantage of this software is manufacturability and mobility, excellent ability to integrate with related devices and systems.

3) service programs for small businesses and individual entrepreneurs. The main technology of their distribution is the SaaS model. They are designed to keep simple records for the needs of small businesses. Their main advantages are simplicity, mobility, timely updates and support. Such programs offer private entrepreneurs assistance in self-employment, accounting and reporting without the involvement of a professional accountant.

When choosing an information system for small business owners, it is necessary to take into account that information technology in such enterprises must meet the following characteristics:

- minimum cost of equipment and software;
- maximum ease of use;
- flexibility and extensibility;
- data protection and security;
- compatibility of new technology with existing hardware and software [5].

However, in the conditions of negative state of the national economy, political, social and legislative transformations, on the way of active and wide use of modern information systems that will automate management in small enterprises, a number of problematic issues exist. The main ones are:

1. The risks associated with the use of automated information systems for processing input information can be significant (incorrect data processing; loss of information, etc.).
2. The development of accounting software is a very time-consuming process that requires significant financial costs.
3. Unsatisfactory level of computer literacy of users and the need to incur additional costs for the training of accounting staff.
4. Different branch specialization of domestic enterprises, which does not allow to create a universal, uniform for all computer program.
5. Ensuring the appropriate level of security of the automated information system of accounting and reporting of a particular enterprise.
6. The problem of information resources management: adaptation of accounting and reporting to new opportunities, training of employees to work with information systems, compliance with the quality of software.
7. Rising prices for accounting services, the availability of pirated copies and unlicensed computer accounting software.
8. Lack of state support for domestic enterprises in the direction of computerization and accounting software, etc [2].

Conclusions.

The specifics of each small business should be taken into account when choosing software. Specific goals and objectives that need to be addressed through computer information technology need to be defined. Only then rational planning of effective use of information technologies in small business becomes possible. Further development of "cloud" technologies, which allows to develop the software market not as a product market, but as a service market is today a trend in the market of information support in small businesses. Today, services to enable the use of software in the form of service or rental already exist. The work is done by connecting to

special services on remote servers. The weakness of this technology is the problem of protection and preservation of credentials. Any technical problems with the service provider lead to a shutdown in the enterprise. However, the most important criterion when choosing innovative information systems and technologies for small businesses is the ratio of its price and the ability to timely and fully meet the requirements of the legislation on accounting and reporting.

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Abstract. *За умов світових глобалізаційних процесів підвищення конкурентоздатності вітчизняних підприємств малого бізнесу пов'язане з необхідністю розширення інноваційної діяльності як фактору стабільного розвитку. Відповідно дослідження необхідності та ефективності впровадження інноваційних інформаційних технологій в умовах господарювання підприємств малого бізнесу набувають сьогодні особливої актуальності.*

У статті досліджено розвиток трактування терміну «інновації». Згруповані фактори, що впливають на розвиток інформаційних систем та технологій, а також види інформаційних систем і технологій. Визначено проблеми, які постають перед вітчизняним підприємствами малого бізнесу при запровадженні інноваційних інформаційних технолдогій. Проведено аналіз програмного забезпечення для управління малого бізнесу українського виробництва та визначено критерії його вибору. Виокремлено характеристики інформаційної ситеми, які необхідно враховувати на підприємствах малого бізнесу. З'ясовано тенденції розвитку ринку інформаційного забезпечення в сфері малого бізнесу.

Доведено, що специфіка інноваційної діяльності різних суб'єктів господарювання обумовлена їх організаційними особливостями та цільовим спрямуванням діяльності. Для кожного підприємства під час вибору програмного забезпечення необхідно враховувати специфіку його діяльності та визначити конкретні цілі та завдання, вирішення яких необхідно здійснювати за допомогою комп'ютерних інформаційних технологій. Лише тоді можливе раціональне планування ефективного використання інформаційних технологій у малому бізнесі.

Keywords: *інновацій, інформація, малий бізнес, управління, інформаційна система, інформаційна технологія*

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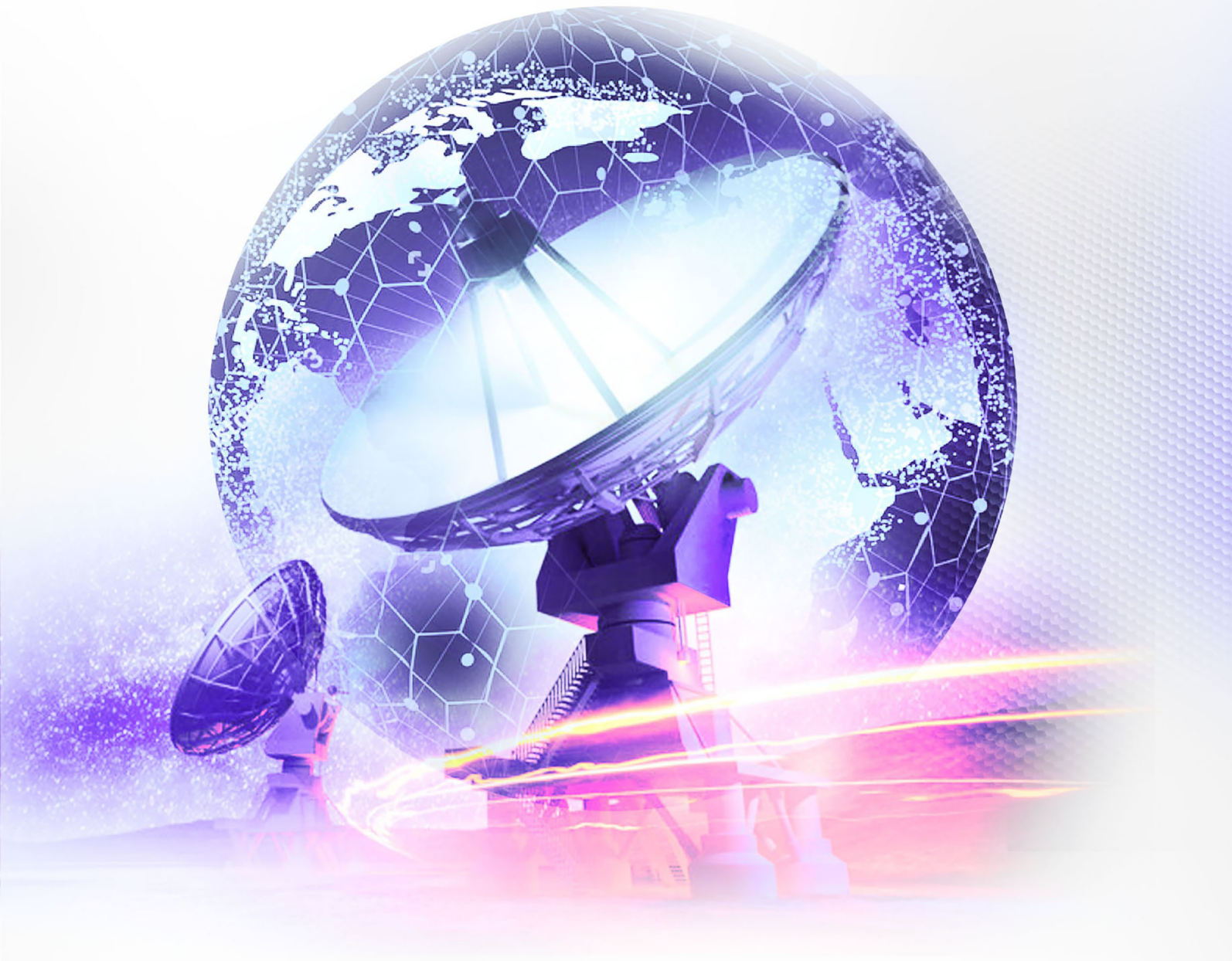

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