The key direction in the formation of a “smart” city is its spatial development. The principles of accessibility, openness and comfort of people are widely recognized in the field of urban planning.

The state has incurred the costs of building infrastructure and social facilities - roads, kindergartens, schools and polyclinics. All these resources, first of all - intellectual ones.

**Economy of Smart-City**

The most striking projects of recent years are Skolkovo, Innopolis and SMART City Kazan. It is noteworthy that two of the most ambitious projects at the all-Russian scale are in Tatarstan at once.

1. Introduction

**Abstract**

In the process of creating and developing a “Smart-City,” the important role is played by the organization of a qualitative innovation breakthrough, implemented and applied on the special economic zones and special economic zones. The need for the qualitative innovation breakthrough is due to the fact that the main trend of modernization of productive forces and productive capacity of the economy is the development of the field of innovation and application of a special economic zone.

**Table 1:** Business and social infrastructure ZET TLZ Depots

<table>
<thead>
<tr>
<th>Area (sq.m)</th>
<th>Description</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>40004</td>
<td>Educational, infinitesimal centre</td>
<td>Educate</td>
</tr>
<tr>
<td></td>
<td>Environmental high school</td>
<td>ECO</td>
</tr>
<tr>
<td>31599</td>
<td>School of the future</td>
<td>Infinitesimal centre</td>
</tr>
<tr>
<td>12300</td>
<td>Community of the future</td>
<td>Community</td>
</tr>
<tr>
<td>5760</td>
<td>Panoramic et al.</td>
<td>Panoramic</td>
</tr>
</tbody>
</table>

**Keywords:** Smart-City, Intellectual Property, Technology
SMART City Kazan is able to transform Kazan, the capital of Tatarstan, into a full-fledged international business center with modern and comfortable conditions for life, work and leisure. Trends of smart cities in Russia show the desire to create an attractive investment environment with the drivers of economic growth. [7]

The project of development of the green city SMART City Kazan is one of the first examples of holistic territory planning in Russia in accordance with the concept of "smart city":
- population: ~ 58 800
- projected annual tourist flow: 337,000;
- Jobs: ~ 39,000;
- housing units: 16,620;
- Total construction area (GFA): 7 million sq.m.

SMART City Kazan is positioned as a platform for attracting investments in four major economic clusters, which should become economic drivers for the Republic of Tatarstan (Fig. 1, table 2).

**Table 2: Examples of the implementation of "smart cities" in Russia**

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Initial Situation</th>
<th>Results</th>
<th>Smart Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innopolis</td>
<td>Realized &quot;from scratch&quot; innovative IT science city for IT professionals and companies</td>
<td>1. City for the comfortable work and residence of IT professionals 2. 1 Federal university 3. Special economic zone of technical-innovative type</td>
<td>1. Extensive engineering, municipal and road infrastructure 2. Unified management system of housing and communal services, based on energy-efficient technologies and informatization of processes</td>
</tr>
<tr>
<td>SMART-city</td>
<td>Creation of a new urban space for the development of business, educational and research activities with a view to developing promising sectors of the economy of Tatarstan</td>
<td>1. The social and business center 2. Special economic zone 3. Center for Education and Science</td>
<td>1. Online monitoring of resources 2. Use of storm water 3. Coordination and integration of traffic flows 4. Information tabloids at stops</td>
</tr>
</tbody>
</table>

The Zone of the Public Business Center will become the international business platform of the SMART City Kazan and Bolshoy Kazan project. The main business zone of SMART City Kazan will continue the tradition of the commercial center of Kazan and will become a center for the development of local enterprises and international companies operating in the region. [17]

The social and economic driver of the public and business center will be the International Exhibition and Conference Center with a total area of 42,000 square meters. m. The total area of the territory of business activity will be 800,000 square meters. m. of commercial real estate of classes A and B. In addition to the exhibition center, it is proposed to open a hotel, shopping centers, apartments and offices. International Airport "Kazan" and the existing Aeroexpress line allow to integrate the projects of a transit hotel, shopping center, business park and other objects of the region with a stopping platform for sustainable development of the city.

The far-sighted planning of SMART City Kazan and the placement of the center of education and science in it will allow Tatarstan to become one of the foremost regions of Russia, where students and young specialists carry on their way.

On the territory of a total area of 156,000 square meters. There will be a university campus, capable of accommodating 10,000 students.

In addition to scientific and educational institutions, there will be a sports arena, a medical center, a shopping center, a residential quarter and scientific technology parks for 5,000 jobs.

A special economic zone is a "green light" for the development of high-tech production and applied science. SEZ will provide companies engaged in Russia and CIS with tax regulations and other preferences.

SMART City Kazan is designed taking into account the preservation of the natural landscape. In addition, new "green zones" will be created, united by a kind of "green" belts. SMART City Kazan is at the forefront of the world trends: creating conditions for sustainable development of territories and the emergence of "smart" cities.

The Republic of Tatarstan, one of the most economically developed and largest regions of Russia, is open to the experience and latest trends of the world economy.

Situated in the center of business activity, SMART City Kazan will support the status of the region as a new center of international business. Given Russia’s important role in the global economy, SMART City Kazan will strengthen Tatarstan’s position by establishing itself as an international business center and a center for the development of education.

This will be the contribution of the SMART City Kazan project to the world trend of sustainable development, which is followed by Tatarstan. This concept presupposes the development of all countries in the world, taking into account the vital needs of the present and future generations of people. Designed in accordance with "green" standards, SMART City Kazan will complement the ranks of such world projects as Masdar City (UAE), Songdo (South Korea), and dozens of other "smart", eco-friendly cities.

Thus, the development of SMART City Kazan corresponds to the world trend of creating innovative, sustainable city models that meet the needs of the local population. Participation in this trend will also contribute to strengthening the position of SMART City Kazan as an international center of economic growth, where creation of jobs and attraction of investments are as important as improvement and stability of the environment.

The creation of the SMART City Kazan project is integrated not only into world trends, but also into the development strategy of Tatarstan.

SMART City Kazan is part of the project for the development of Greater Kazan (total area - 7.075 sq. Km.) - an expanded territory.
that will consist of three elements: the international investment site SMART City Kazan, the satellite city of Innopolis and directly Kazan itself (Fig. 2).

SMART City Kazan is an ideal place to start projects on the Russian market and to expand the existing business. The general plan of SMART City Kazan was developed taking into account the needs of investors, developing such areas as medicine, hi-tech production, education, tourism, and services. The international investment technopolis offers more than 200 sites for investment projects and more than 5 million square meters. m. area for investing in real estate.

There is also Smart City of Nizhny Novgorod. A new residential micro district near the village of Novinki will become one of the largest projects for the integrated development of the territory (DOT), not only in the Nizhny Novgorod region, but also in the Volga Federal District.

Project data:
- the size of the construction site - 272 hectares;
- the number of inhabitants is 40,000;
- total building area - 1.7 million square meters. m;
- 75% of housing are classified as "compact class".

If we compare Smart City Kazan and Smart City Nizhny Novgorod, then there are many differences, for example, in Kazan 4 clusters, and in Nizhny Novgorod there are as many as 7 clusters. For each of the seven clusters, its theme is chosen. Accordingly, the central cluster area and public institutions located on its territory are projected. (For example, in the "Literary" cluster, a library will be located.) Around the central zone there will be a school, a kindergarten, a multi-shopping center and a sports complex, which will create a comfortable urban structure.

2. Methodology

The concept of a "smart city", for example, in management consulting for complex systems consists of such key components as: integrative model, or framework; architecture (architecture); maturity model; roadmap. But the very content of the term "smart city" is still being formed. And this does not prevent active use of these words, often in different contexts and senses. Instead of the usual adjective "smart" or "smart", smart adjectives are often used: smarter, digital, connected, information, or intellectual, intelligent).

There are three main points of view on the "smart city" problem: the scientific view, the economic (urban) view and the information technology (Table 3).

<table>
<thead>
<tr>
<th>The main signs of classification</th>
<th>Ideological dimension (what is the vision of an intelligent city?)</th>
<th>Normative measurement (where / what sphere?)</th>
<th>Technological instrumental measurement (to whom will the result of the &quot;smart city&quot; project be transferred?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The purpose of creating a &quot;smart city&quot;</td>
<td>Improving the quality of life of residents</td>
<td>Formation of a sustainable green environment for life</td>
<td>Innovative working life</td>
</tr>
<tr>
<td>Elements</td>
<td>Services</td>
<td>Infrastructure</td>
<td>Human / social capital</td>
</tr>
</tbody>
</table>

3. Results

Based on their analyzed sources, we consider it expedient to single out the next concept for Smart City: Welcome. Sufficient. Heartwarming.
WELCOME:
1) modern building materials and technologies of monolithic housing construction of business class houses;
2) lift equipment with improved operational properties;
3) ecological and energy-saving materials / equipment, which improve the comfort of living and reduce the costs of further exploitation;
4) additional conveniences for residents of the house aimed at general use (concierge room, storage rooms, wheelchair, increased common areas, individual design of entrance groups).

SUFFICIENT:
1) effective planning solutions that allow you to create a comfortable living in an apartment;
2) the possibility of redevelopment and the creation of individual designs of apartments;
3) zoning of the apartment's living space (guest and private areas, storage areas for clothes, shoes and linen);
4) increased insolation of premises;
5) ground / underground parking for vehicles;
6) children's play and sports grounds;
7) landscape design in the home territory.

HEATWARMING:
1) Internet coverage of all public places of the city;
2) the first floors of the houses are equipped with lounge zones for communicating neighbors with each other and guests;
3) a pool for use by residents designed on the sites of residential buildings (complexes), a laundry, premises for mass events (guest meetings);
4) the library zone in the residential complex;
5) medical point in the territory of the residential complex.

4. Discussion

Developed infrastructure of the national or regional economy is one of the key elements of economic development. For the first time a significant part of financial infrastructure of the economy and its impact on economic growth emerged in the work of Bagehot, W. (1873) and Schumpeter, J. A. (1911). [18, 20]. People in the "smart city" are classified according to their type: visitors or residents, and then residents by their occupation in the "smart city" - people of a free profession, employees or businessmen, etc. subdivide into a set of "communities" of city residents. [2-4, 16, 18]. The employment and interests of the "communities" form the so-called "ecosystems", under whose interests "soft infrastructures" are created to manage them. Next, a "city system" is created, which includes all the services of the city that provide services to residents and visitors (social services, transport services, etc.). And as a final link in creating a smart city, they are introduced into "solid infrastructure" - the real physical infrastructure of the city. [8-10, 12-14].

Another flat example of the "smart city" architecture can be its representation in terms of its functionality. The flat architecture of the smart city consists precisely of its stationary components, such as: "smart building" (in Russia the term "intelligent building" is popular), "smart factory", "smart house", "smart car" and "smart city infrastructure" "(Transport, electrical, etc.). [1, 5, 6, 11, 15].

5. Conclusions

The transformation of industrial cities into "smart" cities is a worldwide trend, as well as a realistic prospect for Russian cities. At the same time, the reorientation in the strategy for the development of cities, megalopolises and their agglomerations suggests a radical restructuring of the management system for the development of municipalities, including a change in priorities, standards, criteria, goals and objectives, performance indicators and efficiency. It requires a different assessment of the resource potential of the territory, new ways of achieving the set goals.

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