

MAIN DIRECTIONS OF ACCELERATING REGIONAL SOCIO-ECONOMIC DEVELOPMENT IN THE DIGITAL ERA

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Abstract: *International experiences show that one of the most important indicators for the sustainable and balanced development of each country is the socio-economic development level of the country's regions. The digital information presented by the digital economy is widely used in the direction of solving the socio-economic problems of the regions and opens great opportunities for increasing the effectiveness of the economic policy of the regions. Ensuring sustainable economic and social development of regions is part of the regional economic policy implemented by the state. Currently, in the international practice, the regional policy of the state is evaluated as an activity of managing economic and social development in the country through the creation of economic relations between the state and the regions of the country. Despite the implementation of a number of state programs in the field of socio-economic development of regions in the country, as well as the attention paid to regional development issues in a some program documents of the government and the achievement of certain progress in this direction, sharp differences and inequality between the levels of socio-economic development of the country's regions continue. This difference is particularly sharp between the Baku-Absheron zone and all other regions of the country. In the article, the current state of inequality in regional socio-economic development is analyzed based on official statistical data and its causes are investigated. Then, the policy steps implemented by the government so far in order to eliminate this problem are examined. The article examines the impact of measures resulting from the analysis of state programs and strategic road maps on the socio-economic development of regions. In the end, the economic benefits of digitization in economic regions were specified and presented in the form of recommendations.*

Keywords: *region, socio-economic development, economy, international experience, digital technologies.*

INTRODUCTION

In the digital era, equal development of regions remains the main way of economic development. It has become the main source of sustainable economic development in developed countries by creating conditions for attracting the natural, labor and financial resources of underdeveloped regions to the economic cycle in order to ensure interregional equal development. The cheap labor reserves of underdeveloped regions, rich natural resources, and favorable geographical location require investors to invest in these regions.

Even today, the issue of ensuring the balanced development of the country's regions has become one of the very important factors that ensure the fairness and usefulness of the state's regional policy in our country. This, in turn, ensured that the solution of a number of issues related to economic development was brought to the fore both theoretically and practically.

The main goal of the article is to develop economically sound scientific and methodological approaches to identifying the socio-economic aspects of sustainable development of regions in the digital economy.

RESEARCH METHODOLOGY

The methodological basis of the study was research by domestic and foreign scientists on various aspects of assessing the socio-economic development of regions, and articles from specialized journals. The article used research methods: comparative and SWOT analysis, systems approach. The regions are diverse according to their potential, according to the structure of their natural resources, according to the level of employment. The main factors that distinguish economic regions from the economic, geographical and historical point of view can be shown as follows: natural conditions and resources; economic-geographic location; territorial and field structure of regions; population settlement level; historical development features. (Ağayev, Mehtiyev, 2021)

One of the stimulating forces of the economic development of any country is the organization of state regulation in the economic sphere. Today, at a time when economic subjects are given maximum freedom in the conditions of market economic relations, state intervention in the economy can only be done with certain regulatory instruments. We can note that for the realization of optimal public administration, it is necessary to ensure the full and careful use of the existing potential in this sphere, as well as to ensure the sustainable development of this field.

As a result of the implemented economic policy, our country has progressed on the international level and the per capita national income has increased significantly. According to the classification based on the World Bank's atlas methodology, our country is included in the group of poor countries according to the level of national income per capita. According to that classification, Azerbaijan was then included in the group of low-middle-income countries, and then in the group of upper-middle-income countries.

One of the important conditions for sustainable and balanced development in the country is ensuring that the general social and economic development of the country affects all its population and all regions at the same level. (Qasimov, İsrailov, Hacızadə & Ağayev, 2006)

The territory of Azerbaijan seems to be divided into 2 parts, which differ from each other according to the level of socio-economic development and economic potential:

1) approximately 75-80% of the country's economic potential is concentrated in the city of Baku and the Absheron-Khizi peninsula, which is only 6.8% of the country's territory and where up to 32% of its population lives;

2) only 20-25% of the country's economy is formed in other areas covering 93.2% of the country's geography and 68% of its population. (Azərbaycanın regionları,2023)

At the same time, serious differences are observed between the mentioned individual regions according to the level of socio-economic development and economic potential. To better see and understand these differences, first, let's look at the regional territory and population structure of Azerbaijan by economic regions.

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Table 1. Regional territory and population structure of Azerbaijan by economic regions in 2022 (data as of January 1, 2023)

	Territory		Territory	
	100 0 m ²	Share in the total, %	Number, thousand people	Share of total,%
Baku city	2,14	2,5	2336,6	23,1
Nakhchivan Autonomous Republic	5,50	6,3	465,7	4,6
Absheron-Khizi economic region	3,73	4,3	874,1	8,6
Nagorno-Karabakh Shirvan economic district	6,13	7,1	317,8	3,1
Ganja-Dashkasan economic region	5,27	6,1	596,0	5,9
Karabakh economic region	8,99	10,3	736,4	7,3
Gazakh-Tovuz economic region	7,03	8,2	674,4	6,6
Guba-Khachmaz economic region	6,96	8,0	543,8	5,3
Lankaran-Astara economic region	6,07	7,0	930,6	9,2
Central Aran economic region	6,69	7,8	716,2	7,1
Mil-Mugan economic region	5,67	6,5	520,2	5,1
Sheki-Zagatala economic region	8,84	10,2	623,6	6,2
East Zangezur economic region	7,47	8,6	300,4	3,0
Shirvan Salyan economic region	6,08	7,1	491,3	4,9
Republic of Azerbaijan, total	86,6	100	10127,1	100

Source: Azərbaycanın regionları ,2023

The main differences in regional development in Azerbaijan are primarily reflected more prominently between the city of Baku and other economic regions. The differences between the regions in terms of the level of economic well-being of the population in the republic arose primarily as a result of the development of relevant production and service areas concentrated in Baku and the Baku suburbs. The development of regions requires large investments. However, the majority of foreign companies and enterprises are concentrated in the Absheron-Khizi economic region, especially in the capital city of Baku, therefore, the creation of a system for promoting the attraction of foreign investments to the regions remains relevant.

The observed situation in the development of the regions in the country requires raising the level of socio-economic development of the regions and minimizing the difference between them by using the existing potential effectively. The fact that the problems of the development of the regions are closely related to each other implies their systematic solution, which acts as an important condition for the development of the regions. In this regard, at the current stage of development, the need for fuller use of the potential of the regions and their effective coordination requires the implementation of complex measures aimed at the socio-economic development of the regions. This could be achieved through the development and implementation of a new effective regional policy system.

The existence of differences in socio-economic development between the regions of the country depends on many factors. The disproportionate distribution of productive forces between regions has created a sharp difference in the level of their socio-economic development. Thus, the concentration of the main part of the economy, especially the industry, infrastructure areas in Baku city, along with its faster development than in the regions, led to the worsening of the socio-economic situation in the regions and the flow of the population from the regions to Baku. (Azərbaycan Respublikasının iqtisadiyyat Nazirliyi, 2023).

The economic policy implemented in the country in recent years has contributed to the comprehensive development of the country as a whole and the regions, to the rise of the special quality of the regions in macroeconomic indicators across the country, to the improvement of the provision of infrastructure in the regions, to the improvement of the level of communal services, to the creation of new production and processing facilities, socio-cultural facilities, investments, employment. has led to the increase, the further acceleration of the development of local entrepreneurship, the opening of new jobs, as a result, the reduction of poverty and the further improvement of the population's standard of living. (Əliyev,2016)

It should be noted that during the period covering the last 5 years, the real GDP increased by an average of 6.4 percent (Fig. 1). We can note that the nominal GDP has increased by 65 percent. A 62 percent increase in the volume of GDP per person was observed during this period of time, with which our country rose from the 134th to the 85th place among the countries of the world. The social status of the population has changed significantly, and the poverty level has decreased from 40.2 percent to 4.9 percent in 10 years. (Azərbaycanın statistik göstəriciləri, 2023)

Figure 1. Gross domestic product growth dynamics (in million manats)



Source: AR State Statistical Committee,2023

The economic growth model implemented during the period of increasing oil revenues has created conditions and opportunities for the creation and increase of strategic currency reserves on a large scale, and as a result, it will be able to ensure the elimination of possible threats that the republic's economy may face. In addition, it should not be forgotten that it can be an important tool for the process of financing future economic growth. According to the information provided by the State Statistics Committee, the growth rate of economic development in the period covering the years 2018-2022 was 7.9 percent on average. The level of investment decreased by 6 percent compared to previous years. The fact that the economic growth model successfully implemented during 2018-2022 has reached the limit of "saturation"

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has revealed the importance of switching to a qualitatively new economic growth approach. (Dövlət Statistika Komitəsi,2023)

Historically, the oil sector has been the main factor of economic development in Azerbaijan for many years. From 2018-2022, the contributions of non-oil sectors to economic development began to increase. According to statistical data, in 2022, an increase of 6.2 percent in the non-oil sector, 8.8 percent in the construction sector, and 7.6 percent in the service sector were observed. In addition, 11.5 percent economic growth was recorded as a result of the reforms carried out in the non-oil sector. (Dövlət Statistika Komitəsi, 2023)

SWOT analysis is widely used in the analysis of the current state of economic development in the strategic road map. (Azərbaycan Respublikasında kiçik və orta sahibkarlığın inkişafına dair Strateji Yol Xəritəsi,2016)

The SWOT analysis of the regions of the Republic of Azerbaijan is given in the table below (table 2).

Table 2. SWOT analysis of the current economic situation in the regions of the Republic of Azerbaijan

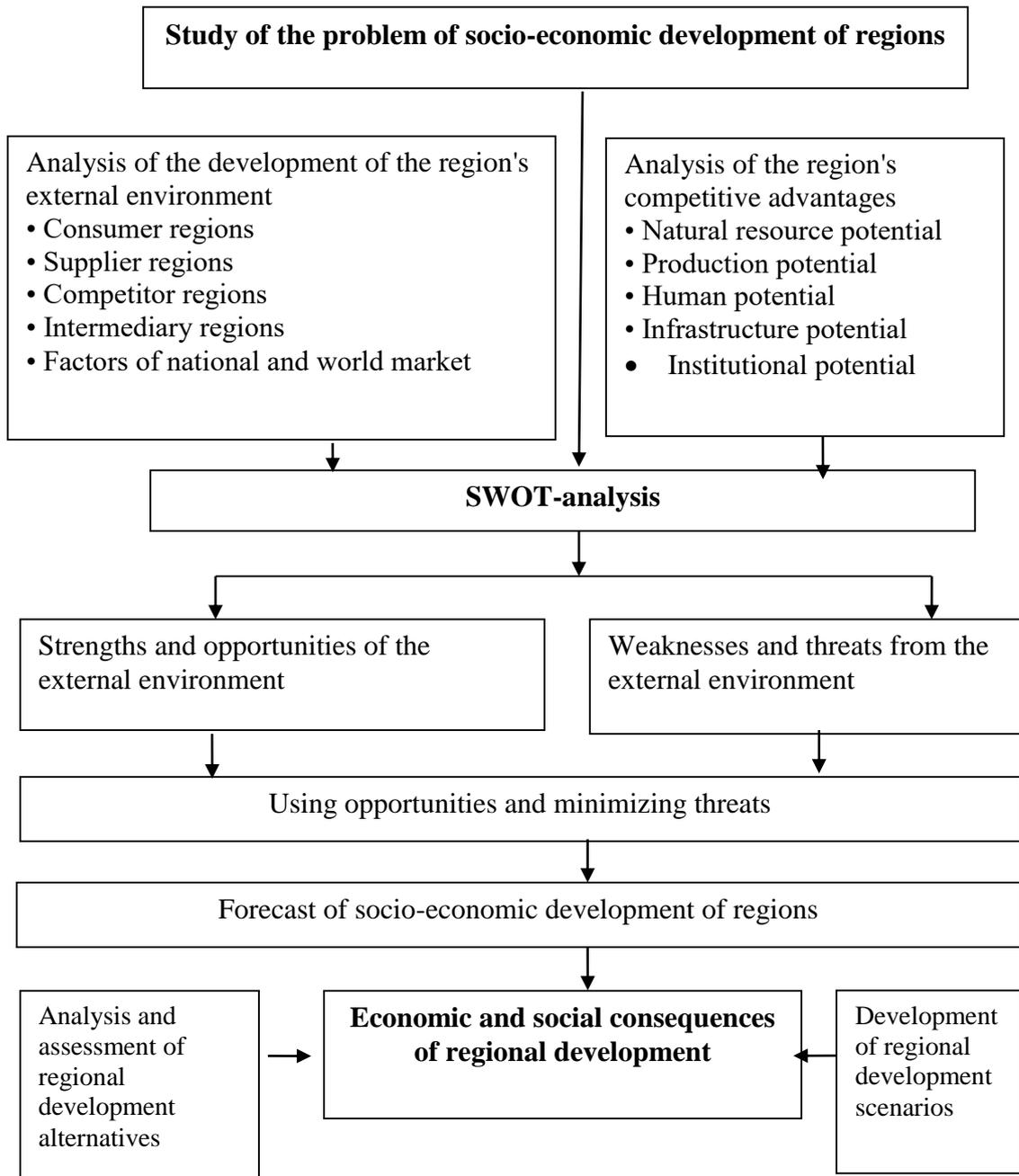
Strengths	Weaknesses
<ul style="list-style-type: none"> -Ensuring the stabilization of the macroeconomic environment in the regions - High labor force -Development of telecommunications infrastructure - Availability of wide opportunities for lifelong learning - Low labor costs - Satisfactory level of food self-sufficiency in the regions 	<ul style="list-style-type: none"> -It is difficult to get initial capital for entrepreneurship - Lack of interregional transport facilities at any level - Inability to develop the regional infrastructure at the desired level - Low state support for research and development - Inadequate coordination between the educational institution and the labor market - High military costs
Opportunities	Threats
<ul style="list-style-type: none"> - Access to the European market - International cooperation and research opportunities in the field of science -Opportunities for new investors to enter - Development of local branches of foreign companies - Being able to stimulate regional economic growth with low taxes and low costs 	<ul style="list-style-type: none"> - The possibility of running out of natural resources - Low profitability of non-oil sector areas - Release of skilled workers to another country - Directing investments to infrastructure projects rather than to production areas

As it is known from the analysis, there are wide opportunities and conditions for the regions of the Republic of Azerbaijan to reach a high level of economic development. So, today, the main strengths in the economic development of the country's regions are the stability of the macroeconomic environment, the abundance of the workforce, the development of the telecommunication infrastructure at a certain level, the availability of wide opportunities for lifelong education, low labor costs, and the satisfactory level of food self-sufficiency of the regions. which is one of the factors that create opportunities and conditions to overcome a number of obstacles in front of economic development. However, currently, the biggest potential opportunity of the country's regions is that the non-oil products produced in these

regions are competitive in the European markets due to their quality and ecological purity. On the other hand, the creation of research and development centers by the state in the regions can be one of the main factors that stimulate development.

In the country, the social development of the regions is as important as the economic development. One of the main factors of social development is the income level of the population. As a result of the economic development of the regions, the attraction of investments, especially in the non-oil sector, creates conditions for the creation of new jobs in this field and the employment of more people.

Figure 2. Model for developing a forecast of socio-economic development of regions



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The following laws, decrees, orders and instructions were adopted by the President of the Republic of Azerbaijan, the Milli Majlis of the Republic of Azerbaijan and the government of the Republic in accordance with their authority to implement the regional policy and regulate the internal economic development of the republic.

1. Law of the Republic of Azerbaijan on environmental safety.
2. Law of the Republic of Azerbaijan on environmental protection.
3. Law of the Republic of Azerbaijan on specially protected natural areas and objects.
4. Law of the Republic of Azerbaijan on municipalities.
5. State program of socio-economic development of the regions of the Republic of Azerbaijan (2004-2008)
6. The State Program for the Socio-Economic Development of the Regions of the Republic of Azerbaijan (2009-2013)
7. State program for socio-economic development of the regions of the Republic of Azerbaijan (2014-2018 years)
8. State Program on Poverty Reduction and Economic Development (2005-2015)
9. State Property Privatization Program
10. State Program of Small and Medium Business Development
11. We can give an example of laws as the main directions of the strategic roadmap for the national economy and the main sector of the economy.

Despite the extensive development of the large-scale areas of the republic, there are still many unsolved problems in the field of state regulation and management of regions. Such problems are related to the new establishment of a single central authority for the management and regulation of regional development in many countries, including the Republic of Azerbaijan. Various functions of the state are performed by local and regional administrative bodies, that is, committees, ministries, national councils, and local self-government bodies. The state's regional management bodies are considered the main management bodies created in democratic societies. (Azərbaycan Respublikası regionlarının 2019–2023-cü illərdə sosial-iqtisadi inkişafı Dövlət Proqramı,2019)

Four State programs on socio-economic development of regions were adopted and implemented: the first state program (2004-2008); the second state program (2009-2013); the third state program (2014-2018); the fourth state program (2019-2023).

The main goals set in the framework of this program are to support the development of business entities, especially to support the activities of small, medium, and micro entrepreneurial entities, to continue infrastructure projects, to increase the income level of the population, to develop the non-oil sector, to increase the activity of young people in the regions, to increase personnel training, to support the development of tourism services, to ensure the availability of financial services, to further strengthen social protection, to improve the environmental situation, to improve road infrastructure, and to carry out protection measures. (Babayev,2022)

In recent years, digitalization has become one of the key areas of socio-economic development of regions. Access to digital technologies in the regions changes: the quality of life of people, makes the activities of industrial enterprises and agriculture more efficient,

simplifies access to information, and simplifies access to clients for small and medium-sized businesses. (Sadıqov, Balayev,2020)

The economic benefits of digitalization in the regions are: an open and accessible market; rapid receipt and processing of data, significant contribution to economic growth; creation of new jobs in industries; increase in labor productivity; accelerating the pace of small and medium-sized businesses; simplifying financial transactions for businesses; the emergence of new organizations interested in qualitatively new technological solutions. (Samara, Andronikidis, Komninos,Bakouros&Katsoras,2022)

Social benefits from digitalization in the regions are: creation of digital public services; overcoming social inequality; the emergence of new opportunities to ensure people's lives; automation and robotic of treatment processes, thereby improving the quality and accessibility of medical care; poverty reduction; reducing negative impact on the environment; increasing the availability of financial services. [Барпакова,2019]

It should be noted that the digital economy is a new type of economic relations in the regions. For its development, it is necessary to create digital infrastructure, new business models, build trust in the reliability and security of digital infrastructure, assess risks, train specialists, and increase the level of proficiency in information technology.

In recent years, Azerbaijan has focused on such large projects as the creation of “smart” regions, cities, streets, and houses. With the deoccupation of Karabakh, the relevance of these ideas has increased. President Ilham Aliyev has repeatedly stated that such “smart” cities and villages will be created in the liberated territories. “Cities and villages in the liberated territories must be created based on the concept of “smart-city”, “smart-village”, that is, “smart city”, “smart village”. Work is already being carried out to ensure that the most advanced technologies in the world are used when carrying out urban planning and implementing projects there. (Azərbaycan 2030: sosial-iqtisadi inkişafın Milli prioritetləri, 2021)

It is planned that the Karabakh region will become a center of interest for technological investments, and will also play the role of an experiment in the application of smart urban and rural technologies in other regions of the country.

Currently, 54% of the world's people live in cities, and the global population is projected to reach up to 9.7 billion people in 2050. Along with overall population growth, urbanization will add another 2.5 billion people to cities over the next three decades.

As migration from regions to cities continues, urban overcrowding is becoming a real threat to the quality of life of the people living in them. If optimal solutions are not implemented, cities will face many challenges in the near future. Among them are growing economic crises, poverty, environmental pollution, disease and others. (Corchado &Trabelsi, 2022)

The concentration of large numbers of people in cities has become one of the main causes of climate change. Cities account for more than 70 percent of global greenhouse gas emissions, according to a United Nations Development Program report. Urban residents themselves are more susceptible to many of the impacts of climate change caused by urbanization, especially heat stress, floods and health emergencies.

The creation of smart cities and regions in the modern world can also eliminate many of the problems caused by globalization and the 4th industrial revolution. In addition, making

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cities and regions more resilient, inclusive and safe is identified as one of the United Nations Sustainable Development Goals.

It should be noted that for the concept of a “smart city” to become a reality in territories liberated from occupation, it is necessary to first study sustainable international practices, apply and promote them at the next stage, and make extensive use of information and communication technologies. [Quliyeva,2021]By implementing «smart city» solutions, it is possible to influence various quality of life indicators such as safety, time and convenience, health, environmental quality, social connections and civic participation, jobs and cost of living. [Corchado &Trabelsi, 2022] As an analysis of scientific literature has shown, it is possible to distinguish 5 areas in which the implementation of the “Smart Region” is taking place:

1. Mobility of the population (road infrastructure, means of transport).
2. Economics (support for innovative entrepreneurship, local initiatives, creative industries, providing citizens with opportunities for personal growth).
3. Environment (rational use of natural resources, their efficient consumption, waste management and prevention of negative impacts on the environment).
4. Human potential (special education opportunities, social awareness, collaboration opportunities).
5. Living conditions (safety, health, cultural opportunities, housing, leisure activities, availability of general education).

Analysis of each area allowed us to identify certain problems. Increasing the level of digitalization of the region requires the identification of measures to ensure the necessary conditions for sustainable development.

However, there are certain problems in the development of digitalization of regions. Among the main ones, we highlight the following: insufficient funding for IT projects in the regions, personnel shortages, inconsistency of actions between different levels of government. In addition, in remote and sparsely populated regions there is a problem associated with the absence or poor development of regional information and telecommunications infrastructure.

RESULTS

As a result of the study, the most significant factors influencing the socio-economic development of the regions were identified and classified. The dependence of these factors on the development of regions in the digital economy has been established. A forecast model for the socio-economic development of regions has been developed. The conducted analysis leads to the conclusion that despite the implementation of 3 state programs aimed at the socio-economic development of regions in Azerbaijan since 2004, as well as the completion of the implementation period of the "Azerbaijan 2020: Vision of the Future" Development Concept, the socio-economic development of the regions in the country there are still serious problems in the field of elimination of sharp differences. Summarizing the analysis, it can be said that there are still sharp differences between the country's regions on all socio-economic development parameters of the country.

Therefore, in order to ensure a more efficient and balanced development of the socio-economic development of regions in the country, we consider it appropriate to implement measures in the following directions, both in the field of regional development management

and regulation, and in the field of mechanisms for stimulating the economic development of digital technologies in the regions:

1. It is important to use digital technologies in the regions. With this aim, it was possible to provide resource saving and control system in the regions by computerization and skillful use of information technologies.

2. In order to speed up social and economic development in the regions, a separate "economic analysis and information center" should be established in each region in order to regulate financial problems and detect its activity based on deep economic analysis. Such centers should be created in the regional centers first of all.

3. Special programs should be prepared in economically problematic regions. Proper distribution of key manpower between regions should be ensured and also sustainable development of this manpower should be ensured. Using digital technologies will save people time, money and energy.

4. Production or processing facilities in each economic region should be located close to the sources of raw materials. With this, we will be able to use the resources efficiently and economically.

5. Competitiveness of regions should be assessed. Naturally by using the resources properly, additional income will be obtained. We must ensure that this income is invested in other sectors. However, at this time, it is also necessary to ensure the protection of ecology.

6. Plans should be prepared for optimal use of labor resources.

In order to ensure the sustainable development of regions in the digital era, we need to approach each region separately, analyze it, and draw up development plans based on this.

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