Decision support system for assessing the economic development potential of a territorial community

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Abstract

The article studies and analyses factors that influence formation of the economic potential of a territorial community. In order to partially automate the decision-making process of assessing the economic potential of a territorial community, and given the complexity of such a process, a decision support system is proposed that allows taking into account all available factors, grouping them according to the degree of influence on the assessment of economic potential, providing a conclusion on the sufficiency or insufficiency of information for assessing the potential of economic development, and making decisions to assess the potential of economic development of a territorial community.

Keywords

economic potential, territorial community, decision support system, information sufficiency

1. Introduction

The economic potential is the basis for ensuring the competitiveness of the territory, systemic, balanced local economic development, improving the welfare of the residents of the territorial community, etc. The process of forming and assessing the economic potential of a territorial community in terms of all its elements is extremely complex. It is necessary to take into account the influence of numerous factors that are in a state of constant movement and imbalance under changing environmental conditions. Given the complexity of such a process, it is advisable to use decision support systems that allow taking into account all available factors, grouping them according to the degree of influence on the

assessment of economic potential, providing a conclusion on the sufficiency or insufficiency of information for assessing the economic development potential, and making decisions to assess the economic development potential of a territorial community.

Decision-making is an important process in various subject areas, as the cost of human error is quite high, and failure to take into account all factors leads to erroneous decisions [1]. To date, Ukraine has not developed any decision support systems for assessing the economic development potential of territorial communities. All processes of formation and assessment are carried out manually using SWOT analysis. The results are also evaluated manually, which can lead to unreliable and sometimes inaccurate estimates, as the economic environment is quite volatile under the influence of external factors. If new factors affecting the economic potential change or emerge, the entire process of building a SWOT matrix needs to be started anew, as the conclusion needs to be formed anew. All this leads to an increased workload for employees and additional time and resources. In addition, unreliable assessment of the economic development potential of territorial communities can lead to significant economic losses, as stakeholders may decide, based on the proposed assessments, to finance an unpromising community or not pay enough attention to strengthening certain factors of development of a promising community.

The task of providing automated decision-making support in this area is becoming increasingly important as the information load on employees who form and study the factors of economic potential increases.

Let us consider the existing decision support systems for economic development. Let us consider the existing decision support systems for economic development.

In work [2], the author describes modern information and analytical systems for managing the social and economic development of territorial communities. They allow visualising and analysing spatial data such as land use, infrastructure and environmental conditions. With the help of such systems, local authorities can make informed decisions about urban planning, resource allocation and disaster preparedness, thus contributing to the overall well-being of the community. These are partial solutions that do not solve the problem of forming and assessing the economic development potential of a territorial community.

In paper [3], the authors considered the construction of artificial intelligent systems for environmental forecasting in environmental management decision support systems, which contributes to ensuring the environmental safety of natural and economic systems, and provides a set of recommendations for effective environmental and economic management. The procedure of environmental forecasting should be used in emergency, non-standard, extraordinary emergency and catastrophic environmental situations. The authors note that the results obtained can be used in subsystems of environmental monitoring of technogenically hazardous facilities whose operation is associated with emissions of pollutants into the environment.

In paper [4], the systematic literature review technique is used to survey thirteen representative decision support systems, including their applications for agricultural mission planning, water resources management, climate change adaptation, and food waste control. Each decision support system is analyzed under a systematic manner. A comprehensive evaluation is conducted from the aspects of interoperability, scalability,

accessibility, usability, etc. Based on the evaluation result, upcoming challenges are detected and summarized, suggesting the development trends and demonstrating potential improvements for future research.

The authors of the paper [5] analyzes the current challenges faced by domestic entrepreneurship and characterizes the essence of a management decision in the field of foreign economic activity. The characterization of information needs in the formation of management decisions in the processes of foreign economic activity of enterprises is given. The article characterizes the key approaches to determining the effectiveness of information support for decision-making methods in the context of foreign economic activity and their characteristics. The authors propose to consider the effectiveness of information support of decision-making methods in the context of foreign economic activity in the context of the entire management system.

In [6] the authors examine decision-making in public administration. The study analyzes the impact of good governance on the quality of public management decision-making. The results of the study show that good governance has a significant positive impact on the quality of decision-making in public administration.

The author of the paper [7] considers the decision support system in the tasks of financial analysis. The paper investigates a computer information system used to support various activities in decision-making in situations where it is impossible or undesirable to have an automatic system that fully performs the entire decision-making process.

The authors of [8] propose a two-stage decision support system to improve the quality of tourism logistics and public transportation services. First, using mixed methods of research based on quantitative and qualitative analysis, the factors that influence the level of satisfaction and choice of destinations by tourists are studied. Further, transportation services and routes are analyzed by modeling the traveling salesman's problem in order to improve current services based on the data collected in the first stage. The application of the proposed approaches with minimized travel distances helps to improve planning decisions in an integrated manner.

The literature review showed that there are currently no decision support systems for assessing the economic development potential of territorial communities []

Therefore, given the lack of specialised decision support systems for assessing the economic development potential of territorial communities, the urgent task is to develop a decision support system that allows taking into account all available factors, grouping them according to the degree of influence on the assessment of economic potential, providing a conclusion on the sufficiency or insufficiency of information for assessing the economic development potential, and making decisions to assess the economic development potential of a territorial community. This paper is devoted to solving this problem.

2. Research of the subject area

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To support decision-making, it is necessary to study the subject area, as well as to systematise the factors of formation and realisation of the economic potential of a territorial community and determine the level and nature of their influence.

In the scientific literature, there are several approaches to interpreting the content of economic potential, namely:

- systemic (this approach studies the capabilities and reserves of the territorial community as an open socio-economic system);
- reproductive (this approach involves consideration of the potential from the perspective of the structure of budget revenues and their growth rates);
- resource (allows structuring the potential in terms of available resources and potential opportunities for their use) [9].

In our opinion, the most holistic view of the essence of economic potential can be obtained through a systematic approach that explores the following aspects of it [9]:

1. elemental - identifying the quantitative and qualitative structure of the potential;
2. structural - determination of connections and interdependencies between the elements of the potential;
3. functional - identification of the functional purpose of the potential elements;
4. integration - identification of contradictions in the structure of the potential and the ability to combine and interact its components;
5. historical - assessment of the potential through the prism of its historical development, established trends, patterns of development.

In our opinion, for a more substantive understanding of the factors of economic potential formation, it is important to determine its structure. We are convinced that the elements of the economic potential of a community should be considered from the following perspectives:

1. resource provision (involves structuring the economic potential from the perspective of real and nominal community resources):

- budgetary
- labour (human);
- financial;
- production
- technological;
- material and technical;
- raw materials;
- natural and climatic;

2. the ability to structure and readiness to implement socio-economic transformations (means the ability to integrate resources, capabilities, efforts, knowledge, institutions, and establish appropriate sustainable links and dependencies):

- institutional
- integration;
- communication;
- management;
- organisational;
- qualification;
- informational;
- psychological;
- regulatory and legal;
- scientific and methodological;

3. formation of the market environment (provides for the possibility of structuring the potential from the point of view of the territory's ability to function and develop in the market conditions):

- entrepreneurial
- consumer
- marketing;
- investment;
- innovation;
- export;
- infrastructure;

4. the level and quality of life of the community (illustrates the capabilities of the TC to implement people's life strategies, maximise their needs, ensure the intellectual and cultural development of the population, its freedom and legal protection):

- intellectual
- educational
- scientific
- social;
- demographic;
- environmental;
- cultural;
- infrastructural;
- legal;

5. area of implementation (refers to the sectors of the economy of the Territory in which the potential is used):

- industrial
- agricultural
- construction
- trade;

- transport and logistics;
- tourism;
- management, etc.

The development of economic potential should be considered as a complex, long-term, dynamic process that occurs under the influence of external and internal environment factors, during which opportunities for economic growth in the territorial community are increasing.

The factors that influence the formation and development of the economic potential of territories can be considered according to the following criteria:

- use (those that are used and those that are not used);
- impact (factors of direct and indirect influence);
- intensity of impact (significant and insignificant);
- conditions of creation (natural and artificial);
- possibilities of management influence (controlled and uncontrolled);
- areas of occurrence in relation to the managed subsystem (external and internal);
- sphere of implementation (legal, economic, social, demographic, cultural, psychological, managerial, political, industrial, etc;)
- type of impact (universal and special);
- duration of impact (long-, medium- and short-term);
- quality of impact (positive and negative).

At the same time, the key factors of strategic transformations within a territorial community are the population of the territory and human resources. Also important is the level of development of productive forces, the political structure of the state, national and demographic characteristics of the territory, and the nature of the historical stage of its development. In practical terms, the leading role in ensuring the formation and realization of the economic potential of a territorial community is played by such factors as high-quality strategic planning of local economic development; attraction of investment projects; cooperation between business, government, and the public; creation of a favorable environment for increasing entrepreneurial activity, etc.

According to some scholars, the key factors of capacity development include

- political and legal - political stability and regulatory support that determine the conditions for activity;
- innovation and investment - state support in attracting investments;
- financial and economic - state support through strategies, development programmes, macroeconomic levers, etc;
- personnel - qualitative and quantitative characteristics of labour resources.

There is also an opinion that the development of a territory, as well as the level and nature of its economic potential, depends primarily on political and legal, socio-economic, technological, environmental, natural and historical factors.

As we can see, given the content of the factors considered in the scientific literature, it is advisable to divide them into factors that form the external and internal environment of the territorial community. Thus, the first group of factors includes: the possibility of structuring the potential in terms of the territory's ability to function and develop in the market, state regulation of territory development, the state strategy of local economic development, participation of the territorial community in international (European), national programmes and projects, international economic activity, socio-political, legal, security, socio-demographic, environmental, scientific and technical and other factors. In this context, it is important to take into account the fact that individual territorial communities, regions, and countries as a whole belong to a single space of the global economic system. In order to ensure effective, holistic management of local economic development, it is important to take into account the patterns and principles of global economic development, the creation of agglomerations, new "growth points", etc. It is generally recognised that the formation of the economic potential of a territory and local development are the basis for the growth of the national economy as a whole. In fact, economic growth in the context of globalisation is becoming local.

In these conditions, such a factor as the ability of each individual territory and local authorities to compete with other economic systems (cities, regions, countries) to attract resources, including foreign direct investment, innovations, etc. deserves attention.

In turn, the factors of the internal environment include: the structure of economic potential and its resource provision, policy and strategy of the territory development, institutional capacity to implement socio-economic transformations, appropriate support of citizens, the level and quality of life in the territorial community, etc.

Internal factors also include: social conditions, technological development, innovation, investment, natural resource, tourism, labour (human) potential, etc. At the same time, the expediency of combining internal factors of development into groups is recognised: the resource group, which determines the potential for development of the territory in relation to the available real and nominal resources, and the regulatory group, which determines the possibility of influencing the development of the region in terms of the management system.

The economic potential is related to the level of investment attractiveness and competitiveness of the territory, which depend on the factors of formation of a favourable business and entrepreneurial climate: legal (regulations, permitting procedures, legislation, security, etc.), technological (transport, roads, production, municipal infrastructure, communications, telecommunications, research, science), commercial (sales networks, individualisation, response, location, cost), socio-cultural (attitudes, behaviour, traditions, social norms).

The basis for ensuring the competitiveness of territories is such an economic category as productivity. The productivity of strategic resources makes it possible to replace natural resources with intellectual ones, materialised through more advanced production processes. The generation of knowledge, innovations, and methods of managing external productivity on this basis leads to the presence of such a property as "the ability to self-organise".

Productivity is the key explanation for economic growth and competitiveness of a territory. The basis for ensuring the competitiveness of territories is such an economic category as productivity.

We are convinced that the formation and realisation of the economic potential of territorial communities is directly influenced by the effectiveness of local authorities and the level of their responsibility. In this case, it is important to use powerful analytical tools for making decisions on local development, as well as the synergy of actions of local authorities and territorial communities, businesses, their corporate social responsibility, and the flexibility of adaptive management systems, taking into account the priorities of national and regional development programmes and plans. As the experience of a number of territorial communities shows, the development of their economic potential largely depends on the level of entrepreneurial activity, public involvement in making relevant management decisions and, most importantly, in the implementation of individual projects. In doing so, it is, of course, advisable to take into account such factors as favourable environmental and climatic conditions, the level of application of modern technologies, available human resources, etc.

We should also not forget about the trends and intensity of the use of natural resources of the territories and the need to ensure their restoration. In such circumstances, intangible factors of community development are becoming increasingly important. The main intangible factor in the development of the territory is social capital, which is formed in the community as a result of mutual trust and cooperation between its members. Social capital can have a significant impact on local economic development, help support entrepreneurship, innovation, and the development of civil society and democracy. It can also influence social well-being by providing support and mutual assistance in various spheres of life.

There is also an opinion that intangible factors include [10]:

1. political, administrative, legislative factors, property relations;
2. historical, cultural, ethical, spiritual, aesthetic and landscape factors.

It is quite justified to refer to the image and reputation of the territory as intangible factors. When forming them, it is important for local authorities and local self-government bodies to avoid a situation where the image and reputation are formed only with a focus on external stakeholders, as they are a kind of criteria for the quality and standard of living, doing business, etc. by which residents, existing businesses and active investors decide to stay or leave the territory: to live or migrate, develop a business or move it to another territory, increase investment or close a project, etc. At the same time, we are convinced that the development of the economic potential of the community and local development is determined by the role of the community itself in the territorial division of social labour, its place and functions in the settlement system, the general economic and political situation in the country, region, the priorities of social policy of the state, region, the level of social guarantees, etc.

The presence of the middle class can be considered an important factor in shaping the economic potential of a territorial community. The behaviour of middle-class

representatives is the most rational and predictable, so it is quite interesting for companies operating in the markets, as well as for the state or a separate territorial community. Due to the fact that middle class representatives include entrepreneurs, capital owners, employees, scientists, and artists, their interaction creates a synergy effect that exceeds the total efforts of individual "subclasses" and extends to representatives of other social groups. The behaviour of middle class representatives is often innovative; it is in the bifurcation points provoked by them that new knowledge and modern technologies are born. Since the middle class creates and disseminates samples of socio-cultural and innovative behavioural practices, is the bearer of the basic components of national culture, an expression of public interests and serves as a cultural integrator of society, it can be argued that it "pushes" the entire socio-economic system to choose the optimal attractor.

It is important to use powerful analytical tools to make decisions on local development, as well as synergies between local authorities and territorial communities, businesses, their corporate social responsibility, and the flexibility of adaptive management systems, taking into account the priorities of national and regional development programmes and plans. A decision-making tool for assessing the economic potential of a territorial community is a decision support system.

3. Concept of the decision support system for assessing the potential of economic development of a territorial community

Having considered and described the subject area, we propose a decision support system for assessing the economic development potential of a territorial community. The structure of such a system is shown in Figure 1.

It consists of a user interface, a query generation module, a knowledge base, and a decision-making module.

An important module in the structure of such a system is the decision-making module. Let us consider it in more detail. To do this, it is necessary to identify the factors that shape the economic potential of a territorial community by the following criteria:

1. by the environment of origin (external, internal);
2. by the level of objectivity (objective, subjective);
3. by the level of manageability (manageable, conditionally manageable and unmanageable);
4. by nature (tangible, intangible);
5. by consequences and quality of impact (constructive and destructive);
6. by the level of impact (mega-, macro-, meso- and micro-level);
7. by origin (historical, demographic, geographical, natural resource, climatic);
8. by content (institutional, organisational, technical, political, legal, innovative, investment, commercial, marketing, financial, tax, human, information, etc;)
9. by the level of structuring (heterogeneous, homogeneous);
10. by the type of impact (universal and special);
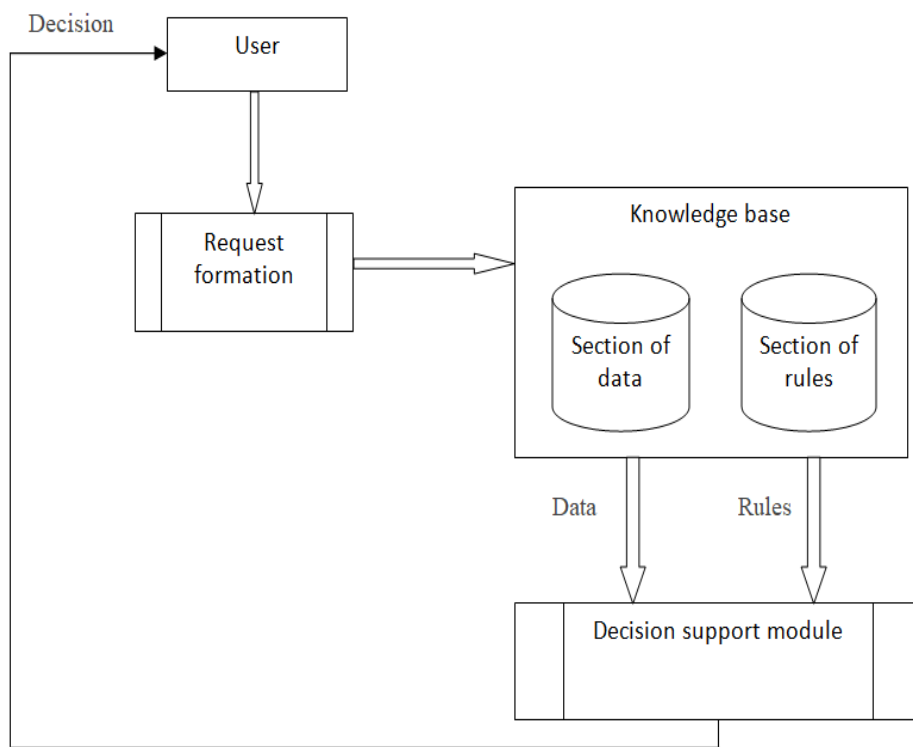11. by the duration of the impact (long-, medium- and short-term).

Figure 1: Scheme of a decision support system for assessing the economic potential of a territorial community.

In our opinion, these types of factors have a multidirectional effect, so they should be grouped into the following groups:

1. FSR - factors that direct the development of the economic potential of the territory. These factors create the institutional environment, define strategic vectors and policies that form the basis for the formation of the economic potential of the territorial community :

- the principles of the state's foreign policy (creation of favorable foreign policy conditions for the development of the country's economic potential as a whole, ensuring Ukraine's integration into the European Union; support for the development of Ukraine's cooperation with foreign partners on the basis of mutual benefit; expansion of international cooperation to attract foreign investment, the latest technologies, adaptation to changes in the world economy and competitive requirements, etc);
- principles of domestic policy of the state (budgetary, tax policy of the state, state employment policy, development of local self-government, powers of local executive authorities and local self-government bodies, as well as the practice of their interaction in the socio-economic sphere, harmonization of national, regional and local interests, strengthening of the material base of territorial communities,

strengthening of economic integration of regions using the advantages of territorial division and cooperation of labor, ensuring competitiveness);

- priorities of local economic development (ensuring balanced spatial development of territories, introduction of effective mechanisms to ensure active participation of communities in the formation and implementation of state regional policy, structural reorganization of regional economies, support and development of rural areas, conservation and restoration of ecosystems, infrastructure development, integration of internally displaced persons and relocated businesses into territorial communities of their permanent residence, implementation of inter-municipal cooperation projects).

2. FZR - factors that ensure the development of the economic potential of the territory. These factors create the resource basis for the realization of the economic potential of the territorial community and determine its structure:

- existing natural resource environment (the structure of the territory's resources (land, mineral, water, energy, human resources, financial resources (cash and other financial assets for investment and development), natural and climatic conditions, etc. that determine the structure and opportunities for local economic development);
- technological development and innovations (innovation activity and availability of research centers, ability to technological re-equipment, support of scientific developments by the state, ability to use advanced technologies to improve the efficiency of production and service provision, etc);
- budgetary support (fullness of the state and local budgets, ability to finance (co-finance) development programs);
- international support (provision of loans and financial assistance to stabilize the economy and reforms in times of war, attraction of foreign direct investment in economic recovery and development, cooperation with international organizations, support for civic initiatives, provision of humanitarian aid and support to the population, development of partnership in the energy sector, level of international economic relations, intensity of export-import relations with foreign partners, existence of cooperation agreements, including trade relations.

3. FVR - factors that determine the development of the economic potential of the territory. These factors affect the level of formation and intensity of use of the econoic potential of the territory:

- economic activity and production (the level of socio-economic development of neighboring territories, as well as the state as a whole, gross domestic product, which determines the level of economic activity, production, economic structure, formation of the business system (development of business infrastructure, support for small business startups);

- legal environment (efficiency of the legal system, political will to reform and development, degree of protection of the rights of entrepreneurs and investors, ease of doing business);
- sustainable use of natural resources (efficiency of natural resources use, commitment of the territory to the principles of sustainable development);
- social situation and historical preconditions for development (level and quality of life, level of social protection, unemployment and employment, development of social infrastructure (education, healthcare), presence of the so-called middle class, etc);
- the institutional environment of the community (the level of cooperation between local authorities, business and the community, the powers of local executive authorities and local self-government bodies, as well as the practice of their interaction in the socio-economic sphere, the level of civic engagement and responsibility of the local population, community resilience, etc).

4. FCR - factors that hinder the development of the economic potential of the territory. These factors create obstacles to the formation and effective use of the components of the economic potential of the territorial community:

- economic instability (high inflation, which leads to rising prices, reduced purchasing power of the population, reduces the efficiency of doing business, economic and financial threats and risks, low level of economic predictability, currency fluctuations that complicate trade relations, worsen the investment climate, etc);
- bureaucratic and legal obstacles (complex bureaucratic procedures, difficulty starting and running a business, high level of corruption, etc. lead to a deterioration in the ease of doing business index and a decrease in trust in the government);
- infrastructure problems (low level of development of transport infrastructure, inadequate energy supply, etc. limit opportunities for trade development (domestic and foreign), negatively affect production capabilities and competitiveness of the local economy);
- unfavorable investment climate (low level of the business index, unfavorable tax system, lack (ineffectiveness) of incentives for investment and financial support for business, non-transparency and inefficiency of law enforcement and judicial systems, poor condition of infrastructure, etc);
- low level of involvement in international economic relations (low competitiveness of local producers, unsatisfactory export opportunities, low added value of export products, high level of import dependence);
- instability of the political situation (threats to national security, military conflicts, interethnic conflicts, corruption, contradictions between different political forces, human rights violations, democratic deficit);
- unfavorable socio-demographic situation (low standard of living in the community, high unemployment, inadequate structure and level of human resources).

The structural diagram of the decision-making module for assessing the potential for economic development of the territorial community is shown in Fig. 2.
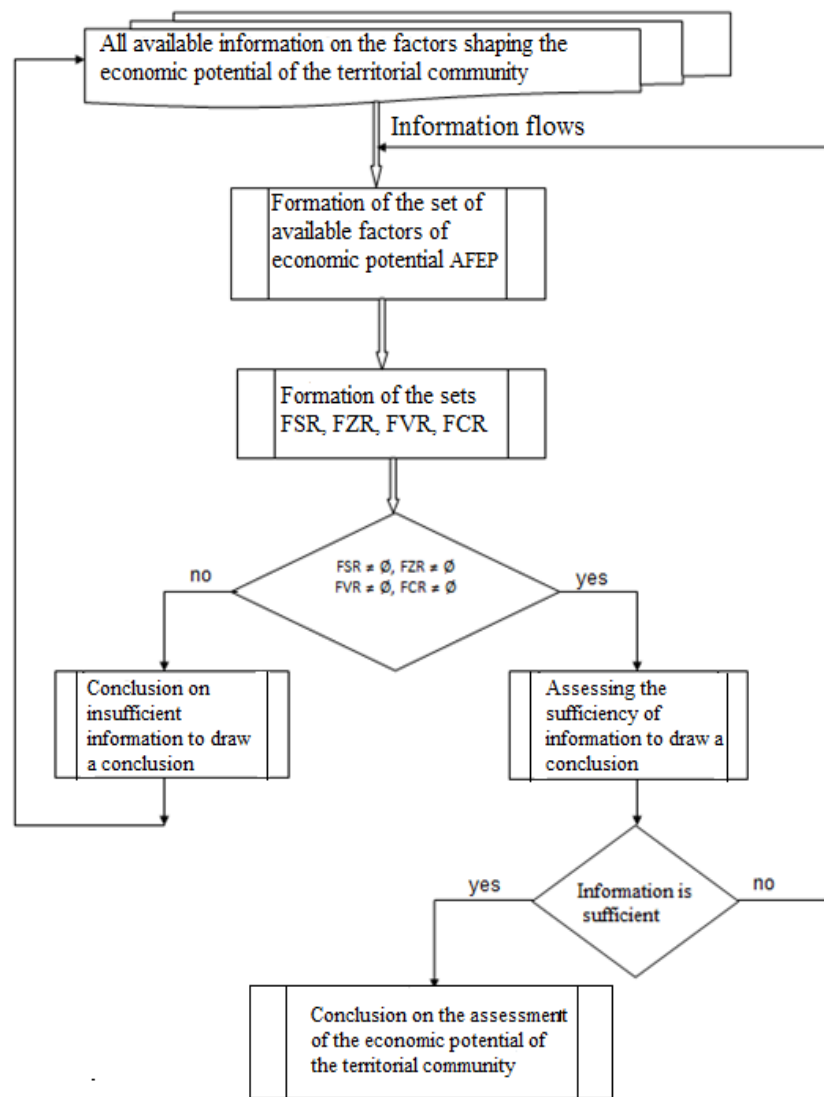
Figure 2: Scheme of the decision-making module for assessing the potential for economic development of the territorial community.

As input, the decision-making module receives all available information about the factors that influence the formation of the economic potential of the territorial community. The next step is to form a set of available factors of the AFEP economic potential. After that, according to certain criteria, the factors from this set are grouped into the sets FSR - factors that direct the development of the economic potential of the territory, FZR - factors that ensure the development of the economic potential of the territory, FVR - factors that determine the development of the economic potential of the territory and FCR - factors that constrain the development of the economic potential of the territory. Next, we check whether these sets are not empty sets, i.e., each set must contain certain elements. If this condition is not met, the module concludes that there is insufficient information to draw a conclusion. If the condition (FSR≠Ø AND FZR≠Ø AND FVR≠Ø AND FCR≠Ø) is met, then the

module checks whether there is enough information to form a conclusion. If the information is sufficient, the conclusion is formed in the form of an assessment of the economic development potential of the territorial community.

The assessment of the economic development potential of a territorial community is a set of the form 1:

$$APER=\{MP, CP, VP\}, \tag{1}$$

where MP - small potential, CP - medium potential, VP - large potential.

According to the source [15], in order to have enough information to make a decision on assessing the economic potential of a territorial community, it is necessary that the set AEFP ≥ 37. If this condition is not met, then it is impossible to form a conclusion because there is not enough information.

4. Experimental studies

To test the proposed solutions, let's consider the decision support for assessing the economic development potential of the Horodok territorial community [28].

As input, the decision-making module receives all available information about the factors that influence the formation of the economic potential of the territorial community. The next step is to form a set of available AFEP economic potential factors. Taking into account all available factors, the value of the set AEFP = {41}.

The next step is to group the factors from this set into the set FSR = {8} - the factors that direct the development of the economic potential of the territory:

- -partners abroad;
- -decentralization reform;
- -geographical location;
- -inter-municipal cooperation;
- -implementation of state and regional programs;
- -implementation of international technical assistance projects, including cross-border cooperation;
- -legislative initiatives to promote the development of industrial parks;
- -communications in the government and business environment.

Factors that ensure the development of the economic potential of the territory FZR = {12}:

- -favorable geographical location of the community;
- -the Zakhid Resurs Industrial Park with an area of 20.7 hectares is a potential point of economic growth of the community (creation of about 1600 jobs);
- -potential for the development of recreation and leisure facilities - Drozdovytskyi Pond and other water bodies;
- -availability of nine mothballed water intake wells in the territory adjacent to Kernytsia village;
- -renovated road surface ofpublic roads of national importance;

- -businesses are ready to renew or expand their activities in the community;
- -developed network of public organizations;
- -there is a base for physical education of youth and children;
- -successful performances of Horodok athletes at championships of various levels;
- -availability of design and estimate documentation for fundraising;
- -construction of a therapeutic building in Horodok;
- -annual festival "Zahid-fest".

Factors that determine the development of the economic potential of the territory FVR = {4}:

- -presence of large industrial employers;
- -availability of investment-attractive plots and premises on the community's territory;
- -availability of two airports in the community;
- -availability of railway connection;

Factors that hinder the development of the economic potential of the territory FCR = {17}:

- -decrease in the population of the community;
- -there are no equipped places for rest and recreation in the community;
- -lack of centralized water supply in most settlements;
- -partially absent centralized sewage system in Horodok;
- -lack of power supply facilities;
- -high level of deterioration of engineering networks;
- -lack of internal passenger transportation to certain settlements of the community;
- -lack of urban planning documentation for the spatial development of the community;
- -outdated material and technical base of budgetary institutions;
- -there is no system for separate waste collection and sorting, and a large number of illegal landfills;
- -underdeveloped tourism;
- -outdated heating systems in public institutions ("consumption budget");
- -insufficient number of preschool education institutions;
- -a significant share of municipal roads are in critical condition;
- -lack of access to some villages in the community;
- -suboptimal network of budgetary institutions;
- -contamination of reclamation ditches (systems), which leads to flooding in some settlements.

Thus, the condition (FSR≠Ø AND FZR≠Ø AND FVR≠Ø AND FCR≠Ø) is met, and then the check is made whether there is enough information to make a conclusion. Since, according to the conditions described earlier, AEFP is >37, there is enough information to make a decision on the assessment of the economic development potential of the territorial community. The results of the assessment of the economic development potential of a territorial community - VP - large potential, which coincides with the conclusions made

manually by employees of the relevant departments. Thus, according to the experiment, it can be concluded that the Horodok territorial community is an investment-attractive area of sustainable dynamic development with a developed industry. It is an environment of rest and recreation with a high level of living comfort and meeting the social and cultural needs of residents.

5. Conclusions

Thus, the factors that influence the assessment of the economic potential of a territorial community are interrelated and form a complex system with emergent properties, since any recombination of them (strengthening or weakening the intensity of a factor, introducing a new component or eliminating a previously existing one) can have a dramatic and even unpredictable impact on the level of economic potential of an object, change its specialisation, cause the need to establish4 new economic ties, etc. To date, no decision support systems have been developed in Ukraine to assess the economic development potential of territorial communities. All processes of formation and assessment are carried out manually using SWOT analysis. The results are also evaluated manually, which can lead to unreliable and sometimes inaccurate assessments, as the economic environment is quite volatile under the influence of external factors. If new factors affecting the economic potential change or emerge, the entire process of building a SWOT matrix needs to be started anew, as the conclusion needs to be formed anew. All this leads to an increased workload for employees and additional time and resources. In addition, unreliable assessment of the economic development potential of territorial communities can lead to significant economic losses, as stakeholders may decide, based on the proposed assessments, to finance an unpromising community or not pay enough attention to strengthening certain factors of development of a promising community.

The task of providing automated decision-making support in this area is becoming increasingly relevant as the information burden on employees who form and study economic potential factors increases. As a result of the conducted research, a decision support system has been proposed that allows taking into account all available factors, grouping them according to the degree of influence on the assessment of economic potential, providing a conclusion on the sufficiency or insufficiency of information for assessing the potential of economic development, and making decisions to assess the potential of economic development of a territorial community.

The prospect of further research is to expand the capabilities of the proposed system.

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