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HASANOV I.[1]

STATE CONCEPT OF «SMART CITY» AND «SMART VILLAGE» AS A PRIORITY OF THE NATIONAL ECONOMY IN AZERBAIJAN

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Постановка проблеми. Разом із «розумним містом» планується реалізація проекту «розумне село» на постконфліктних територіях. У міжнародній практиці Smart Village означає вирішення основних проблем, з якими стикається сільське населення, і, що більш важливо, створення нових економічних можливостей у сільській місцевості. Технології «розумного села» – це діджиталізація, мислення поза межами села, новий формат співпраці між селом та прилеглими регіонами. Також використання технологій «розумного села» створить умови для широкого поширення соціальних інновацій, мікро- та малого старт-ап бізнесу серед сільського населення цих територій. Підсумовуючи, розумне місто та розумне село, застосування технологій може перетворити регіон Карабах у туристичну перлину, створену єдністю штучного інтелекту та природної краси світу, і водночас інноваційний початок. *Метою статті* є аналіз та характеристика державної концепції «Smart city» та «Smart village» як пріоритету національної економіки Азербайджану. *Методи, використані в дослідженні:* порівняльний аналіз, градієнтний, деталізації та узагальнення, рейтинг і групування та ін. *Гіпотеза дослідження*. Одним із актуальних напрямків наукових досліджень є сфера житлового середовища, яка на даний момент розвивається з області Smart Homes у сферу Smart City, Smart Transport System тощо. *Виклад основного матеріалу*. Зараз відбувається стрімка зміна інформаційно-комунікаційних технологій (ІКТ). Зміни, що виникають, торкаються мережевих технологій, самих обчислювальних і комунікаційних пристроїв, а також обробки даних. У результаті інформаційні технології використовуються у все більшій кількості сфер життя людини та економіки. Сьогодні міста стали основною силою економічного розвитку та є центральними для мереж виробництва, споживання, визначення соціальних та економічних відносин, і тепер забезпечують значну частку валового внутрішнього продукту багатьох країн. Міста почали відігравати важливу роль у національному, регіональному та глобальному розвитку. Від них залежить якість життя людей. Тому сьогодні, як ніколи, до них висуваються особливі вимоги, такі як наявність доступної міської інфраструктури, висока мобільність, безпечність міських територій, екологічність, розвинене міське самоврядування. Важливим моментом є детальний аналіз, розуміння цих проблем, а також уміння розглядати різні варіанти вирішення. Усі перераховані проблеми внаслідок активної урбанізації є основними пусковими механізмами та форсованими процесами розвитку міст та їх трансформації у «Розумні міста». *Оригінальність і практична значущість дослідження*. Головна мета проектів «Розумне село» в усьому світі — запобігти міграції із села в місто. Тобто для мешканців села мають бути створені умови, щоб у селі були доступні всі послуги, які люди можуть отримати в місті. Водночас необхідно створити більше можливостей для доходів і працевлаштування сільських жителів. Третій момент – створення повноцінних умов для забезпечення доступу сільських жителів до комунальних послуг. Іншими словами, в концепції Smart Village практично зникла різниця між селом і містом щодо обслуговування, отримання прибутку та користування державними послугами. *Висновки.* Відповідно до концепції Smart Village, електронізація процесу розширює виробничі можливості. «Розумне село» – це автоматизована, централізовано та спільно керована система всієї платформи, від зрошення до обробітку ґрунту, збору врожаю, а також передбачає використання найпередовіших технологій та трансфер технологій. Інтеграція цієї системи в інші сфери сільської інфраструктури – альтернативні джерела енергії та сучасну транспортну систему – завершить концепцію Smart Village.

Ключові слова:
Азербайджан, розумне місто, розумне село, проект, технології, розвиток.

[1] **Гасанов Ісмаїл Джафар,** доктор філософії в економіці, доцент, Бакинський бізнес університет, Баку, Азербайджан.

Hasanov Ismail Jafar, Ph.D. of Economic sciences, Associate Professor, Baku Business University, Baku, Azerbaijan.

ORCID ID: https://orcid.org/0000-0002-7690-1177

e-mail: i_hasanov_65@mail.ru

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ДЕРЖАВНА КОНЦЕПЦІЯ «РОЗУМНОГО МІСТА» ТА «РОЗУМНОГО СЕЛА» ЯК ПРІОРИТЕТ НАЦІОНАЛЬНОЇ ЕКОНОМІКИ АЗЕРБАЙДЖАНУ

Formulation of the problem. Along with the “smart city”, it is planned to implement the “smart village” project in post-conflict areas. In international practice, Smart Village means solving the main problems facing the rural population and, more importantly, creating new economic opportunities in rural areas. “Smart village” technologies are digitization, thinking beyond the boundaries of the village, a new format of cooperation between the village and adjacent regions. We can also block the possibility of a cycle of decline by applying smart village technologies in liberated areas. Also, the use of “smart village” technologies will create conditions for the widespread dissemination of social innovations, micro and small start-up businesses among the rural population of these territories. In conclusion, smart city and smart village, the application of technology can transform the Karabakh region into a tourism pearl created by the unity of artificial intelligence and the natural beauty of the world, and at the same time an innovative start. *The aim of the article* is analysis and characteristics of the state concept of "Smart city" and "Smart village" as a priority of the national economy of Azerbaijan. *Methods used in the study:* comparative analysis, gradient, detailing and generalization, rating and grouping, etc. *The hypothesis of the study*. One of the current areas of scientific research is the sphere of living environment, which from the field of Smart Homes is currently developing into the field of Smart City, Smart Transport System, etc. *Presentation of the main material.* Currently, there is a rapid change in information and communication technologies (ICT). The emerging changes affect network technologies, computing and communication devices themselves, as well as data processing. As a result, information technologies are used in more and more areas of human life and economic life. Today, cities have become a major force in economic development and are central to production, consumption networks, defining social and economic relationships, and now provide a significant share of the gross domestic product of many countries. Cities have come to play a major role in national, regional and global development. The quality of people's lives depends on them. Therefore, today, more than ever, they are subject to special requirements, such as the availability of accessible urban infrastructure, high mobility, safety of urban areas, environmental friendliness, and developed urban self-government. For example, there is a whole direction that studies the growth of urban settlements, population concentration, and socio-economic changes. This direction is called urbanization. In 2008, the urban population was equal to the rural population. According to UN forecasts, by 2050, 85% of the population will live in cities. Thus, governments and city authorities are faced with new tasks that must not only solve a whole range of emerging problems, but also carry out a radical transformation of cities. The important point is a detailed analysis, understanding of these problems, as well as the ability to consider various solution options. All of the listed problems as a result of active urbanization are the main triggers and forced processes of urban development and their transformation into “Smart Cities”. *The originality and practical significance of the study*. The main goal of Smart Village projects around the world is to prevent rural-to-urban migration. In other words, conditions must be created for residents of rural areas so that all the services that people can get in the city are easily accessible in villages. At the same time, it is necessary to create more income and employment opportunities for rural residents. The third point is the creation of full-fledged conditions to ensure access of rural residents to public services. In other words, in the Smart Village concept, the difference between rural and urban areas has practically disappeared in terms of service, profit generation, and use of public services. *Conclusions.* According to the Smart Village concept, process electronization expands production capabilities. “Smart Village” is an automated, centrally managed and jointly managed system of the entire platform, from irrigation to tillage, harvesting, and also involves the use of the most advanced technologies and technology transfer. Integration of this system into other areas of rural infrastructure – alternative energy sources and a modern transport system - will complete the Smart Village concept.

Keywords:
Azerbaijan, smart city, smart village, project, technology, development.

Formulation of the problem. A smart city is an innovative city that introduces a set of technical solutions and organizational measures, aimed at the highest possible quality of resource management and service provision at present, in order to create sustainable favorable conditions for living and staying, business activity of current and future generations. This is not a static target state, but dynamic processes of management transformation using modern digital technologies.

A smart city has 5 key principles:

- People-oriented;

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- Comfortable and safe urban environment;
- Emphasis on economic efficiency, city economy and services;
- Manufacturability of urban infrastructure, availability of data and smart city infrastructure for all stakeholders.

A smart city can be managed by two approaches:

- An integrated approach is laid down when implementing a smart city, initially on a conceptual basis. Digitalization of infrastructure and digital transformation of management. The approach ensures the integrated functioning of the city as a single system.
- Project approach - digitalization of industry processes. The approach should provide for the possibility of further integration into a single smart city platform and digital transformation of management [1].

Advantages of an integrated approach: maximum use of existing infrastructure; multi-purpose use of sources; effective management at all levels; strategic, tactical and operational management based on real data; involving citizens in the development and management of the city; integrated functioning of the city as a unified system.

Selection and implementation of Smart City projects:

Preparatory steps.

- Audit of the state of digital infrastructure and implemented information systems.
- Assessing the demand and readiness of the population for digital services.
- Analysis of priorities, development of concepts / strategic development documents and roadmaps with detailing to the project level.
- Creation of the necessary governing bodies.

Participants in the process:

- Cities - pilots Leaders of regions.
- Representatives of regional authorities.
- City leaders and their teams. Representatives of science and business, City residents:
- Team of the integrator and its partners.

Basic conditions for the successful implementation of the Smart City project:

- Management involvement;
- Involvement of residents;
- Project management;
- Project development;
- Project promotion.
- Personal participation and control of the project by the “first person” of the region, the head of the city.
- Appointed deputy (operational management).
- Taking into account the opinions of residents when making decisions and implementing tools for their participation in city management [3].
- Development and approval of a conceptual document for the creation of a Smart City.
- Formation of project management bodies.
- Active involvement of authorities and local governments in the implementation of the project.
- Development of a launch plan, identification of funding sources.
- Ensuring the functioning of management bodies and the development of a smart city.
- Creation of a mechanism for monitoring feedback processing services.
- Regulation of processes in the Smart City, approval of smart city standards.
- Development of business models for commercialized services.
- Formation of image, favorable opinion and popularization of the Smart City.
- Informing about new opportunities, promoting services.
- Involvement of citizens in shaping the appearance of the Smart City and city management.

Analysis of recent research and publications. The purpose of the article is to analyze the measures and strategies already taken to develop the infrastructure of the liberated territories of Azerbaijan, to identify promising directions for the reconstruction of infrastructure, to consider the opportunities and problems that the state may encounter in the implementation of its goals.

The methodological basis of the study will be the work of economists from Azerbaijan, near and far abroad on the definition of the concept of infrastructure, its types and functions, legal acts on improving infrastructure of all types in Azerbaijan, as well as adopted state programs for socio-economic development. The study uses comparative economic analysis, SWOT analysis, economic-statistical and observational methods.

Therefore, **the purpose of the article** is analysis and characteristics of the state concept

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of "Smart city" and "Smart village" as a priority of the na-tional economy of Azerbaijan.

Presentation of the main material. Significant economic events in Azerbaijan and in the world that are experiencing digital transformation and the use of innovative technologies ensure sustainable economic growth. In particular, we are talking about smart cities and villages in Azerbaijan. What are the advantages of the innovative concept for the population. The concept in the form of a smart city, village or any other locality is seen in the maximum use of modern information and communication technologies for the benefit of development and for the benefit of the residents of a particular locality.

Of course, the introduction of modern technologies will allow us to use resources more economically, make life better, easier, and a certain synergistic effect will be obtained as a result of the introduction of these new technologies. In turn, these information technologies should make our lives better and easier and we should have access to all the benefits and opportunities. There is a certain point when we talk about the concepts of a smart city or village or something smart in general, in this case we must understand to what level [5].

We want to achieve this and what it will ultimately give us. Naturally, this will make the lives of our citizens easier, and naturally this will provide economic opportunities to save on possible resources that we will use, which are connected to smart systems, plus in addition to all this, we will also receive control and security, both physically and passively. That is, we will say the same about the water supply and gas systems.

Distribution of the power supply system, that is, it is controlled in the system and in houses, from houses to all infrastructure buildings. Imagine everything is controlled. Today we just take one phone and our whole life is controlled from there.

Imagine that we can run a city. Each ministry has its own situation center, which monitors the overall situation, but no matter how you integrate this into a single system, responding quickly is still a priority. I think that the concept should be prepared from this point of view.

Firstly, it will give us security, secondly, it will give us savings and, of course, in the end, our residents, all of us, comfort. If we speak from the concept of new settlers in Azerbaijan, it is somehow generally different from the concept that exists and exists in the world. Each region has its own smart village.

The approach is different, the Chinese think one way, the Americans another, in Europe it all depends on the region and what goals each country or each city has set. Then, how will the residents of this city or this village react to these innovations.

Today, even grandmothers are very good at using modern phones and quickly adapt to modern technologies. In principle, there are no general universal Concepts, even if we want to prepare a dish, three housewives will cook it differently despite the fact that they will not communicate with each other. So, if you take a specific locality, village, urban settlement, village, or as we say smart village, then first of all, of course, you need to take into account the needs and understand the level of perception of this by the population.

Their readiness for some new innovations. If we say the level of training of the population requires explanatory work, to teach some new standards to bring this region to some higher level, and then introduce some fairly serious technologies.

Maybe even some breakthrough technologies. Because you can put a spaceship in a village. They set up a spaceship, but there was no point in it. Or they installed some kind of Formula 1 car, but it needs to be controlled, so will citizens be able to manage and use these resources? This must be taken into account when forming this concept and when implementing the project [7].

Since it requires resources and time, and they can be wasted, so we must first adapt according to the needs. One can or should assume. that the population is or is not ready. One might assume that there is no need to stimulate him, to push him to some new progressive changes, but this is not so.

Of course, we must move forward, develop, and this, first of all, is the main task of the state. It must take on this responsibility for the development of the regions, for raising this standard and quality of life of the country or each point in particular. People need to be trained, this requires time and resources. Naturally, this requires support at the highest level, because without government support it will be impossible to quickly implement it.

If we stop today, for example, let's say we are not ready for this project yet. We will start in

10 years, then we will lag behind all this time. We will never enter this channel, we will not stand on those rails that already exist in the world today. And this theme is used everywhere throughout the world.

China already has entire smart cities. In fact, the entire infrastructure is practically controlled. All possible communications are controlled. It's convenient for people to live there. Elementary or trivial today we will compare. Let's take for example, someone wants to get into a Lada or we all want a good car. A safe, comfortable car equipped with modern technologies.

So why not live in such cities and in such villages. The same goes for innovation in agriculture. Apply the same technologies, integrate them in the same schools, integrate the city system. The system ends here only when the imagination and government financial support run out. It is noteworthy that today's fantasies and possibilities do not end; innovations are constantly moving forward. Our state is financially strong, I think that we will be able to handle all infrastructure projects.

Naturally, pilot projects are moving forward step by step. If we move forward and the population is interested, I think they will be grateful, because they will have a very comfortable and safe life.

From an economic point of view, the goal of rational use of resources will be achieved. For example, coronavirus has changed our normal daily lives in Azerbaijan and around the world. Let’s imagine that the Internet, which is an integral part of any city, did not provide the required volume of consumption.

In principle, without it it is probably difficult to imagine the creation of a smart city project; there would be no remote work. And remote work still allows you to involve resources in economic circulation. Remote work and station work are the face of economic efficiency.

Citizens are involved in this system; if there were no access to these communications, then, in principle, part of the population would be unaware. The economy would suffer accordingly.

A review of the communication technology index is an index that characterizes the degree of development of communication technologies in countries around the world. About more than 170 countries take part in the rating, and in particular I will give examples for Azerbaijan.

This progress is not just some numbers, they characterize the possibilities of public participation in any projects related to information and communication technologies. One of which is the smart city project. In general, we can say that Azerbaijan is showing fairly good steps of progress and is able to quickly implement these smart city goals.

All countries of the world are, in principle, progressing and gaining breadth in this direction. The goal is, first and foremost, economic convenience. All these innovations must have an economic effect. If we look at the top thirty countries in the world according to this index, they are all highly developed. They have a fairly high level of income, and it is precisely these two indicators, the level of economic development and the index of communication technologies, that interact with each other. Development in this direction is based on the fact that a smart city will ensure savings and respect for the resources of any state.

From an economic point of view, if we introduce such technologies, starting from the simplest building, village, town, city on a large scale, then progress is guaranteed. This scale allows you to save on some resources. If every house, every building is smart, then this will indicate energy efficiency, that is, we will resell excess energy resources to our neighbors and earn foreign currency [8].

System resources are not only energy resources, but also equipment that operates in an economical mode; all these systems will work on resources in terms of economy. This will also give big savings, and if you scale it up, it’s not 100 square meters, but the whole region, village, city. Naturally, this will be economical, profitable, and in addition to all this, it will provide the opportunity to open new jobs, and our youth will strive to work in this area. Naturally, this is not a one-year project.

We assume that this project will be implemented in ten years. Let’s imagine that on a city scale, on a national scale, we are constantly using new technologies. For example, agricultural growth is developed within the framework of an agricultural project.

It is necessary to consider the development of a tourist region, which means this concept of a smart city should be subordinated to tourism needs. Based on all this, we will be able to make the right project and the right benefit and make

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the right decision to provide it to the population of the region.

This "Smart City and Smart Village" system can bring enormous benefits. Access to information sources, for example, electronic libraries, will help to be the primary source, then of course he will contact the library, and if you can read, say, on an electronic medium, then you can order information through a search. If you contact the library, we can speed up or save time, since this resource certainly works. 24 hours a day.

Services in the field of medical care, contacting the doctor on duty, for example, if there is such an implementation system, it is clear that this can be done over the phone, it may be convenient to do this through some kind of video communication, video conference. Today there are already known operations that are performed remotely using modern technologies.

Will this give any effect, of course, this exchange of experience is the help of a timely and accelerated process. In principle, this could be through a system of contacting a valuable doctor, a bearer of unique knowledge, who cannot simultaneously attend 5-6 cases, but can remotely give valuable recommendations for more than 10 calls [1].

Tourist cities are cities for tourists, which is important for guides with electronic offers and, in turn, optimal and maximally informed when moving around the attractions. How to do it? Today we print a lot of booklets, but one or two good supplements about attractions are enough.

Today in Azerbaijan there are certain resources in smart technologies and ICT, which are engaged in both the public and private sectors, dealing with smart technologies, smart buildings, smart houses, which can, in principle, gather into a single team and develop a good concept for what already exists experience.

Azerbaijani companies, some even began to produce some products for smart homes and smart systems. This will create a boost to the economy, including in the field of smart devices. For example, a sensor that we are currently purchasing abroad. If we have some requests already inside, then we will do it ourselves. We will produce for our market, and then resell [5].

Young people will not have questions, we graduated from university, where should we work? Please, you graduate from university, you will have somewhere to work, because like in all these regions, competent engineers will be needed who will manage these systems. Of course, the state and business are intertwined, and only with the resources of one state can this problem or this task be solved. A simple example: in Soviet times they used coupons on the bus; today we have an electronic ticket that does not require paper. Then payments in the banking sector used to be difficult to imagine using a plastic card.

Work in this direction is already in full swing. Why was the decision made to build settlements using smart technologies and what will they look like as a result? The concept of a smart village or smart city is not so much a technological process, but rather a decision-making process. A smart city or smart village means that people who will live in these territories will make decisions every day depending on a particular problem.

A smart city or smart city implies not so much technological innovation, but rather process innovation in the sense that this real-time adoption process works quickly and efficiently. To make the life of people in these territories in a city or village as comfortable as possible.

Concept standards exist, but these standards work very individually, that is, each country has its own specifics and level of economy and this must be approached very carefully and selectively.

Azerbaijan is such a unique and original country that the development of some standards here will be completely different from what was done in the leaders of smart cities. If we look at examples of successful countries that have applied these smart city concepts, we can choose leaders [9].

The first leader was Singapore where this concept was applied, but the example of Singapore cannot be applied in a formulaic manner to Azerbaijan. Singapore is a small country, but highly technological. Korea is a second example; they also have completely different problems.

Finland, they also have their own problems. In this context, our very first task is to return our internally displaced persons to the Karabakh region. When the internally displaced persons return to Karabakh, comfortable conditions must be created so that the internally displaced persons can return to their villages. They must know that the standard of living in which they lived 30 years ago will no longer be there. They return to a completely different

atmosphere, they return to a completely different world. A smart village or smart city will again help them live comfortably and help them solve problems in real time. That is, be it some kind of smart agriculture, be it irrigation. Here the moment will be determined to solve all the work quickly and efficiently.

Here, in principle, for a person to be comfortable living in a particular area, it must first of all be cheap, that is, if I change my standard of living from one city or from one village to another, then this must cost first of all cheaper. Everything should be done faster, I shouldn't sit and wait for the Internet to be installed for me or for my electricity to turn on again. Today, in Azerbaijani villages and cities, one of the biggest problems is, first of all, an infrastructural problem, that is, if I return to smart cities or villages, I should not have any infrastructural problems.

I don't have to think about the fact that there won't be electricity tomorrow, or that there won't be light, or that I won't have water or sewerage. This problem shouldn't bother me at all. Because all these problems are solved in real time. Some problem arises tomorrow and this problem should no longer exist, that is, people who look after this entire data source solve all problems. A smart city is when certain information is supplied to one large source and people make decisions by analyzing this information. They have to make decisions and take into account what people want.

If correctly speaking, people know what they want to see, that is, initially it is necessary to conduct some kind of research. Ask people who plan to return there what they need. If there are 70% pensioners in my village, then I should understand perfectly well that I should have a high level of healthcare here.

But it makes no sense to build bars and nightclubs there. If we see that we have the majority of young people in the same village or city, then we should already build the infrastructure that will be interesting and useful for young people. If we are talking about a big city like Baku, Singapore or Helsinki, implementing a smart city system will be expensive, but will quickly pay off in the near future.

Why, because Baku is a million-dollar city, more than four million people officially live here. In this context, introducing certain smart concepts pays off. If we are talking about payback, it is not necessary. people will spend less time in the same traffic jams, people will spend less time on some particular services and, most importantly, we will gain time.

After all, if we convert this time into money, we will win big things. And if the city is small, if the population is small, then introducing some high-tech smart city concepts here in this context will somehow not be cheap, because in the end, if you build some kind of smart village for 50 people, these people will not be able to use the tools.

They will only use what is here, that is, roughly speaking, you have a mobile phone; in any case, we use a mobile phone a maximum of 85 percent. If we are building a smart village today, then first of all we need to think about the infrastructure, such as providing gas, electricity, water, so that it is no longer so much smart, but rather long-term and sustainable.

Again, the most important thing in a smart village is that the electricity was never turned off, there was Internet, gas, water and everything else all the time. But it doesn't make sense to install an intelligent traffic light, because there won't be that many cars; it doesn't make sense to install smart parking, because there won't be that many cars there. In these villages, it is possible to install smart trash cans. When the garbage chute was full, the garbage truck would come and pick up the garbage. Consider smart education in a smart city. We immediately begin to build some kind of school, although it is quite possible that there is no need to build a school, we can build something else.

If all this does not rely on online, then children in these villages can gather an online class somewhere in the city of Baku. Classes would be conducted online, such as English or mathematics and other subjects. Children and adults are adapting to distance education. If we build 5-6 smart villages, it is quite possible to build some kind of modular school there. And for teachers this means additional salary. For example, teachers from the city of Baku can conduct distance education online and give lectures on their subjects.

Green technology is necessary in order to ensure that sooner or later natural resources, oil and gas, will run out. Having such potential as Azerbaijan has windmills, solar panels, we need to work on it, the future lies with it. What smart cities and villages will be like in Karabakh - there is a lot of discussion on this topic. When we say that this is already relevant in Karabakh, many people object.

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A smart city, any object that is subject to digitalization, first of all, it must be based on a platform and on a digitized platform, which is based on a geographic information system. As soon as we digitize all the resources of a given area, that is, land, relief, landscape and underground and surface utilities, air transport, we will get it in digital format.

The master plan for the development of this area is of great importance. After we receive the master plan, the next detailed planning plans will follow. Next will be the water protection zone as a red line; in fact, step by step, this entire city can already become a standard city based on a digital map.

The very last stage that can be implemented is a geoportal that will be linked to all services and this geoportal will actually work, forming a geo-referenced one.

So they can receive all their services in this portal. Thus, the idea of a smart city is that when a person enters this portal, he receives all his services. Moreover, not only the system sees him, but he himself sees how his services and requests will be implemented.

Thus, in this system, everything that we are talking about and discussing now, let's say on Facebook, a metagalaxy, a metaverse, and so on, will be very easily implemented. Be it medicine, service based healthcare and most importantly safety and employment issues are essential. All this combined is now relevant in Karabakh.

So the construction and commissioning of roads, airports, there is infrastructure that should be based on digital maps, which will contain a master plan for the development of a given area. You need to be very active, flexible, efficient, and fast.

We can transfer the electronic services portal, smart gas and water electricity meters and meters to smart cities and villages. It was decided to build a smart city in Karabakh, because there can be a blank slate after the war, forced migrants should return to their territories. There must be an attractive idea to attract people to the place of residence.

A city is not a dead organism, but a living organism. It's like a person who lives. He is born, lives, ages, becomes younger, and is rebuilt. You need to look at the city as a person. Follow, care, love, update.

Touching upon the essence of this plan, much has been said about the fact that this approach meets global challenges. Thanks to this, the Karabakh region will turn into a center of technological investment, and the experience gained here will support the construction of "smart settlements" in other regions of the country.

In general, these plans have already received concrete outlines. During a February visit to the Fuzuli, Zangilan, Lachin and Jabrail regions liberated from occupation, President Ilham Aliyev said that "smart villages" would be created in these territories. The world's most advanced technologies will be used in urban planning and projects, and as part of the implementation of such projects, the country's top political leadership intends to attract successful global companies.

Modern technologies in the field of renewable energy sources will be used in Karabakh, high technologies will be introduced into the agricultural sector, laying the foundation for high productivity. About the concept of "smart villages", within the framework of which the liberated lands will become areas of high-tech development.

Today, master plans are being prepared for all our cities liberated from occupation, and after that restoration work will begin here. At the same time, the first "smart village" project will be implemented in the Zangilan district. Preliminary monitoring has already been carried out in this direction, and first of all, the destroyed village of Agalar will be restored.

The project will be implemented in this village according to 5 components - housing, manufacturing, social services, smart agriculture and alternative energy. The energy needs of the settlement, where it is planned to rebuild 200 houses, will be provided only by alternative energy sources.

The head of state has repeatedly said in his speeches that the liberated territories will become a "green energy" zone. Those. Today we are faced with the task of not only restoring these lands and bringing them back to life, but doing this according to the first word of science and technology within the framework of the concept of "smart city" and "smart village". I note that in the context of global economic turbulence caused by the coronavirus pandemic, the mentioned initiative of the President of Azerbaijan once again demonstrates the strength and power of our state.

What does the "smart village" concept promise us, and will these projects be profitable? Will they benefit the budget, and approximately

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how much will they cost and what will they serve?

As a result of the war, we liberated 20% of the territory of Azerbaijan from the barbaric yoke. The de-occupied part of the country is actively integrating into the economy of Azerbaijan. Here, the restoration of railways is already in full swing, the construction of new railway lines is underway, and work is underway on the short-term commissioning of two international airports.

But these and future infrastructure projects are precisely the solid foundation for forming the export potential of products that will be produced in the Karabakh region.

In turn, industrial and agricultural products will be produced using modern technologies, which will be created within the framework of the "smart village" and "smart city" concepts. Dozens of cities and towns will generate income from the service sector. What do smart villages serve? This is an interesting question. First of all, the creation of qualified jobs, since this is not just an economic project, its enormous socio-economic significance is undeniable - it will support the high level of well-being of the population of Karabakh, and it is possible to organize the closest connection between the economic reconstruction of these territories and education in the form of a self-reproducing ecosystem.

Conclusion and prospects for further research. Today, a serious transport and energy infrastructure is being created in Karabakh to create a self-reproducing ecosystem. The liberated territories have significant economic resources for this, since all obstacles on this path have been removed. Here, from scratch, the most favorable conditions for the formation of the 21st century economy are being created, and the competence and experience of the national government is a reason for optimism.

Smart villages are not an idea, but a document created on the basis of the European Union declaration on rural development in remote areas. Its main goal is to ensure access to services, especially electronic ones, and achieve sustainable development in rural areas. Is this easy to achieve?

The smart village concept is a holistic approach to the digital transformation of rural areas that will promote rural development and help reduce rural-to-urban migration. In most rural settlements, it is necessary to pay attention to solving the following issues: ensuring a rational energy supply; establishing high-quality Internet; access to digital content; increasing population literacy.

The Khakari River will be "effectively used" after the commissioning of an 8-megawatt hydroelectric power station in the village of Gulebir in Lachin district. An agreement has already been reached on the construction of some of the 12 hydroelectric power stations in the Kelbajar region. The Khudaferin and Maiden Tower hydroelectric power stations will have the greatest potential among them. In the near future, these hydroelectric power plants will be built, the generating capacity of operating these stations will be 120 megawatts.

That is, in a few years we will receive 120 megawatts from the Khudaferin and Maiden Tower stations and 120 megawatts from hydroelectric power stations in the Kelbajar and Lachin regions. A total of 240 megawatts of generating capacity. But we are talking about hydroelectric power plants with very low cost of electricity generation." The liberated lands will generally become a "green energy" zone.

Access to digital content is a complex process, starting with the idea of a product through its implementation and further delivery to the user. Anyone can create digital content of mediocre quality; today there are many programs and applications for this. These are various video editors (Windows Movie Maker, SONY Vegas Pro, Pinnacle Video, Editor JahShaka and others), services for developing e-books and animated stories (StoryBird, UtellStory, ACMI Storyboard Generator, etc.)

In addition, increasing the digital literacy of the population is of particular importance within the framework of the mentioned concepts. For example, the "smart village" project will solve the problem of digital "minorities" in the province. And since the implementation of these projects requires financial resources, it is necessary to develop a communication and marketing plan that will ensure optimal use of services in the process of transition to smart farming in cities and rural areas, as well as the development of tourism in our country.

Tourism, globally and locally, as an important economic sector, guarantees real opportunities for inclusive economic growth. The tourism sector generates foreign exchange, initiates regional development, and supports jobs in enterprises.

Tourists travel from their place of residence to their destination, and tourism organiza-

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tions undertake a range of activities aimed at satisfying various consumer needs. The growing volume and complexity of tourism services is shaping the development of the tourism industry and reinforcing the notion that tourism is a self-sustaining economic sector. Tourism is a complex phenomenon with deep social, political, cultural and economic dimensions. Unlike other sectors of the service sector, tourism is a set of categories, the development of which at any stage can only be ensured in close connection with the level of development of other sectors of the economy. The active development of the tourism industry is characterized by an annual increase in the number of tourists and an increase in the share in total production. The tourism industry is characterized by high efficiency and rapid return on investment, which significantly increases the demand for locally produced goods, improves the business environment and improves the welfare of society. In this context, tourism represents a large share of the service sector. Therefore, the tourism sector is one of the priorities of the country's economic development strategy.

It should be noted that promising tourist destinations often start with a low level of infrastructure and negative attitudes from consumers who associate the area with a non-tourist area. In general, providing products to tourism destinations is not an easy task as there are both tangible and intangible aspects. For example, the placement of comfortable and affordable hotels, a high level of service, a sufficient number of private and public transport, parking spaces for them, the attractiveness of residential areas and clean natural ecology, the friendliness of local residents, the presence of various tourist attractions, cultural events, national traditions, etc. further, to satisfy human needs in detail.

The tourism industry, being one of the largest industries in the world and having enormous economic potential, contributes to the progressive development of the country. In Azerbaijan, the tourism sector is seen as a way to further develop the country's non-oil sector. Given the rise in oil prices and the need to generate additional income by attracting more tourists to our country, the state strategy regarding tourism has become a priority. The legal framework for the tourism sector in Azerbaijan was formed on June 27, 1999, when the Law "On Tourism" was adopted. This law defined the foundations of state policy and was aimed at defining the principles for the use of tourism resources to ensure effective socio-economic development of the Republic of Azerbaijan. Based on this and taking into account the great potential of the country, many local and international companies and organizations have focused on new projects and programs to promote Azerbaijan as a tourist destination.

The World Travel and Tourism Council has released a publication entitled "The Economic Impact of Travel and Tourism on the Azerbaijani Economy in 2018." In it they presented an overview of recent years, as well as forecasts for the next 10 years. One of the strategic goals of Azerbaijan's new marketing campaign "Look in a New Way" is to double the incoming tourist flow by 2023. The new tourism brand is combined with wider exposure, including Azerbaijan's participation in the international exhibition Excel London, organized by England. In the future, Germany, Russia, UAE, Saudi Arabia, India, China, UK, Korea, France are designated as centers for promoting the Look Again campaign. Presenting Azerbaijan's tourism brand at the international level will help increase the flow of tourists from these countries and support the ongoing creation of Azerbaijan's tourism brand.

It is very important to note the great role played by such a bright personality as the famous Norwegian travel scientist Thor Heyerdahl in promoting the tourism potential of Azerbaijan. He visited Azerbaijan several times, where he shocked everyone with the sensational results of his research on rock paintings in Gobustan. He called the Gobustan Nature Reserve an open-air museum, and after studying the rock paintings there, he came to the conclusion that Norwegians and Azerbaijanis have family ties. He discovered the similarity of the ships depicted on the stones with the ships used by the Vikings, and came to the conclusion that it was from here that the Vikings began their journey to the west. Mountain tours, so-called trekking tours, are gaining great popularity around the world. Few people know that Azerbaijan, thanks to its topography, where the amplitude of levels is quite large, will be able to offer potential travelers a variety of routes. At the same time, most routes will be suitable even for novice tourists. However, in the places where they are laid, there are many "blank spots" where everyone will feel like a pioneer.

The travel and tourism industry plays an important role in the economies of most countries around the world. For developing countries, tourism is becoming increasingly important. Therefore, most countries, in order to increase

their gold and foreign exchange reserves, concentrate their efforts on attracting foreign tourists. The tourism sector in Azerbaijan is developing day by day, becoming one of the important factors of the economy. New pathways for tourism development open up opportunities for cooperation between the public and private sectors in the development of tourism products and tourism infrastructure; between tourism business sectors and educational institutions providing tourism training programs in developing human resources to improve service levels in the tourism industry. The development of the tourism sector is one of the effective ways to strengthen the macroeconomics of Azerbaijan.

Azerbaijan is rich in nature, flora and fauna, mountains, rivers, lakes, sea, forests, mud volcanoes, deep gorges, waterfalls, numerous sources of minerals, ancient architecture, unique national culture, national cuisine, ancient monuments.

Tourism is a source of both direct and indirect state income and stimulates the development of various industries not directly related to the tourism infrastructure, but due to the multiplier effect.

Thus, the legislative framework and ongoing activities at the present stage create favorable conditions for the development of tourism in Azerbaijan. This sector is becoming an important factor in creating additional jobs, accelerating the development of road and hotel construction, stimulating the production of all types of vehicles and promoting the country's national culture.

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