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ANALYSIS OF THE REAL SECTOR OF THE ECONOMY OF THE REPUBLIC OF KAZAKHSTAN AND ITS DEVELOPMENT PROSPECTS

Abstract. The real sector of the economy is the industrial production sector of the Republic, which includes a large number of enterprises of various sectors of economic development of the Republic of Kazakhstan. Analyze the real sector of the economy of the Republic of Kazakhstan and consider the prospects for its development. The article presents an attempt to describe and classify these enterprises, to determine their role in the development of the economy. In this article the authors analyzes the features of the development of the real sector of the economy of the Republic of Kazakhstan in the long term-from 1996 to 2017. The article also provides an analysis of the perspective directions of development of the real sector of the economy, as well as the main content and limitations of each of them. When conducting foresight studies, a combination of 10–15 forecasting methods is used. For visual systematization of Foresight methods by a specialist of the University of Manchester R. Popper, a scheme was developed, called the "Foresight-rhombus".

Key words: Economy, real sector, GDP, development, budget, economic growth.

Theoretical and methodological approaches. The real economy is the main source of economic growth in the Republic of Kazakhstan. The possibility of general socio-economic progress largely depends on how rationally organized the real sector of the economy is, how effectively its subjects function and how adequately they react to the regulatory signals of the state. In modern conditions and in the light of the requirements of economic and social modernization, issues of improving the management mechanisms of the real sector of the economy are of particular relevance and require special research efforts.

The real sector of the economy is a set of enterprises and other economic entities operating in the sectors of material production, which produce products, carry out work and provide services of production and economic nature. As a result of their activities, enterprises make a profit, from which taxes are paid and a regional and state budget is formed [1].

The real sector includes industry, agriculture, construction, transport and communications. It also includes inter-industry production and economic complexes, for example, the agro-industrial complex, the military-industrial (MIC), machine-building, fuel and energy (FEC), chemical-forest complex and others.

Over the past three decades, Kazakhstani society has been undergoing complex, dynamically proceeding social and economic transformations.

With the acquisition of sovereignty as a result of the collapse of the USSR in December 1991, Kazakhstan switched to fundamental changes in the real economy.

The enterprises of the real sector of the economy of Kazakhstan, for many years, developing in the conditions of a practical lack of competition and market mechanisms, with a focus on subsidized development mechanisms, were mostly not ready for effective activity in a market economy.

In the course of the implementation of economic reforms, such shortcomings in the activities of enterprises were particularly acute: inefficient use of resources, the slow introduction of modern technologies and science and technology into production processes, the low level of corporate culture and labor discipline, etc.

The purpose and objectives of the article. Analyze the real sector of the economy of the Republic of Kazakhstan and consider the prospects for its development.

Statement of the main material of the study. During the 90s, the real sector of the economy developed unstable. During the transition period, which was accompanied by the rupture of economic relations, the strengthening of financial problems until 1996 there remained a negative trend of decline in industrial production. From the second half of the 90s of the 20th century, industrial production began to increase, which led to a reduction in the decline compared with 1991 (Figure 1) [2].

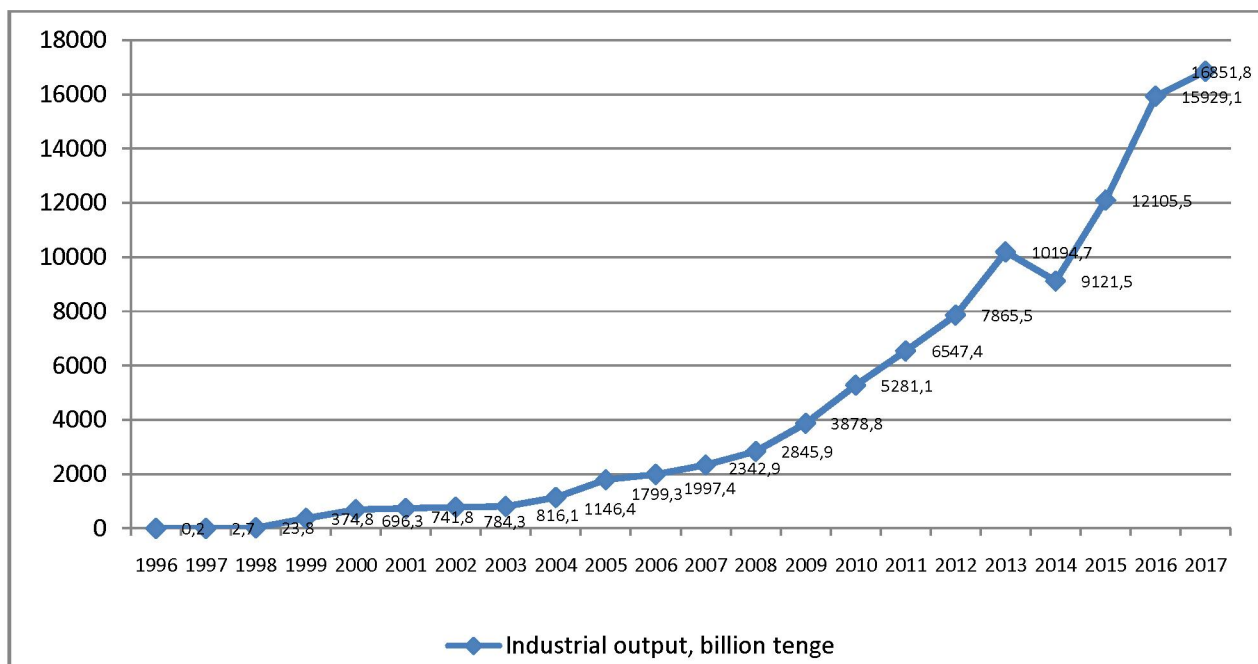


Figure 1 – Dynamics of industrial production in the Republic of Kazakhstan for 1996-2017

In 2017, Kazakhstan's economy showed relatively high growth rates. According to the Committee on Statistics, the gross domestic product at the end of 2017 amounted to \$ 203.5 billion, which is 5% higher than in 2016 at comparable prices.

Thus, for the first time, the main contribution to GDP growth was achieved not only at the expense of the extractive industries. The overall real GDP growth in 2017 compared to 2013 is 22.6%, compared to the planned 15% by 2020. In the structure of GDP, the share of production of goods amounted to 40.7%, services - 52.9%.

It should be noted that the sectoral structure of industrial production over the years of independence has undergone significant changes. If in 1996, of the total industrial production of the republic, 83.7% accounted for the manufacturing industry, 10.5% for the mining industry and 5.7% for the production and distribution of electricity, gas and water, then in 2017 the share of the processing industry accounted for 32.3%, mining - 60.8%, the production and distribution of electricity, gas, water - 6.9% (Figure 2) [3].

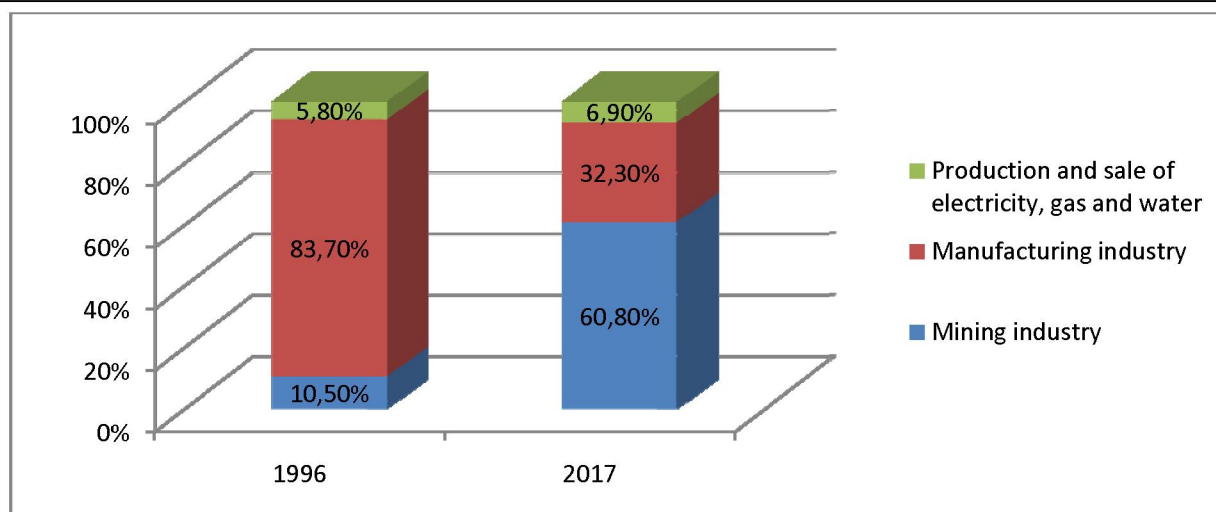


Figure 2 – Sectoral structure of industrial production of the Republic of Kazakhstan in 1996 and in 2017

A significant increase in the share of the mining sector is due to the enhanced development of the republic's oil and gas and uranium reserves in response to growing demand in world markets.

A prerequisite for economic growth and the achievement of a strong competitive position of Kazakhstan in the global economy is the modernization and innovative development of the sectors of the real sector.

Since 2010, Kazakhstan has been implementing the State Program of Forced Industrial-Innovative Development, designed for the period up to 2020. The main objectives of the launch of the innovative (“new”) industrialization program were the centralization of the management of industrial investment projects and increasing the coordination of actions of individual ministries and departments to ensure the overall growth of the economy.

According to the results of 7 years of implementation, the government program on accelerated industrial-innovative development shows positive changes in the country's economy. Since 2010, there has been a trend of outpacing growth in the manufacturing sector compared with the mining sector. So, by the end of 2016, the growth of the manufacturing industry was 19.4% compared to 2012, mining - 15.6%. At the same time, in 2017 compared to the same period of 2016, there were negative changes - the growth rate in the mining industry is higher than in the manufacturing industry (Figure 3) [4].

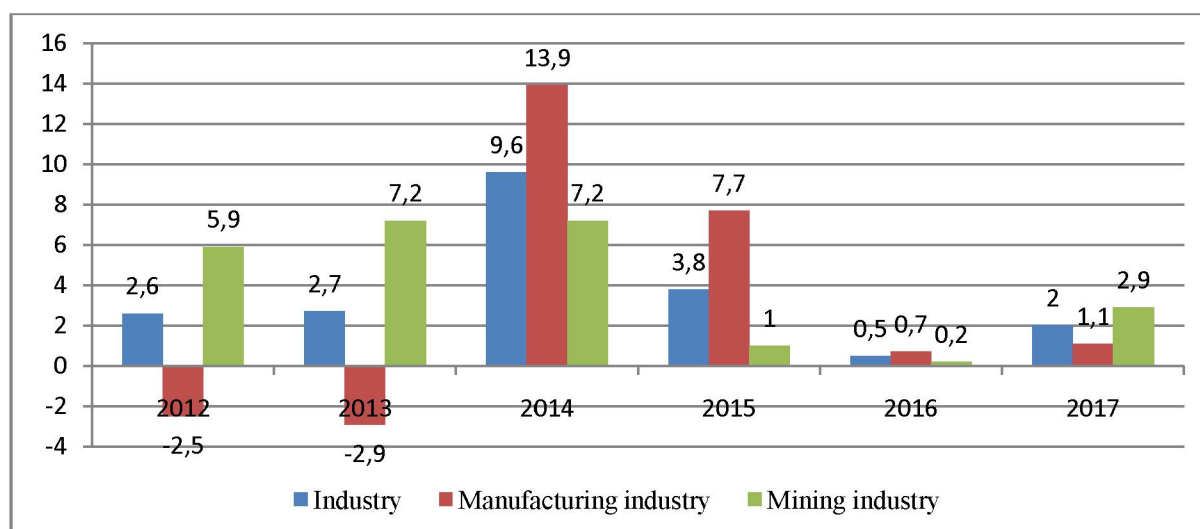


Figure 3 – Growth of IFI of Kazakhstan industry for 2012-2017

The decline in the growth rate of the manufacturing industry was affected by the fact that almost 40% of the domestic manufacturing industry is the production of industrial metals: copper, steel, aluminum and zinc. The demand for them in the world market is declining due to a slowdown in demand for these products from the current workshop in the world - China. As a result, the reduction of metal prices by 10–20% and a small reduction in production.

Thus, despite a number of positive trends in the development of the sectors of the real sector of the economy of Kazakhstan, the structural deformation of the economy remains, which is characterized by unevenness and disproportions in the development of the mining and processing industries.

It has to be noted that although the raw material orientation of the export policy of Kazakhstan is quite effective in ensuring high indicators of the country's economic growth at the present time with high energy prices, in the long term it is disastrous. The natural resource potential as a whole and especially the reserves of fuel and energy resources are not renewable and they are far from endless [5].

In addition, the majority of enterprises in the real sector of the economy of Kazakhstan have not yet been able to achieve compliance with international standards in terms of the optimal price-quality ratio.

Therefore, questions about the development of new and modernization of existing tools and mechanisms for introducing innovative technologies into industrial production, about increasing the innovation activity of organizations, about state support for the high-tech sector of the economy, attracting financial resources, and promoting high-tech products of Kazakhstan to the world market are highly relevant.

To effectively manage the innovative development of the real sector, it is necessary to have a set of adequate mechanisms. The mechanism for managing the innovative development of the real sector of the economy is a combination of means and methods by which the state influences the entire economic potential of industries, controlled external factors, taking into account the current situation, with a view to their constant and sustainable development. Such an approach implies the integrated functioning of all elements of the control mechanism, which include:

- The system of forecasting and program documents reflecting the results of the functioning of the national economic system;
- Forms of management - organizational and management structures;
- Management methods - tools, including methods, levers, technology processes to achieve the goal [6].

Under market conditions, a number of features appear, among which the need for interaction between state and market regulation is very important. In the management system, it is necessary to strive to optimize a combination of administrative, economic and socio-moral methods. It is now generally accepted that the market cannot solve all the problems, and the more imperfect the control mechanism, the more important the use of the entire set of methods.

The management mechanism of the real sector of the economy includes planning, organizational structures and management methods, as well as motivation. In the process of transformation, the priority is to improve the planning system at all hierarchical levels.

Currently, there are various institutions in the Republic of Kazakhstan and programs have been developed to support the modernization of enterprises in the real sector. A variety of government incentive instruments are applied, including tax breaks and grants. However, until now, the mechanisms for coordinating initiatives and their practical implementation have not been worked out sufficiently. The measures taken are aimed more at strengthening control over state-owned enterprises, although there are initiatives to optimize tax breaks, the use of public procurement mechanisms and coordination. For example, the program of supporting enterprises in the real sector “Productivity - 2020” provides for a whole range of tools - innovative grants, reimbursement of expenses for attracting highly qualified foreign engineering and technical personnel, design engineering organizations, for purchasing licenses, technical documentation, technologies, long-term leasing of industrial equipment with preferential rate [7].

Recent changes in legislation provide improved forecasting mechanisms for identifying priorities and providing a sound basis for government intervention. At the same time, modern economic conditions require a qualitative improvement in the methodology of scientific and technological forecasting for the long term.

Technological roadmaps, sectorial and regional forecasts should be important links in the integrated forecasting system. However, it is not enough just to accumulate various forecasts - their methodology must meet certain standards. The course on industrial-innovative development requires an unconventional approach for domestic practice, which allows defining “breakthrough” areas in which the Republic of Kazakhstan can achieve a real socio-economic effect [8].

Among the management tools that synthesize the positive aspects of a planned and market economy are the foresight technologies that are widely used in many developed and developing countries in the formulation of science and technology policy.

Foresight studies serve as a basis for selecting priorities implemented in the framework of large national and international programs of scientific, technical and innovative development, on their basis plans for technological modernization of large companies are formed, and prospects for the technological development of individual sectors of the economy are discussed. Today, Foresight has evolved from a tool aimed at identifying technological trends into an independent, actively developing scientific discipline, covering a wide range of research methods.

The emergence of new, more sophisticated scientific and technical policy tools that take into account the interests of various players (stakeholders), and the changing nature of innovation itself, associated with the increasing role of non-technological innovations, the spread of open innovation models, etc., put forward a non-trivial research agenda, tasks related to the identification of features and limits of application of individual policy instruments, the development of approaches to assessing their potential impact on the sphere of science and innovation, the economy and society.

When conducting foresight studies, a combination of 10–15 forecasting methods is used. For visual systematization of Foresight methods by R. Popper, a specialist at the University of Manchester, a scheme was developed, called the “Foresight-rhombus” (Figure 4).

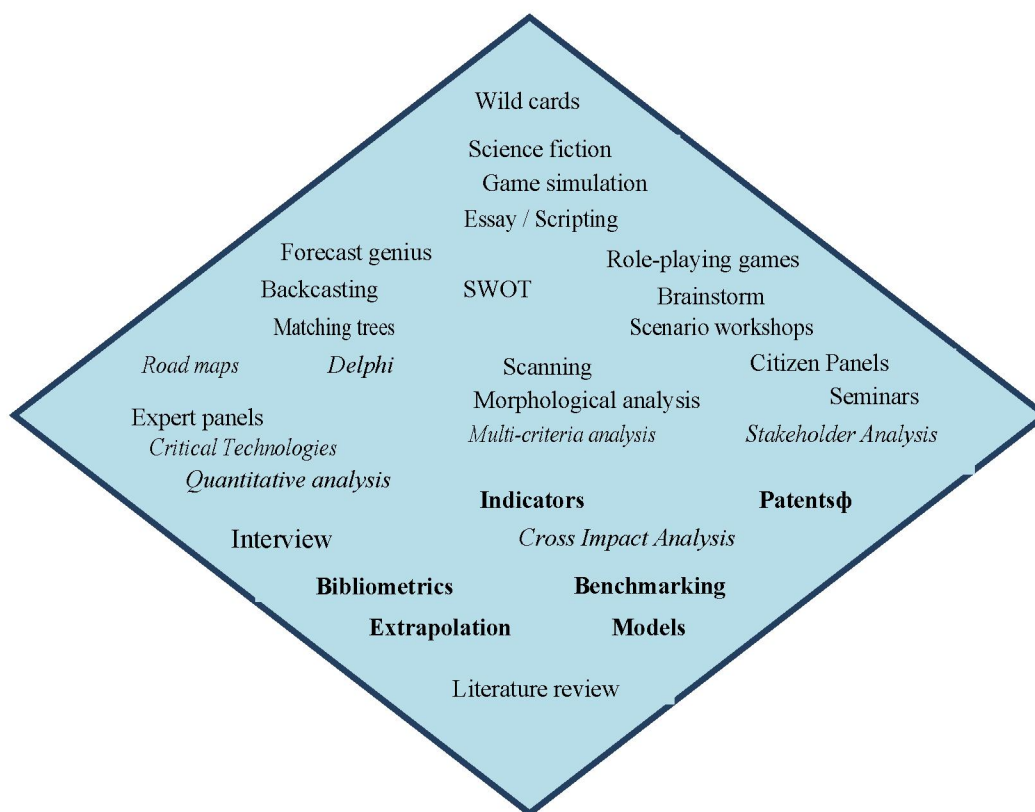


Figure 4 – Foresight methods rhombus

The stage of conducting foresight studies is determined by an algorithm that can be represented as a chain: the goal - the tasks - the state - the alternatives - the execution.

According to the results of foresight projects, road maps are created - a structured set of indicators and tasks, the achievement of which leads to the achievement of a common goal and allows you to track

the implementation of program activities. It contains a set of activities whose implementation results ensure achievement of target indicators, clearly defines the responsible executors, deadlines, describes the risks associated with the implementation of the proposed activities, and suggests a set of measures to respond to the implementation of a particular risk [1].

Road maps also determine:

- The range of possible participants, parties interested in the implementation of this roadmap (beneficiaries);
- Resources that can be attracted to solve the tasks defined by the roadmap, and restrictions on their involvement and / or use;
- The role of state institutions in the implementation of the roadmap;
- The order of coordination of efforts of all participants in the process.

For the Republic of Kazakhstan, foresight is a relatively new management tool. The first, unique in its content and tasks, the national scientific and technological foresight was conducted by JSC "National Agency for Technological Development" in the period 2010-2011. in order to determine the strategic directions of development of Kazakhstan until 2020. The country does not yet have a sustainable practice of developing long-term priorities in market conditions at all levels of government. When conducting foresight studies, the methodology provided by the leading institute in the field of planning and forecasting of South Korea KISTEP (Korean Institute of Scientific Technological Planning and Evaluation) was used [3].

In order to concentrate the available resources on the strategic priorities of the republic, within the identified priority technology areas, technologies were identified that will give impetus to the further development of industries and allow them to be brought to a new technological level. These technologies, after passing through technological analysis for their economic and strategic attractiveness and feasibility for Kazakhstan, were included in the list of technologies critical for the country.

Currently, foresight studies have been completed, 75 critical technologies have been identified in 7 key industries. A continuation of the work done was the development in 2012 of 10 pilot target technological development programs for the country's critical technologies, in the development of which experts from concerned business structures and scientific institutions took part. At the same time, the developed programs were discussed with the participation of a wide range of experts in the context of technological areas, as well as representatives of relevant government agencies.

In 2018, it is planned to hold another technological foresight, which will determine the horizons of innovation until 2030.

Conclusions and prospects for further development. In conclusion, it should be noted that for a full-fledged entry of the Republic of Kazakhstan into the number of developed, competitive countries of the world, it is necessary to give a new impetus to the development of such a specific instrument of state regulation as a foresight. It is necessary to create favorable opportunities for the practical transformation of Foresight into a tool of science, technology and innovation policy oriented towards a long-term perspective.

Enterprises are provided with service support. Today, companies involved in large projects are subject to strict requirements regarding the quality of their products, which must meet international standards. In this regard, the agency reimburses part of the costs of product certification and quality management systems in accordance with international standards under the program "Productivity 2020" [9].

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ҚАЗАҚСТАН РЕСПУБЛИКАСЫ ЭКОНОМИКАСЫНЫҢ НАҚТЫ СЕКТОРЫН ТАЛДАУ ЖӘНЕ ОНЫҢ ДАМУ ПЕРСПЕКТИВАЛАРЫ

Аннотация. Экономиканың нақты секторы деп Қазақстан Республикасының экономикалық дамуының түрлі салалары кәсіпорындарының көп санын қамтитын республиканың өнеркәсіптік өндіріс секторы түсіндіреді. Қазақстан Республикасы экономикасының нақты секторы талданды және оның даму перспективаларын қарастыруға болады. Мақалада осы кәсіпорындарды сипаттауға және жіктеуге, олардың экономиканы дамытудағы

рөлін анықтауға тырысу ұсынылды. Бұл мақалада авторлар 1996 жылдан бастап 2017 жылға дейін ұзақ мерзімді кезең ішінде Қазақстан Республикасы экономикасының нақты секторының даму ерекшеліктерін талдайды. Сондай-ақ мақалада экономиканың нақты секторын дамытудың перспективалы бағыттарына талдау жасалады және олардың әрқайсысының негізгі мазмұны мен шектеулері талданады. Форсайт-зерттеулерді жүргізу кезінде болжаудың 10-15 әдістерінің үйлесімі пайдаланылады. Форсайт әдістерін көрнекі жүйелеу үшін Манчестер университетінің маманы Р. Поппермен "Форсайт-ромб" деп аталатын схема жасалды.

Түйін сөздер: Экономика, экономиканың нақты секторы, ЖІӨ-нің, даму, бюджет, экономикалық өсу

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АНАЛИЗ РЕАЛЬНОГО СЕКТОРА ЭКОНОМИКИ РЕСПУБЛИКИ КАЗАХСТАН И ПЕРСПЕКТИВЫ ЕГО РАЗВИТИЯ

Аннотация. Под реальным сектором экономики понимается сектор промышленного производства республики, включающий большое количество предприятий различных отраслей экономического развития Республики Казахстан. Проанализирован реальный сектор экономики Республики Казахстан и рассмотрены перспективы его развития. В статье была представлена попытка описать и классифицировать данные предприятия, определить их роль в развитии экономики. В данной статье авторами анализируются особенности развития реального сектора экономики Республики Казахстан в течение долгосрочного периода – с 1996 г. по 2017 г. Также в статье приводится анализ перспективных направлений развития реального сектора экономики и анализируется основное содержание и ограничения каждого из них. При проведении форсайт-исследований используется сочетание 10–15 методов прогнозирования. Для наглядной систематизации методов Форсайта специалистом Университета Манчестера Р. Поппером была разработана схема, получившая название «Форсайт-ромб».

Ключевые слова: Экономика, реальный сектор, ВВП, развитие, бюджет, экономический рост.

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