www.volsu.ru

DOI: https://doi.org/10.15688/jvolsu4.2026.4.19

UDC 323.174:004.8
LBC 66.3(2Рос),124+32.973.202

Submitted: 01.04.2026
Accepted: 07.07.2026

THE POTENTIAL OF AI MODELING IN OVERCOMING THE PARADOXES OF THE DEVELOPMENT OF SMALL MUNICIPALITIES OF THE RUSSIAN FEDERATION (USING THE EXAMPLE OF THE VOLGOGRAD REGION)

Kirill M. Makarenko

Volgograd State University, Volgograd, Russian Federation

Abstract. *Introduction.* The article attempts to study the potential of large language models of artificial intelligence for the formation of development plans for small municipalities in Russia in conditions of depopulation. *Methods and materials.* The theoretical and methodological basis of the research is the theory of rational choice. The empirical basis of the study was statistical data for three districts of the Volgograd region, in-depth interviews with youth representatives ($N = 9$) who moved from small municipalities of the Volgograd region to the regional center, as well as 10-year development plans generated by AI models (DeepSeek, Qwen, AlisaAI, and GigaChat) for each municipality, including SWOT analysis, project portfolios, and cost estimates. The *analysis* of the interviews made it possible to update the thesis about the rationalization of youth relocation and consolidation in a large city due to the lack of prospects for the development of the respondents' "small homeland." The key paradox is the phenomenon of "loyalty without hope," when, with a positive assessment of local administrations, young people do not believe in the future of the municipality. This reinforces the gap between municipal powers and the structural problems of the province. *Results.* AI modeling has demonstrated a high degree of differentiation of development plans depending on the types of municipality. It has been established that the feasibility of the generated strategies directly depends on how much the title projects "fall" on the regional and federal agenda. Giving the municipal center the status of a reference settlement is critically important for attracting additional investments and constructing a long-term positive "image of the future." *Funding.* The research was carried out at the expense of the grant of the Russian Science Foundation No. 25-28-03377 "Prospects of using large language models of artificial intelligence for the formation of development plans for small municipalities of the Russian Federation," https://rscf.ru/project/25-28-03377/

Key words: urban planning, management, political subjectivity, municipalities, artificial intelligence, loyalty, image of the future.

Citation. Makarenko K.M. The Potential of AI Modeling in Overcoming the Paradoxes of the Development of Small Municipalities of the Russian Federation (Using the Example of the Volgograd Region). *Vestnik Volgogradskogo gosudarstvennogo universiteta. Seriya 4. Istoriya. Regionovedenie. Mezhdunarodnye otnosheniya* [Science Journal of Volgograd State University. History. Area Studies. International Relations], 2026, vol. 31, no. 4, pp. 224-233. DOI: https://doi.org/10.15688/jvolsu4.2026.4.19

УДК 323.174:004.8
ББК 66.3(2Рос),124+32.973.202

Дата поступления статьи: 01.04.2026
Дата принятия статьи: 07.07.2026

ПОТЕНЦИАЛ ИИ-МОДЕЛИРОВАНИЯ В ПРЕОДОЛЕНИИ ПАРАДОКСОВ РАЗВИТИЯ МАЛЫХ МУНИЦИПАЛЬНЫХ ОБРАЗОВАНИЙ РОССИЙСКОЙ ФЕДЕРАЦИИ (НА ПРИМЕРЕ ВОЛГОГРАДСКОЙ ОБЛАСТИ)

Кирилл Михайлович Макаренко

Волгоградский государственный университет, г. Волгоград, Российская Федерация

© Makarenko K.M., 2026

Аннотация. *Введение.* В статье предпринята попытка изучения потенциала больших языковых моделей искусственного интеллекта для формирования планов развития малых муниципальных образований в России в условиях депопуляции. *Методы и материалы.* Теоретико-методологическую основу исследования составляет теория рационального выбора; эмпирическую базу исследования – статистические данные по трем районам Волгоградской области, глубинные интервью с представителями молодежи ($N = 9$), переехавшими из малых муниципалитетов Волгоградской области в региональный центр, а также сгенерированные ИИ-моделями (DeepSeek, Qwen, АлисаAI, GigaChat) 10-летние планы развития для каждого муниципального образования, включающие SWOT-анализ, портфели проектов и оценку их стоимости. *Анализ* интервью позволил актуализировать тезис о рационализации молодежью переезда и закрепления в крупном городе из-за отсутствия перспектив развития «малой Родины» респондентов. Ключевой парадокс – феномен «лояльности без надежды», когда при позитивной оценке местных администраций молодежь не верит в будущее муниципалитета. Это усиливает разрыв между муниципальными полномочиями и структурными проблемами провинции. *Результаты.* ИИ-моделирование продемонстрировало высокую степень дифференциации планов развития в зависимости от типов муниципалитета. Установлено, что реализуемость сгенерированных стратегий напрямую зависит от того, насколько титульные проекты «попадают» в региональную и федеральную повестку. Придание муниципальному центру статуса опорного населенного пункта критически важно для привлечения дополнительных инвестиций и конструирования долгосрочного позитивного «образа будущего». *Финансирование.* Исследование выполнено за счет гранта Российского научного фонда № 25-28-03377 «Перспективы использования больших языковых моделей искусственного интеллекта для формирования планов развития малых муниципальных образований РФ», https://rscf.ru/project/25-28-03377/

Ключевые слова: городское планирование, управление, политическая субъектность, муниципальные образования, искусственный интеллект, лояльность, образ будущего.

Цитирование. Макаренко К. М. Потенциал ИИ-моделирования в преодолении парадоксов развития малых муниципальных образований Российской Федерации (на примере Волгоградской области) // Вестник Волгоградского государственного университета. Серия 4, История. Регионоведение. Международные отношения. – 2026. – Т. 31, № 4. – С. 224–233. – (На англ. яз.). – DOI: https://doi.org/10.15688/jvolsu4.2026.4.19

Introduction. One of Russia's biggest problems is its strong territorial differentiation. Doctor of Sciences (Geography), Professor at Moscow State University N.V. Zubarevich in 2011 identified four types of Russian territories that differ in their specifics both in economic and socio-demographic terms. A special place is occupied by the periphery – small towns and villages, where a significant (38%), but showing a decreasing trend, part of Russians lives [26]. N. Zubarevich's own forecast for the future of the "Four Russias" is inclined to the gradual growth of the "first Russia" due to the relocation of the population from the rest of its parts [27]. The movement of young people, primarily to the capital and large cities is a natural desire to improve life. According to the VTsIOM survey, only 2% of young people do not plan to leave their city, and the main centers of attraction are Moscow and the Moscow region (10%), Krasnodar (8%), St. Petersburg (6%), Yekaterinburg (3%), Sochi (3%), etc. [13]. Internal migration of the population is a natural process, but at the same time it generates a number of problems of spatial development. Economist M. Sergeev noted that young people account for "the most noticeable flow of internal migration," and "the reduction of the population in rural areas and small towns reduces the chances of overcoming the depopulation of Russia" [17]. This brings to the fore one of the most important problems of modern Russia, which poses a threat to Russia's national security and its stability.

The comprehensive progress of modern Russia seems unpromising and even impossible without taking into account the modernization of the "Russia of Small Towns." At the same time, there are a number of problems that create barriers to the development of these territories: first, the personnel shortage caused by the migration of talented young people to large agglomerations, and, secondly, the digital divide, which is becoming one of the most important tasks of national development. In addition, insufficient attention is paid to priority projects for the development of small towns and municipalities. Regional development programs tend to focus on the development of the regional center, while other municipalities are on the periphery of government and public attention.

Methods and materials. The research is based on the theory of rational choice in the framework of the neo-institutional approach.

Migration of young people from small towns and municipalities is driven by a rational strategy to maximize benefits, which leads to long-term degradation of the periphery. Rationalizing the behavior of actors in the context of resource scarcity leads to more attention to AI projects that are presented as objective.

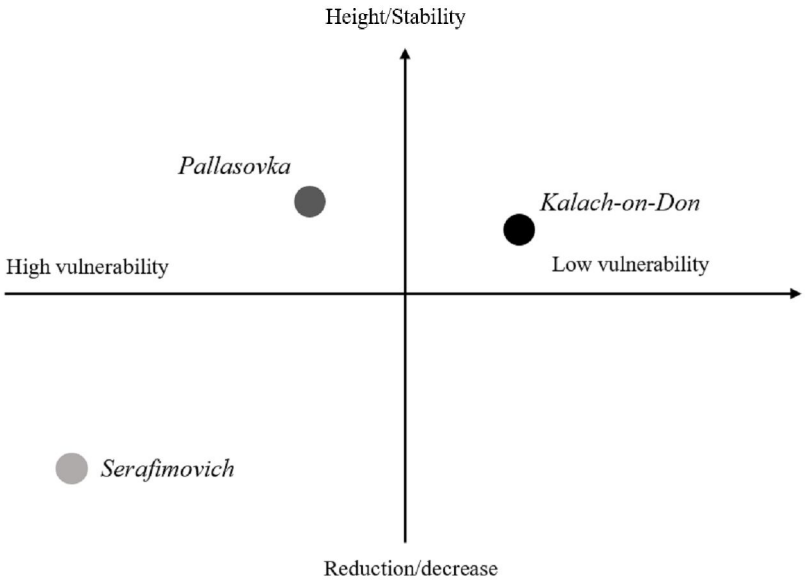
One of the scientific gaps that the research team of the grant project is trying to overcome is determining the potential of AI for analyzing and modeling political scenarios at the municipal level. The microlevel was chosen not by chance, but on the basis of a rational scientific strategy: the development of small objects is due to the influence of a smaller number of factors that can be measured and formalized (at least some of them). The transition to a higher level of the region or the country as a whole creates prospects for abstracting plans and reducing real analytical potential, at best, to domestic futurism.

The analytical framework of the study will be based on the developed classification of municipalities with two bases: the vertical axis – demographic trend (negative – positive) and the horizontal axis – vulnerability of the economy (high – low). Thus, the matrix with two bases forms four quadrants: crisis (lower left), stagnation (lower right), stable (upper left), developing (upper right).

The choice of municipalities in this study is based on an attempt to present objects with different characteristics, but within a single region, which will allow us to assess the locality factor to a greater extent, reducing the impact of climatic, cultural and other conditions that would have to be taken into account if we chose municipalities from different regions of the Russian Federation. Three municipal districts of the Volgograd Region will serve as the objects: Serafimovichsky, Kalachevsky, and Pallasovsky (see Figure). The choice of municipalities was determined both by their pronounced territorial differentiation (remoteness from the regional center, Volgograd), and by the nature of economic activity, as well as by the size and dynamics of the population.

Specific research methods included in-depth interviews with young people who previously lived in small municipalities of the Volgograd region, but currently live in Volgograd. The interview guide included several mandatory blocks: motivational, nostalgic, socio-political, and predictive. In-depth interviews were conducted with 9 informants, including both student and working youth representatives, which allowed us to form ideas about different strategies for youth migration and their further consolidation in a large city.

In addition, the article reflects the use of tools based on large language models of AI in order to create development plans for small municipalities of the Volgograd region based on the developed promt [1] and the unified reference on municipalities provided to four AI models (DeepSeek, Qwen, AlisaAI, GigaChat) [2].



Classification matrix of municipalities

The advantage of this method is that it is possible to simulate scenarios of the "image of the future" for each municipality based on an assessment of the municipality's strengths and weaknesses, threats and development opportunities (SWOT analysis). This approach makes it possible to translate hypothetical arguments about the prospects for the development of territories into verifiable scenario modeling, which corresponds to the principles of modern political science.

In this article, the "image of the future" is understood as a discursive construction in which there is a narrative about the desired trajectory of the territory's development. Operationally, the image of the future is revealed through three indicators: the source of goal setting, the range of available development alternatives, and the method of resource mobilization.

Analysis. Domestic researchers A.V. Odintsov, A.I. Shipitsin, and A.Yu. Marchenko wrote about the "centripetal migration" of young people from Russian regions [12]. A.A. Gerasimov concluded that the formation of stable gender disparities both in donor and recipient municipalities is due to different migration strategies for women and men [4, p. 92]. Researchers of the Institute of Demographic Research of the Russian Academy of Sciences O.O. Smirnov and V.A. Bezverbny noted that small cities of Russia at the present stage face a systemic set of problems of economic, social and political nature [18, pp. 65-66]. The motives of migration of young people from small towns are presented on both objective and subjective grounds. At the same time, researchers V.A. Belyaev and E.R. Kalimullina point out that psychological motives can be traced to the presence of irrational simulacra of large cities, which may prevail over real (objective) motives [1, pp. 237-238].

N.V. Mkrtchyan's article notes that the key factor of relocation for young people from small towns is educational, related to finishing school and trying to get a higher education, which is concentrated in large cities. The general, fundamental reason for the outflow of population from small cities in Russia is economic: "low incomes, a narrow labor market and other economic problems inherent in the outback" [10, p. 231]. After conducting a series of interviews, the author came to the conclusion about the hierarchy of factors that determine the outflow of the population from small towns: economic, the state of urban infrastructure, the lack of a leisure environment (multifunctional shopping centers, sports complexes, cafes, etc.) [10, p. 233].

Doctor of Economics V. B. Zotov noted that the realities of modern Russia are the development of megacities with the extinction of medium and small cities. At the same time, the author noted either the complexity of implementation or the low efficiency of existing tools of state support for the development of medium and small cities [25, p. 41]. With the mass desire of young people to move from small towns to large agglomerations, Doctor of Sociology P. Razov notes that the combination of "economic and social conditions, infrastructure development and cultural environment" can serve as a basis for preserving the local population [22].

The institutional framework for overcoming territorial differentiation in Russia is defined by the Strategy for Spatial Development of the Russian Federation adopted in 2024 for the period up to 2030 with a forecast up to 2036 [19]. The Strategy itself not only captures the existence of objective problems (high depopulation rates of small and medium-sized cities, declining infrastructure, reduced quality of human resources and, as a result, a deterioration in the quality of life of people in the province, etc.), but also offers institutional mechanisms for solving problems (formation of reference settlements, use of ICTs and AI in spatial development, etc.).

One of the key definitions in the Strategy is "a strong locality – a locality whose priority development contributes to achieving national goals and ensuring national security, including by ensuring access to education, medical care, cultural services and other needs for residents of the adjacent territory" [19]. Thus, the development potential of a small city (with a population of up to 50 thousand people) is largely determined by the possibility of becoming a "reference" and being involved in projects that are significant for the region and the country.

Territory management and development is the result of the work of many institutions and specific people. At the same time, the phenomenon of urban governance itself is undergoing significant changes, which is due to the unprecedented growth of cities and a significant improvement in the quality of life of people in the 20th and 21st centuries. Thus, E.A. Grigorieva points out

that the idea of ideal urban governance has been transformed from justice to efficiency over the past century [5]. Thus, focusing on results for the city as a whole, attracting investment, and forming long-term strategies has become the most important criterion for the quality of management.

Artificial intelligence in recent years has had a huge impact on all spheres of life. H. Kissinger and his co-authors noted that AI can radically transform the perception of reality, the process of cognition, diplomacy, and the entire international system [7]. If AI changes the forms and nature of interstate interaction, can it become a decision-making actor at the national, regional or municipal level? In this article, this issue is considered not from an ethical but from an instrumental perspective: is AI capable of helping with management, and if so, to what extent?

Despite the fact that according to VTsIOM, 52% of Russians trust artificial intelligence technologies in 2024, the attitude to the use of AI in different areas differs significantly. For example, 80% and 76% of respondents are more likely to favor the use of artificial intelligence technologies in industry and science, while the lowest level of support for AI technologies is recorded in the field of public administration – 37% [3]. Thus, public administration is perceived by respondents as a sensitive area, where the clarity and algorithmic nature of artificial intelligence may not correspond to "humanity", i.e. social orientation. Discussing the "limits of trust" in AI, journalists A. Tamarovich and A. Almamatov wrote that new technologies "will be introduced into the public administration sphere... even without the consent of voters. [...] implementation will be strictly 'top-down', although not without problems" [20].

MGIMO Rector, academician A.V. Torkunov, reflecting on the impact of digitalization and the introduction of AI in the political sphere, noted that" The result of these transformations is not just a multiplication of the number of political participants, but the emergence of fundamentally new players", including "digital corporations and the algorithms they create (formal logical rules underlying artificial intelligence) and digital media (platforms, social networks, applications, etc.)." And the key characteristic of the new political reality is "the intermediary role of digital platforms in relations between citizens and the state, networkization and hybridization of political players and functions" [21, p. 25].

In this regard, it is crucial to understand how young people themselves – a key subject and object of migration processes-perceive the opportunities and limitations of their hometown. The answer to this question allows us not only to diagnose the problem, but also to assess the potential for implementing algorithmic management tools, which Academician A.V. Torkunov wrote about.

To collect relevant data, it was decided to conduct a series of in-depth interviews with representatives of young people in the Volgograd region who moved to Volgograd from small municipalities in the region. The sample population is represented by both students and those who work in budget and commercial organizations, which allows us not only to diversify the average portrait of an informant, but also to get an idea of different motives for moving and getting a foothold in a large city. It is necessary to recognize the limitation associated with the composition of the sample population, since we excluded the representatives of young people who remained in their hometown. Forming a larger sample of informants, including those who have returned and those who have never left, can be the basis for future research.

Taking into account the fact that most of our informants were students, the phenomenon of moving "for the future" is of interest, which cannot be reduced solely to economic reasons, but also has a clear socio-political character:

I left because there are no prospects for development in the city. The city-forming plant has ceased its normal functioning since 2012. My relatives: my stepfather and grandfather-travel by car to another city every day and spend a conditional 30–40 minutes a day just to get to their workplace, because there is no work in their city (interview 2, male).

I left a hopeless place... (interview 5, male).

I moved away from stereotypes. In our city, people live as they were told in their Soviet childhood. They look at others and think what "fools" they are. I decided to leave so that I wouldn't get caught up in these negative thoughts (interview 6, female).

In the course of our interviews, we encountered a dominant reaction: the close circle – relatives and friends – of informants

reacted positively to the desire to move to a larger city, expressing sadness only at the very fact of parting with their loved one. While peers who remain in a small town are perceived by informants as those who "simply could not leave":

It wasn't a direct conversation, it was more like this... We both knew that this was true, but we didn't say it directly (interview 1, male).

The outflow of young people provokes further migration of this socio-demographic group, prompting the remaining ones to feel alienated and want to leave, so as not to experience a sense of social atomization.

The data obtained are also confirmed by current research conducted by VTsIOM, according to which the absolutization of the economic factor is erroneous. The move of young people from small towns is associated with an attempt to escape "from the oppressive atmosphere, from the feeling of a missed life." Young people run to megacities in search of interest and happiness [14]. One of our respondents noted this tendency at a "pace" that is too slow for a young person in small towns. The thirst for speed forms a strategy for further migration to cities with an even faster "pace" of life: Moscow, St. Petersburg, Krasnodar-thereby strengthening the centripetal trend of population outflow.

The migration of young people from small towns in Russia entails systemic political consequences that go far beyond demographic and economic problems. A crisis of political reproduction of local elites is forming. The most active, educated and ambitious representatives of the younger generation are leaving-precisely those who could form a talent pool for municipal authorities, local entrepreneurship and civic activism.

The massive outflow of young people, among other things, contributes to undermining the legitimacy of local authorities in the eyes of residents. If the city cannot offer prospects, it is perceived as the failure of the entire management system, which leads to an increase in political cynicism and apathy. In the long run, this creates the risk of turning small towns into "territories without a future", where there are no subjects capable of formulating and defending local interests before regional and federal authorities. As a result of youth migration, small towns lose not only people, but also their political subjectivity, becoming more dependent on the decisions of the regional and/or federal center.

One of the most interesting details was the loyalty and positive attitude of some informants to the local authorities, while completely disbelieving in the "bright future" of the small Motherland.

With the arrival of the new administration and its team, it really began to change [for the better] (interview 1, male).

The merit of the head is that you can see where the money is going. All this landscaping: the embankment, parks – everything was done with her. Previously, money was also allocated, but no one understood where it was going. But the city has no positive future. There is no place to work, everyone is leaving, the city is getting old, and young people only come to visit (interview 6, female).

These statements indicate an important discrepancy: the loyalty of informants is directed not at the institution of local government, but at specific individuals ("new administration," "head"). This allows us to talk about personalized trust while maintaining institutional skepticism. Instrumental effectiveness (progress in improvement) translates into personal support for the head, but not into institutional legitimacy in general. This is precisely the paradox: people see improvements, but do not associate them with the long-term prospects for the development of the municipality.

Despite the small volume of interviews conducted, we can draw a primary conclusion about the phenomenon of "local loyalty without hope." The thesis requires additional verification on a broader sample of respondents. At this stage of the study, we can note that the essence of the phenomenon lies in the fact that no informant, even those who speak positively about the activities of local authorities, is ready to return to their small Homeland in the long term. Against this background, it is almost paradoxical to read the statement of the respondent (who noted the importance of "tempo") about the possibility of moving back to his village for a permanent life:

Only if you want a calm, measured life. Only in this version (interview 1, male).

The problem of the "image of the future" is one of the most urgent in modern Russian political science. In 2025 alone, according to Elibrary.ru there were 2,442 publications devoted to this issue [15]. In this context, reflections and results of empirical research are most represented at the national level, or at the level of large cities, while small municipalities remain on the periphery of scientific attention. The lack of an image of the future for a small city creates a lack of prospects, which, as we saw during the interviews, is a key trigger for moving young people. Our research interest was focused on the question of whether the image of the future for a particular municipality can be constructed by large AI language models.

The spatial development strategy of the Russian Federation establishes two principles that are relevant for our research: reliance on a digital platform for analyzing territories and a differentiated approach to their development [19]. These provisions justify the need for data collection and legitimize the use of AI modeling as a tool that can implement the claimed differentiated approach in practice.

It should be noted that the prospects for using AI in current political tasks have already been reflected in publications [9; 11]. A. Demekhina and Y. Milshina note that in recent years, artificial intelligence plays "a key role in shaping and stimulating urban development" [2]. At the same time, AI should not be perceived as a universal tool, which is due, among other things, to its political bias [23; 24].

The question of the potential of using AI to form plans for the development of a small city caused a positive but balanced reaction from informants:

I think we can [use AI], because we already know examples where artificial intelligence helps doctors make diagnoses and allows us to optimize paperwork. This is quite possible if you write the right promt (interview 4, female).

I think it can be used as an idea-making tool, but it must pass a serious and extensive analysis by a living person who would check whether it is adequate (interview 2, male).

The political science perspective of the study is also justified by the question of the potential presentation of such a project and its subsequent implementation. If in the structure of political power of small cities in Russia, the dominant position is usually occupied by the heads of city administrations (at the same time, as HSE Professor V.G. Ledyaev notes in his research, leadership in cities was determined not only by the position in the formal power structure, but also

Summary table of results of AI design of development plans for small municipalities of the Volgograd region

Criterion	Serafimovichsky district	Kalachevsky district	Pallasovsky district
Type of municipality	Agricultural-peripheral with tourist potential	Industrial-agricultural suburb	Border resource enclave
Total investment	160–1100 million rubles	1.95–2.7 billion rubles	650 million – 3.4 billion rubles
Key areas of development	Agribusiness, tourism, comfortable environment	Industry, logistics, agribusiness	Agro-processing, renewable energy, youth policy
Tourism potential	Development of Cossack tourism	Suburban and river tourism	Ethnotourism, steppe routes
Unique projects	Agrotechnopark, digital village	Industrial park, yacht port	Wind farm, mobile social hub
Demographic goals	Population stabilization	Growth population	Growth
Target indicators salaries	60–65 thousand rubles	78 thousand rubles	70 thousand rubles
Creating jobs	150–500	400–1500	350–1200
Best	Qwen (low-density accounting, mobile services)	DeepSeek (working out the industrial block)	Qwen (integrated approach to youth)
Key risks	Population outflow	Overheating from large-scale projects	Difficulty retaining young
People funding	Federal programs	PPP grants, infrastructure loans	Private investment, national projects

by the personal qualities of the head of administration, the ability to build constructive relationships including regional ones) [8], this does not mean that there are no potential conflicts [6] with other elite groups, businesses, professional communities, and citizens. The more likely the generated plan is to be implemented, the more understandable the benefits it brings to the regional and federal levels, so this item should be included in the promt. Thus, for municipalities of the Volgograd Region, priorities for the development of logistics infrastructure, including the region's participation in the implementation of the North-South transport corridor, as well as focusing on the agro-industrial sector as one of the key drivers of economic growth are becoming priorities.

At this stage of the grant research implementation, we conducted the first generation of municipal development plans in two Russian (AlisaAI, GigaChat) and two Chinese (DeepSeek, Qwen) large language models. The first iteration of promt resulted in a 10-year development plan for three municipalities in the Volgograd Region. The result is presented in a summary table.

The differences in the proposed strategies [3], in our opinion, can be explained not only by the quality of the software, but also by the features of the training data and the architecture of AI models. The Chinese models DeepSeek and Qwen were probably trained on datasets where the task of spatial planning and demographic regulation was prioritized. This may explain their increased sensitivity to data on population density and the proportion of young people. Russian models (AlisaAI and GigaChat), in turn, demonstrate a more universal, but template-based approach to planning with an emphasis on large-scale infrastructure solutions. A comparative analysis of AI-generated development plans directly shows that the tools of large language models do not just provide "objective" recommendations, but also help to capture the political nature of development, when different types of municipalities require fundamentally different strategies for interaction between government, business and society.

Thus, the analysis of the presented strategies for the development of municipalities in the Volgograd region allows us not only to determine the potential positive image of the future, which is aimed at stabilization and demographic growth, but also to identify a set of "growth points" that can serve as drivers of economic development. The problem is acquiring on a pronounced political character, as development plans are being integrated into key projects of the region and the federal center, turning municipalities into strong points for implementing large-scale tasks. There is a growing demand for heads of administrations who are able to build strong communication strategies at both the horizontal and vertical levels.

A potential limitation of the method used is that the generated results change when new variables are added (or reduced). The more open and verifiable data we provide to a large language model, the more objective the planning will be. This sets not only the task of updating data for the researcher, but also a broader task of creating databases, updating existing data at the state, regional, and municipal levels.

Results. The result of the study was the realization that the key problem of small towns lies not so much in the economic or infrastructural plane, but in the sphere of political subjectivity. The phenomenon of "loyalty without hope" recorded during in-depth interviews reflects the presence of a systemic crisis in Russia's peripheral development, when residents (especially young people) positively assess the work of local authorities on landscaping, but do not see a real opportunity for long-term improvement of the situation. A comparative analysis of AI-generated strategies has shown that the quality of the plan directly depends on the ability of the model to take into account the unique parameters of the territory. At the same time, AI remains a tool (and not a decision-making subject) that allows one to show more clearly not only the strengths and weaknesses of municipalities, but also identify threats that provoke political struggle at different levels.

In a broader context, the results obtained indicate a fundamental limitation of the technocratic approach to territorial management. Effectiveness is not the same as legitimacy. The formation of a positive "image of the future" is connected with the political subjectivity of local authorities: the ability to impose one's will on the region, the ability to reorient social and material resources for the development of small territories. The lack of a clear and understandable "image of the future" for residents will contribute to the further outflow of the most active part of the population, and the province will continue to decline.

AI modeling generates alternative scenarios of development, expands the range of available solutions and shows possible trajectories, but does not overcome the paradox of "loyalty without hope." It creates cognitive and communicative prerequisites for conscious choice. The key condition for overcoming the paradox remains the ability of local authorities to mobilize resources to create a positive "image of the future," where plans generated by artificial intelligence can be an additional positive reinforcement. AI technologies help to diagnose problems and design development, but they are not able to solve issues of institutional distrust.

NOTES

[1] The applications are posted on the page of the Russian Science Foundation research Project No. 25-28-03377 on the website of Volgograd State University [16]. Appendix 1. Developed by the PROMT research team for the formation of development plans for small municipalities.

[2] Appendix 2. Statistical information on small municipalities in the framework of the first iteration of the study [16].

[3] Appendix 3. Summary table of the results of the formation of development plans for small municipalities based on the work of large language models (DeepSeek, Qwen, AlisaAI, GigaChat) [16].

REFERENCES

1. Belyaev V.A., Kalimullina E.R. Mezhpokolennaya mobilnost iz malykh gorodov: realnye motivy i simulyakry [Intergenerational Mobility from Small Towns: Real Motives and Simulacra]. *Vestnik ekonomiki, prava i sotsiologii*, 2017, no. 4, pp. 233-238.

2. Demekhina A., Milshina Y. Artificial Intelligence for Urban Planning and Building Smart Cities. Thokchom B., Kaur R., Singh P., Qiu P., eds. *Artificial Intelligence Enabled Real Time Environmental Monitoring*. Singapore, Springer, 2026. DOI: https://doi.org/10.1007/978-981-95-3767-9_12

3. Doverie k II [Trust in AI]. *VTsIOM*, 2024, Dec. 24. URL: https://wciom.ru/analytical-reviews/analiticheskii-obzor/doverie-k-ii

4. Gerasimov A.A. Sootnoshenie polov vo vnutriregionalnoy migratsii v Rossii: prostranstvennaya i vozrastnaya differentsiatsiya [Sex Ratio in Intra-Regional Migration in Russia: Spatial and Age Differentiation]. *Demograficheskoe obozrenie*, 2022, vol. 9, no. 1, pp. 91-107.

5. Grigorieva E.A. Ot spravedlivosti k effektivnosti: transformatsiya predstavleniy ob idealnom gorodskom upravlenii [From Justice to Efficiency: The Transformation of Ideas About Ideal Urban Governance]. *Monitoring obshchestvennogo mneniya: Ekonomicheskie i sotsialnye peremeny*, 2025, no. 5, pp. 115-138.

6. Ivanov O.B. *Konflikty bolshogo goroda* [Conflicts of a Big City]. Moscow, Avtor Publ., 2022. 131 p.

7. Kissinger H., Schmidt E., Mundie K. *Genezis: Iskusstvenny intellekt, nadezhda i dusha chelovechestva* [Genesis: Artificial Intelligence, Hope, and the Human Spirit]. Saint Petersburg, Piter Publ., 2025. 256 p.

8. Ledyaev V.G. *Vlast v malom rossiyskom gorode* [Power in a Small Russian Town]. Moscow, HSE Publ., 2017. 270 p.

9. Li B., Haider S., Callison-Burch C. This Land Is Your, My Land: Evaluating Geopolitical Bias in Language Models Through Territorial Disputes. *Proceedings of the 2024 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL 2024)*, 2024, pp. 3855-3871. DOI: https://doi.org/10.18653/v1/2024.naacl-long.213

10. Mkrtchyan N.V. Migratsiya molodezhi iz malykh gorodov Rossii [Migration of Youth from Small Towns in Russia]. *Monitoring obshchestvennogo mneniya: Ekonomicheskie i sotsialnye peremeny*, 2017, no. 1, pp. 225-242.

11. Mukhametov D.R. Politicheskiy vayb-marketing: vozmozhnosti iskusstvennogo intellekta dlya prodvizheniya obraza budushchego [Political Vibe-Marketing: Possibilities of Artificial Intelligence for Promotion of Image of the Future]. *Izvestiya Tulskogo gosudarstvennogo universiteta. Gumanitarnye nauki*, 2025, no. 3, pp. 27-33. DOI: https://doi.org/10.24412/2071-6141-2025-3-27-33

12. Odintsov A.V., Shipitsin A.I., Marchenko A.Yu. Tsentrostremitelnaya migratsiya molodezhi iz rossiyskoy provintsii: prichiny i tendentsii (na primere Volgogradskoy oblasti) [Centripetal Migration of Young People from the Russian Province: Causes and Trends (On the Example of Volgograd Region)]. *Monitoring obshchestvennogo mneniya: Ekonomicheskie i sotsialnye peremeny*, 2020, no. 3, pp. 335-354. DOI: https://doi.org/10.14515/monitoring.2020.3.788

13. Okhota k peremene mest [Desire for Change of Scenery]. *VTsIOM*, 2024, Mar. 26. URL: https://wciom.ru/analytical-reviews/analiticheskii-obzor/okhota-k-peremene-mest

14. Poteryana svyaz s budushchim. Pochemu lyudi pokidayut malye goroda? [Lost Connection with the Future. Why Do People Leave Small Towns?]. *Analiticheskiy tsentr VTsIOM*, 2026, Jan. 20. URL: https://wciom.ru/expertise/poterjana-svjaz-s-budushchim-pochemu-ljudi-pokidajut-malye-goroda

15. *Rezultaty rasshirennogo poiska po zaprosu «obraz budushchego» v nauchnoy biblioteke Elibrary.ru* [Results of an Advanced Search for the Query "Image of the Future" in Elibrary.ru]. URL: https://elibrary.ru

16. *Russian Science Foundation Research Project No. 25-28-03377 on the Website of Volgograd State University.* URL: https://volsu.ru/struct/institutes/iimost/noc_multivariate_socio-political_space/grant-rfn-25-28-03377.php

17. Sergeev M. Pereezd molodezhi v krupnye goroda ukhudshaet demograficheskie perspektivy [Relocation of Young People to Large Cities Worsens Demographic Prospects]. *Nezavisimaya gazeta*, 2024, Mar. 27. URL: https://www.ng.ru/economics/2024-03-27/4_8980_mobility.html

18. Smirnov O.O., Bezverbny V.A. Potentsial razvitiya sektorov ekonomiki malykh gorodov Rossii: sovremennye tendentsii [Development Potential of Economic Sectors in Small Russian Towns: Current Trends]. *Sotsium i vlast*, 2022, no. 1 (91), pp. 65-77.

19. *Strategiya prostranstvennogo razvitiya Rossiyskoy Federatsii na period do 2030 goda s prognozom do 2036 goda* [Strategy for Spatial Development of the Russian Federation for the Period up to 2030 with a Forecast up to 2036]. URL: https://www.economy.gov.ru/material/file/download/3b8e3a39329ce7949978d271195fdb6d/strategiya_prostranstvennogo_razvitiya_rf_na_period_do_2030_goda_s_prognozom_do_2036_goda.pdf

20. Tamarovich A., Almamatov A. Tekhnokratiya vmesto tsennostey: chem opasno vnedrenie II v upravlenie gosudarstvom [Technocracy Instead of Values: Why the Introduction of AI into Public Administration Is Dangerous]. *Forbes*, 2025, Apr. 14. URL: https://www.forbes.ru/mneniya/534689-tehnokratia-vmesto-cennostej-cem-opasno-vnedrenie-ii-v-upravlenie-gosudarstvom

21. Torkunov A.V. Tsifrovaya transformatsiya i iskusstvenny intellekt v preobrazovanii politicheskogo mira [Digital Transformation and Artificial Intelligence in the Transformation of the Political World]. *Polis. Politicheskie issledovaniya* [Polis. Political Studies], 2025, no. 5, pp. 24-39.

22. Ustranit effekt glukhoy provintsii: Sotsiolog Razov rasskazal o razvitii malykh gorodov Rossii [Eliminate the Backwater Effect: Sociologist Razov Spoke About the Development of Small Towns in Russia]. *Rossiyskaya gazeta*, 2025, Sept. 25. URL: https://rg.ru/2025/09/25/delo-za-malym.html

23. Westwood S.J., Grimmer J., Hall A.B. *Measuring Perceived Slant in Large Language Models Through User Evaluations. Stanford Graduate School of Business Working Paper No. 4262*, 2025. 90 p.

24. Zinovieva E.S., Trapeznikov V.P. Mezhdunarodno-politicheskaya predvzyatost bolshikh yazykovykh modeley: kriticheskiy diskurs-analiz narrativov ChatGPT, LLaMA, Gemini i DeepSeek [International Political Bias in Large Language Models: A Critical Discourse Analysis of Narratives in ChatGPT, LLaMA, Gemini, and DeepSeek]. *Polis. Politicheskie issledovaniya* [Polis. Political Studies], 2026, no. 1, pp. 157-177. DOI: https://doi.org/10.17976/jpps/2026.01.11

25. Zotov V.B. Razvitie i ugasanie rossiyskikh gorodov: prichiny i vozmozhnye resheniya [Development and Decline of Russian Cities: Causes and Possible Solutions]. *Vestnik universiteta*, 2023, no. 2, pp. 41-49.

26. Zubarevich N. Chetyre Rossii [Four Russias]. *Vedomosti*, 2011, Dec. 30. URL: https://www.vedomosti.ru/opinion/articles/2011/12/30/chetyre_rossii

27. Zubarevich N. O tom, kakoe budushchee zhdet "chetyre Rossii" [On the Future of the "Four Russias"]. *RBK Trendy*. URL: https://trends.rbc.ru/trends/social/64e30dd89a7947b8f0158fe1

Information About the Author

Kirill M. Makarenko, Candidate of Sciences (Politics), Associate Professor, Senior Researcher, Department of Russian Statehood, Sociology and Political Sciences, Volgograd State University, Prosp. Universitetsky, 100, 400062 Volgograd, Russian Federation, makarenko_km@volsu.ru, https://orcid.org/0000-0002-1161-5719

Информация об авторе

Кирилл Михайлович Макаренко, кандидат политических наук, доцент, старший научный сотрудник кафедры российской государственности, социологических и политических наук, Волгоградский государственный университет, просп. Университетский, 100, 400062 г. Волгоград, Российская Федерация, makarenko_km@volsu.ru, https://orcid.org/0000-0002-1161-5719