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Innovation as a determinant of socio-economic development in the New Economy

Summary. Modern economy, identified with the new economy and new economic governance (economic order), is often called the: information economy, post-industrial economy, Toffler's third wave society, the information society or knowledge society. In the new socio-economic realities, the condition of participation in the development is the active creation of the innovation process, defined as an activity designer to achieve a competitive advantage. Because of the scope of understanding innovation, it is defined by economists and researchers involved both in science and in social studies. Innovations in a local scale are particularly important because they are one of the most important elements, not only in establishing superiority, but also their quality is a prerequisite for participation in the process of integration into EU structures. They become essential for the development and socio-economic progress since they manifest the tendency and ability to create new and improve existing products, new technologies and the management and motivation systems.

Key words: innovation, social innovation, knowledge-based economy, innovation policy

Introduction

Innovation in the economy appears to be in the new paradigm of development[1] as the most important determinant. Knowledge and information, in turn, are key factors of economic growth. Under these conditions, the economic successes seen in national, regional and local cross-sections depend not only on traditional factors. This is of particular importance in terms of quite sharp disparities be-

[1] In the place of economies of scale there is economies of scope. The new economy is based on the assumption that knowledge is transformed into a stimulator of economic development. It becomes a coupling factor of a contemporary socio-economic development.

tween regions and within them. On the one hand, there is a fairly good chance of eliminating these disparities by including the ability to create regional and local systems of innovations, on the other, it is already known that the management of the new paradigm will depend to a large extent on the development of innovation potential and adaptability to changing conditions. Thus, the knowledge society creates an economy based on knowledge and innovation society. Since we assign an important role to processes of learning in socio-economic system, there is an innovative concept eg complexof institution and relationships between them, through which the economy is an efficient mechanism for the generation and diffusion of knowledge.

Innovations build a regional identity, and therefore require special interest and social support at the level of initiation. Hence the growing rank of innovation policy in its various sections, including mainly local one, as at this level it is seen the biggest potential for a kind of incubator for innovation. In a study of regional innovation, and what is more spatial units of a smaller scale, there is no aspect of local government. However, as the practice shows, local governments within their own tasks are obliged to create such public technical and social infrastructure, and thereby they are responsible for the formation of human capital. Therefore, innovation in these sections can be looked at from the point of view of tasks carried out by the certain units. Here, social innovations often draw our attention.

1. Knowledge-based economy as the new economy

It is knowledge and its effective use in innovative activity that is the basis of social and economic development of countries, regions and micro-regions in the changing paradigm. More recently it is seen the evolution of the economy towards the economy based on knowledge (KBE). It is often called new economy, in which economic growth and structural changes are the result of technological advances, especially in the field of information technology and telecommunications. This means that the "knowledge-based economy at the macroeconomic level is characterized by the rapid development of these areas, which are associated with the processing of information and the development of science, mainly industrial sectors of so called high technology and information society services. However, at the microeconomic level knowledge-based economy is one in which the source of competitive advantage of most of the companies are knowledge-intensive projects."[2] The new business is identified with the new economy and new economic governance.

[2] A. Pawlik, *Potencjał innowacyjny w rozwoju regionalnym* [Innovative Potential of Regional Development], Wyd. Uniwersytetu Jana Kochanowskiego, Kielce 2012, s.75.

According to the World Bank experts, there are four essential conditions for the country to be able to fully participate in the knowledge-based economy.

These are:

– institutional and economic environment to allow free flow of knowledge, investment in information and communication technologies (ICT) and to encourage the development of entrepreneurship,

– educated people having the skills in the creation and using knowledge,

– dynamic information structure from the radio to the Internet to facilitate the effective communication, distribution and information processing,

– a network of research centers, universities, advisory groups, private companies and community groups to take advantage of the growing global knowledge resources, its assimilation and adaptation to local needs and the creation of new knowledge.

These same experts believe that the pillars of the knowledge economy are:

– innovation,
– education,
– system information – communication,
– knowledge management in organizations,
– taking regional conditions into account.

For the development of the European Union of very important significance is a strategy[3] in which within the context of knowledge – based economy it is emphasized that it is based on four pillars:

– ICT infrastructure,
– human capital,
– social capital,
– knowledge management at the organization level.

Table 1 illustrates the subject character of the knowledge-based economy, defining its intrinsic properties, which due to the dominant influence of scientific knowledge on the economy distinguishes a sphere of its operation and gives it some individuality.

KBE is often called "new economy", which basically is a set of new economic methods, including projects based on entirely new concepts and those that are traditional solutions, but aided by electronic techniques. Thus, among others, building knowledge-based economy in the EU is based on the initiatives and activities carried out in two complementary to each other areas including:

– research and innovation, which priorities is to generate innovation, the development of new technologies and mechanisms for the absorption of knowledge by economy,

[3] The Lisbon process, initiated during the "Summit in Lisbon" in March 2000, set the following strategic goal: "to transform the EU in 10 years into the most competitive and dynamic knowledge economy in the world."

Table 1. The nature of the knowledge-based economy

Properties	Knowledge-based economy (KBE)
The range of activities	It includes that part of the economy that is growing and developing under the dominant influence of science. In a narrower sense, the KBE includes: 1) new sectors of the economy producing goods and services that use information and communication technologies (ICT) both in terms of technical equipment (hardware) and programs (software), including the technical devices of civilization (eg cordless telephony) and services (eg trade electronic), 2) traditional industries that produce new or significantly improved products, such as pharmaceuticals and chemicals, aerospace, automotive, machinery, mining, energy. With regard to traditional industries only part of their production qualifies for the knowledge-based economy and establishing an operationally statistical surveys, and in particular regional, requires the introduction of additional criteria such as qualifications of the workforce.
The specificity of the functional organization	It manifests itself primarily in the nature of certain properties and performance of the basic components of KBE. In a study of KBE these properties include: managing the production and service of innovative and meaningful participation of all companies in the production of innovative knowledge and technological innovation used in the production and training of personnel. Much of the knowledge produced by the company is a silent form and training is an ongoing process inherent for introduction of innovation. In addition to the production of knowledge skill KBE company must have the ability to acquire knowledge from external sources and the adoption of it for their own aims. It is believed that the KBE company has a high level of flexibility, the organization of production and the main characteristics of this organization are: strategic management, the provision of „just in time", common quality control, team tasks, decentralization of management. A special role is played by the so-called dynamic flexibility.
Forms of spatial organization	The basic forms of the spatial structure of the occurrence of KBE are: spatial systems of companies distribution and their spatial and territorial organization. Spatial KBE systems occur in the form of the location of individual companies and their clusters. It moves from the location of the individual companies to study different types of spatial clusters of economic activities. In addition to the traditional concept of agglomeration there were introduced new concepts such as clusters, networks, innovative environments and other. These systems come in a precinct issues of KBE by their innovative aspects and with the role of human capital. The enterprise networks are effective components of the knowledge-based economy. The spatial macrostructure is formed by territorial systems and especially regional ones. Despite the growing importance of globality and the emergence of transnational economic system, the basic units of structuring and economic development are the countries and the regions as their territorial subsystems.
Studies on the role	IIt is assumed that the share of KBE in the transformation of the economy is a major factor in the development. This interaction concerns not only the benefits and productivity that economic activity taking place within a KBE brings, but also improving the efficiency and the development of other sectors and industries. KBE acts as a catalyst of change and productivity growth throughout the economy. Concerning the influence of KBE on the transformation of

cont. table 1

Properties	Knowledge-based economy (KBE)
	the economy of countries and regions, it is necessary to include a number of conditions in which these interactions take place, which includes various factors of an economic, organizational, institutional, political and social character. The most developed countries are characterized by a high level and the share of knowledge-based economy, which is the result of the expansion of the manufacturing and the service sector appriopriate for KBE, based on their own sources of technological progress, especially ICT, human capital and favoring the process of institutional and organizational conditions. These sectors make more dynamic the progress in other sectors of the economy, extending the reach of the modern economy and raising the value of produced goods and services and their competitiveness on the world market. Economically underdeveloped or developing countries characterize the low level of KBE and its impast on the economy. This is due to several factors weave among which the most important include: long-term stagnation in innovation and modernization of the economy, devalue the role of science for the development of a modern economy, which is reflected in the low level of expenditure on the development of research, poor knowledge base technology and innovation, and little progress its production both in institutions and research centers and enterprises, lack of capacity and the absorption of such knowledge from abroad, too little importance of foreign capital as a vehicle for innovation.

Source: own study based on: Z. Chojnicki, T. Czyż, *Aspekty regionalne gospodarki opartej na wiedzy w Polsce* [Regional Aspects of the Knowledge-Based Economy in Poland], Bogucki Wyd. Naukowe, Poznan 2006, pp. 20-23.

– information society, whose priority is to ensure that everyone in the EU has free access to information through electronic media,

Thus, the most important factors in the development of KBE in the EU include:

– human capital, understood as the ability of people to innovate, cooperate and develop their competence and ability to organize,

– development of scientific institutions, research and development (universities, laboratories, R&D centers), which are providers of knowledge of qualified staff,

IT infrastructure, which has a huge impact on the flow and use of knowledge in the economy and the environment as a whole science – research, conducting innovation policy in the country and the region. It enables collaboration between the R&D academics , innovators, contributing to their integration.

Crucial to building the knowledge-based economy is the policy of government, whose activities in this area should include:

– educational policy – the aim is to transform the Polish society in a competitive and innovative one, developing their skills and having organizational skills

. This policy is to ensure the overall development of cultural and civilizational society and to prepare staff for the efficient operations in the conditions of competitiveness and innovative economy. The role of authorities is active participation in the organization of training, especially for small, medium-sized businesses, as well as offering them financial support and assistance in the acquisition of new technology,

– science policy, the implementation of which will be channeled mainly through the development of research, its funding and sponsorship, the creation of science and technology parks, promoting the transfer of knowledge.

Thus, the most important entity on a local scale to stimulate innovation is the local authority, which is obliged to coordinate cooperation of various entities and individuals. At this level innovation is generated in the process of multifaceted interaction. The best area seems to be a region (micro-region), since the proximity of the location, cultural ties, similar values and trust provide the best basis for the development of a variety of flexible links of a horizontal (no hierarchical) character in which the interactions occur that are the basis for innovation.

2. Innovation as determinants of socio-economic development

In Poland innovation until recently was seen mainly in the economic and scientific area and it was associated, on one hand, with a specialized technical view, on the other - with high technologies in the sphere of production.[4] Currently, it is a term frequently appearing in various scientific studies and in business practice. The variety of approaches makes it a category defined intuitively, because in practice they failed to create a single, universally valid definition of this phenomenon. However, it is considered a determinant of the development of enterprises and entire countries in the economic – social dimension. The scope of the term and also its versatility makes innovation defined both by economists, researchers, involved in both science and social studies. In addition to technological ones there are also organizational, cultural, marketing, psychology innovations[5]. The interest in innovation has evolved over the years, as the global economy has changed. The first concept of innovation was introduced by J. Schumpeter, who included in his pub-

[4] T. Bogacz, E. Bryk-Swierzko, *Innowacyjność w kreowaniu wizji rozwoju miasta jako efekt korelacji nauki i gospodarki-na przykładzie strategii Wroclaw w perspektywie 2020 Plu*s [Innovation in Creating the Vision of the City Development as a Result of the Correlation of Science and Economy- in the 2020 Plus Wroclaw Strategy Perspective], in: *Współdziałanie władz samorządowych, uczelni i przedsiębiorstw w rozwoju lokalnym* [Co-operation of Local Authorities, Universities and Enterprises in the Local Development], ed. L. Jakubów, Wyd. Wyższej Szkoły Zarządzania "Edukacja", Wroclaw 2008, p. 23.

[5] W. Janasz, K. Kozioł, *Determinanty działalności innowacyjnej przedsiębiorstw* [Determinants of Innovative Activity of Enterprises], PWE, Warsaw2007, p. 11.

lication: "The theory of economic development," the discussion on the tendency of the economy to grow. In his view, innovation is discontinuously carrying out new combinations in five cases[6]:

– the introduction of a new product – that is the product with which consumers are not yet familiar, or a new species of a product,

– the introduction of new methods of production, ie, the method has not yet proven in practice by the industry,

– opening a new market, it is the market where industry of the country has not previously been entered,

– acquiring new sources of raw materials or semi-finished ones,

– carrying out a new organization of industry, such as the creation of a monopolistic situation or break a monopoly position.

We could say that J. Schumpeter's perception of innovation is very broad and is not limited only to their technical solutions, since in this approach it is believed that innovations include also economic enterprise and appear in all areas of economic and social development, thus determining its development.

The classic Schumpeter approach functioned until World War II, and with the changing structure of the industry and the intensive development of services, new concepts emerged. The scope of innovation widened and went far beyond the sphere of technology. Simultaneously with the increase in interest in these issues new definitions of innovation appeared.[7]

Other authors, such as P. F. Drucker, define innovation from the perspective of changes. This is change that is the basis of innovation, as it leads to the creation of new products or services.[8] According to the author a systematic innovation is the purposeful and organized search for changes, and the systematic analysis of the possibilities.

The different attributes of innovation highlights J. Brilman.[9] He takes in its assumptions that innovation is the use of some creative ideas. The author draws attention to the aspect of creativity as essential to the creation of innovation.

In the new economic reality, according to Castells, innovation is the main source of productivity, and knowledge and information are the basis for manage-

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[6] J.A. Schumpeter, *Teoria rozwoju gospodarczego* [The Theory of Economic Development], PWN, Warsaw 1960, p.104.

[7] M. Klimowicz, *Innowacje społeczne jako serendypny efekt wzrostu kapitału ludzkiego* [Social Innovation as Serendip Effect of Human Capital Growth], in: *Człowiek we współczesnej gospodarce globalnej* [The man in the modern global economy], eds. P. Grabowiec, M. Klimowicz, Wyd. Wyższej Szkoły Zarządzania i Finansów, Wroclaw 2011, p. 29.

[8] K. Bachnik, *Innowacyjność jako jeden z kluczowych elementów polityki Unii Europejskiej* [Innovation as a key element of EU policy], in: *Innowacyjność w teorii i praktyce* [Innovation in Theory and Practice], ed. M. Strużycki, SGH, Warsaw 2006, p. 11.

[9] J. Brilman, *Nowoczesne koncepcje i metody zarządzania* [Modern Management Concepts and Methods], PWE, Warsaw 2002, p. 168.

ment process. On the other hand, education is a key feature of the work. The result is that people who are not always able to raise their skills are marginalized. There follows increasingly the networking of all the elements of life. New economic rules exhibit the transition to flexible manufacturing, focusing on a specific individualized customer (market), where quality plays an important role. Economies of scale replaced the economies of scope.

The most effective network forms a creative capital. Networks also allow the simultaneous execution of multiple tasks in real time. It can be said that the generation of network much more than previous generations appreciate the innovation, freedom of action, the ability to personalize and adapt items and services, and cooperation with others. Production of citizenship as a new kind primarily occurs in the network and becomes a manifestation of a new dimension to the social sector, due to the fact of radical reduction of the distributing information and knowledge costs. Thus, there are social innovation as any initiative resulting from the internal needs of an individual or a group of people. They provide innovative ways to achieve specific goals by introducing new forms of organization, regulation, lifestyles as factors leading to solve problems better than in the traditional practice. They also help to change the direction of socio-economic development, being the result of undertaken social initiatives at the local level.

3. Social innovation in local sections

In a sense it can be said that innovativeness is becoming a codition for the success for small provincial spacer which create the environment in relation to agglomeration. "Despite the fact that these spaces (often peripheral) function in other systems and the realities of civilization they can not be satisfied because of residential and recreational functions for the residents of the metropolis that they perform. Therefore, in many cases, just in small towns you will find a kind of uniqueness characterized by innovation."[10] Locally, the opportunity to innovate should refer to changes in ways of organizing activities, generate new ideas, reactions and products. With regard to the success of local businesses it is to be said that the most important are the intangible assets such as reputation of the firm, brand names and social capital – standard values, knowledge and motivation of the employees.

[10] A. Łuczyszyn, *Przestrzeń innowacyjna w obszarze metropolitalnym na wybranym przykładzie-aspekt bezpieczeństwa* [Innovative Space in the Metropolitan Area in the Chosen Example-Safety Aspect], in: *Innowacyjność w strategiach regionów Unii Europejskiej oraz Dolnego Śląska* [Innovation in the policies of the European Union and the regions of Lower Silesia], Oficyna Wydawniczo-Reklamowa Hanna Wolska, Wroclaw 2006, p. 46.

Knowledge, information and abilities are important factors of production. The quality and timeliness are important factors for business competitiveness for companies. Success in the new economy also referred to as "a new era of information" is not only measured by the company's market share, volume of customer assets held or gained market size, but success in knowledge management and the ability to use the intellectual capital of the company. It is worth noting that the local populations are characterized by a tendency to innovate even in the field of cultural innovation or the organizational and educational ones, that require the use of materialized knowledge. "There is a relationship between the education system and the local economy, as the human capital created by the education system is an important factor of production and wealth of local communities. This relationship is particularly strong in the information economy. The effects of the education system establish and shall be determined by the general level of education of the population and workers. The highly qualified staff increases competitive ability and efficiency of the local economy. Improving the economic situation, on the basis of feedback, impacts on the resources of skilled labor by improving the impact on the structure of employment."[11] It requires the use of the appropriate type of local innovation policy.

According to Drucker, „social innovation should be understood as the ability and willingness of individual members of the public to break the existing customs, forms of perception and the types of objectives underlying allocative processes."[12] It means that they can occur in different areas of the local economy. For example, in the sphere of business it is particularly evident in the extra-business enterprises (here there is a close connection between social,technical, organizational and economic innovations). In the social sphere, in turn, they reflect the relationship with different groups of stakeholders. These are primarily new strategies, concepts, ideas and organizations which meet existing needs. They are experimental activities aimed at improving the quality of life of individuals, groups, communities, environments, and even nations. They are a response to the challenges that arise when social systems make it difficult to implement the core values and social norms. They start with a new way of thinking, both practical and scientific. They can be created in connection with the technical and economic progress, but also independently of them. Although they play a major role, technology and the economy are not the only causes of social change. These changes may be of spontaneous character and occur in the field of education, culture, science, management and collective life. Today, however, social thought is heavily influenced by technical and economic progress and social change is considered in this context.

[11] R. Domański, *Ewolucyjna gospodarka przestrzenna* [Evolutionary Economy of Space], Wyd. Uniwersytetu Ekonomicznego, Poznań 2012, p. 142.

[12] P.F. Drucker, *Natchnienie i fart, czyli innowacja i przedsiębiorczość* [Inspiration and Fart, that is Innovation and Entrepreneurship], Studio Emka, Warsaw 2004, p. 17.

Under these conditions, we should note the possibility of any innovations in local sections. At the outset it should be noted that in order to participate in today's global development processes is the active creation of the innovation process defined as an activity designed to achieve a competitive advantage.[13] A manifestation of such initiatives can be even socializing the local budget. First of All, this form allows to collect information from residents of the municipality in the form of a proposal for the next budget (by mail, e-mail or using cases at the points for inhabitants service). It must be admitted that such proposals are very often included on the part of individuals, associations, councils of parents and the greater part of the ideas are for investments in infrastructure, construction of roads and walkways lighting, playgrounds, sports halls and schools. These suggestions are guidelines for local authorities, including neighboring local authorities. It is obvious that people want to have an impact on what is happening in their small home countries, and thus it is a large-scale process of activation of the local population. It is a kind of transfer of power and tools to manage the local community. This means, in practice, the implementation of the effect of the local initiative, which will involve the implementation of the residents ideas with financial assistance from the municipality. An example of the transfer of power in the hands of citizens may be *raising funds to fund the creation of villages budgets* and thus giving them a greater range of powers. This may take the form of *civil budget*, which is based on the fact that part of the funds for which spending is decided solely by residents is entered in the budget.

Of particular interest in recent years in communal economy of the municipality is the act of maintaining cleanliness and order in municipalities, which Parliament adopted in 2011 (called the "new rubbish economy"). In some municipalities ordinance on the form and timing of the *consultation with residents of the municipality* have been issued, on a choice of charging for collection and disposal of municipal waste. Here, as the examples show, consultations are very often carried out in the following forms: survey addressed to the inhabitants of the municipality, or direct meetings with the residents. It seems that such an initiative is most welcome, because people are not indifferent to what is happening around them. They have their expectations, visions and ideas of how to solve problems. Such public consultations show what local community concerns are. They additionally raise awareness that it is the community which is the highest authority in the municipality, and this idea should be guided by anyone who exercises power.

The other good practices of social innovation and thereby stimulatation of local development are examples of the *division of small peripheral towns into districts*, so that city dwellers can significantly take matters "into their own hands",

[13] T. Parteka, *Czynniki innowacji w rozwoju regionalnym* [The Factors of Innovtion in the Regional Development], "Bulletin of National Spatial Development Concept," PAN, Warsaw 2003, p. 84.

and above all to decide their own immediate environment. An example of this social initiative may also be *taking over the tasks by the mayors of the winter maintenance of roads and lighting villages*. It shows that you can distract tasks in municipalities and at the same time decentralize funds for their execution.

Another example of the public "incremental" social innovation can be *sołeckie* (rural units smaller than municipalities) *development strategies*. The adoption of such a strategy by the legislative body of the municipality very often becomes the legitimacy of the villages for the application of the various programs and funds. It often happens that in these documents can be found records of high standards of living and favorable conditions for the operation of small production. It is strongly emphasized that there is a tendency to establish associations in the various organizations of the rural community and taking care of the maintenance of intergenerational contacts. They also often mention the high environmental awareness, so that there are various offers for backpackers and agritourism.

Based on the examples given above it may be noted that such initiatives as local social innovation should be also looked at in a different way, ie as if they were the projects of realisation of the public tasks. Such tasks as organizing integrational meetings, picnics, construction of playgrounds or renovation of rural community houses are the local authorities obligations on the one hand and, on the other, can successfully be performed by organizational units subordinate to the municipality. While such solutions show democratic management style also in managing the community finances, they may involve some difficulties in the procedure for their adoption, especially in acceptance as far-reaching decentralization of the legislative body (municipal council).

Practice shows that in this case strongly overvalued political themes, especially the narrowing the councilors field of impact of on rural issues often lead to conflict between the executive and the legislative body. This type of bold innovation is often a negative voice in the conditions of political struggle. It seems, therefore, that in such cases, despite the need for innovation, local development issues are deposited into the background, and very often does not correspond with the objectives of local political leaders.

Despite the fact that the development of territorial units is uneven in space and has fluctuations, at the same time showing dominance of the center over the environment, it seems that the it is the environment that has a unique chance to develop its resources. This is due to the fact that every innovation brings tangible benefits. It is necessary to pay attention here on the process of diffusion of innovation as a specific component of stimulating economic activities in the local space. In the process, it is worth noting the following types of transfers:[14]

[14] S. Korenik, *Dysproporcje w poziomie rozwoju regionów Polski – wybrane aspekty* [Disparities in levels of development of Polish regions – some aspects], Wyd. Akademii Ekonomicznej, Wroclaw 2003, p. 9.

– vertical – the flow of innovations in the science and implementation, ie, from basic research through development, to business,

– horizontal – with the spatial or situational nature, the first concerns the shift of innovation from one economic system to another, while the second is related to the assigning a different role of innovation in economic processes than before.

The issue of diffusion of innovation (development and introduction of something on the market) shows that innovation will be successful on a global scale if the vast majority of potential followers implement a product or technology. Without this process, there will be no impact of technology on the economy. It is similarly therefore with social innovation, most of which relate to the local economy. It is generally believed that human capital is a factor influencing the competitiveness and hence its level, at the particular level of knowledge, is prerequisites for the success of new solutions. The knowledge deriving from human capital is therefore a guarantee of success or failure for the economy.

4. Innovation policy at the regional and local levels

Contemporary socio-economic development is determined by the degree of competitiveness and above all, their spatial dimension. This means that this development directly depends on innovation policy conducted at national, regional and microregional level. This meaning of innovation policy is based on:[15]

– the role that innovation plays in economic growth. In present economies importance of innovation in relation to the traditional factors of economic growth has been growing,[16]

– so the phenomenon of imperfections of self-regulatory function of market, which in itself, without government support is not able to provide the innovation economy in a rational from the social point of view, level.

Considerating innovation policies at national, regional and even micro-regional level in the context of business is justified. "Innovation policy formed at the state level is defined as innovative macropolicy. Its purpose is social-economic development achieved by increasing the competitiveness of the national economy and the creation of national capacity for innovation, and the result is an innovative structure of the economy."[17] In turn, at the regional and micro-regional (draft) level is a practical implementation of the objectives of this policy through the

[15] S. Pangsy-Kania, *Polityka innowacyjna państwa a narodowa strategia konkurencyjnego rozwoju* [Innovation Policy of the State and National Strategy of Competitive Development], Wyd. Uniwersytetu Gdańskiego, Gdansk 2007, p. 8.

[16] Economists estimate that as many as two thirds of economic growth in developed countries should be connected with the conducting innovation.

[17] A. Pawlik, *Gospodarka lokalna i regionalna – wybrane aspekty* [The Local and Regional Economy – Specific Aspects], Wyd. Uniwersytetu Jana Kochanowskiego, Kielce 2011, p. 85.

instruments of supporting innovation, stemming from the law, reflecting the quality of shaping this policy through the prism of local government activities. Table 2 presents them.

Table 2. Instruments to support innovation by local government

Instrument	Characteristic
Coercive measures	These are laws restricting the freedom of operators in the field of space management. They include injunctions, prohibitions, permits the location, expropriation, pre-emptive rights with local codes and zoning plans.
Incentive measures	They are used to encourage business entities so they would voluntarily act in accordance with the guidelines adopted by the spatial policy. We can distinguish among them: direct financial support for businesses in order to stimulate a specific location, assistance in locating and spatial shifts for new labor, assistance in vocational training, preference for local businesses when awarding public contracts.
Measures of the space material forming	Used by the local government in order to encourage potential investors to locate in a given area by creating the possibility of obtaining external location advantage. Development of infrastructure facilities frees companies from having to pay additional costs associated with the start of operations in a given area. These include, among others development of technical infrastructure, construction of social infrastructure, which have a significant impact on the attractiveness of the area from the point of view of workers, construction of industrial sites, or areas with infrastructure necessary to start industrial production, location, technology parks and centers.
Institutional measures	They are related to the institutions for economic development along with providing assistance in the development of the business.
Information measures	They allow to influence the business entities behavior of economic agents by providing information on opportunities to pursue activities in the area and encouraging investment. These include handouts that are not addressed to specific recipients, and informational materials to be specific, wchich are assumed to make specified audience interested.

Source: A. Pawlik, *Gospodarka lokalna i regionalna-wybrane aspekty*, [Local and Regional Economy – Specific Aspects], Wyd. Uniwersytetu Jana Kochanowskiego, Kielce 2011, pp. 96-97.

Currently one of the most important objectives of innovation policy in developed countries is the development of national and regional innovation systems, ie the system of institutions, skills and incentives to:[18]

– the introduction of innovations increasing the competitiveness of the economy and improving the quality of life of the society,

[18] K. Wilk, M. Łyszczak, *Kierunki transformacji społeczno-ekonomicznej przestrzeni Polski ze szczególnym uwzględnieniem obszarów metropolitalnych* [Study of Socio-Economic transformation of the Space of Poland with Particular Emphasis on Metropolitan Areas], Scientific Papers of Academy of Economics no. 1087, Wyd. Akademii Ekonomicznej, Wroclaw 2005, p. 19.

– the simultaneous transformation of the system of research and development with an inwardly oriented to the needs of the country and an economy based on labor, capital and raw materials in the knowledge-based economy,

– increasing the interaction between science, technology, market, and territorial public administration, NGOs and education.

As in a local scale the growth processes face increasing barriers, it is why there is groups (clusters) support showing the innovative solutions, including organizational, financial and cultural character which has become essential and at the same time strengthens the so-called local innovation system (LIS), consisting of the economic, social and scientific – research and administrative environments.[19]

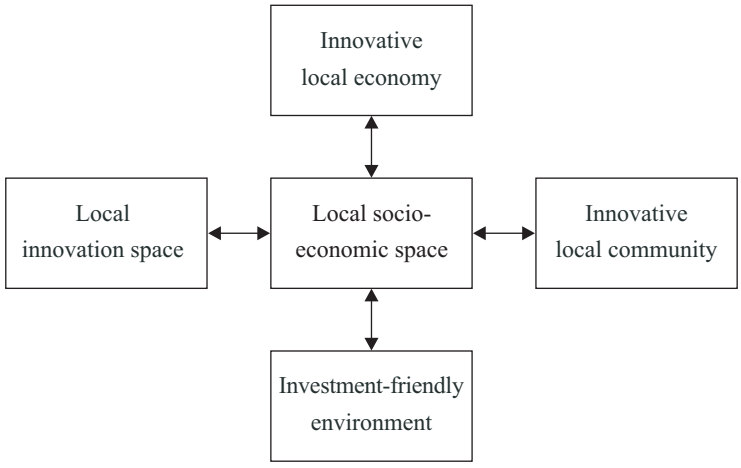

Fig. 1. The local innovation system

Source: author's own description.

Based on the figure above it can be said that the local innovation system (LIS) will then be creative when the local economic entities will continue to function in an efficient network, and innovation-friendly environment. The administrative area with the innovation entity, which is the local government, introduces innovations to market, launching and supporting the introduction of new organizational

[19] The core of the knowledge-based economy of the region at a regional level is regional innovation system (RIS), which the innovation capacity increase creates conditions and a new impetus for the development of the region based on endogenous resources and innovation. Those regions have opportunity for a lasting position in the knowledge economy which own: institutions (academic institutions, research units, science and knowledge serviceunits, science and technology parks), technology (communications, information, infrastructure (eg telephone, internet), stimulants (allowing for modern management of business processes and human resources).

– legal solutions, as well as promoting and spreading innovative activities in their space is especially important.

Summary

Under the conditions of the Polish economy the improvement of the level of innovation is one of the necessary conditions for a favorable position of our country in the process of economic integration with the European Union, as innovation policy is now one of the most important policies of the governments of the Member States, extending in three dimensions. The first relates to government policy and determines the impact of policy on the innovative capacity of firms at different levels (from EU to local). The second dimension (the sector one) makes an innovation policy dependent on the specific characteristics of individual industries. The third dimension is responsible for the interaction between innovation policy and other policies. The innovation itself in its broadest meaning became the basis for the functioning of modern economies. In order to operate in the market and be competitive at the same time one need to be innovative as well. Also in local spatial systems innovation is playing an increasingly larger role. Now even local units represented by different levels of government need to be innovative, in order to provide its citizens ever higher standard of living. It is expected that the pressure on innovation as a basis for the development of various systems in this space will grow. Under these circumstances, it is in some sense to talk about the need to change certain relations, in particular in local socio-economic areas. These changes need to be innovative. The innovative activity requires deliberate and consistent policy of the clearly marked factor of aim. Local government policy in innovation can not only be a reflection of the current needs and problems, and the big advantage of existing urban areas to the detriment of smaller centers, can be mitigated through the use of innovative spatial solutions.

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Innowacyjność jako determinanta rozwoju społeczno-gospodarczego w nowej gospodarce

Streszczenie. Współczesna gospodarka utożsamiana z nową ekonomią i nowym ładem gospodarczym często nazywana jest: gospodarką informacyjną, gospodarką postindustrialną, społeczeństwem trzeciej fali Tofflera, społeczeństwem informacyjnym i społeczeństwem wiedzy. W nowych

realiach społeczno-gospodarczych warunkiem uczestnictwa w rozwoju jest aktywne kreowanie procesu innowacyjnego rozumianego jako działanie w celu osiągnięcia przewagi konkurencyjnej. Zakres rozumienia innowacji powoduje, że definiują je ekonomiści, badacze zajmujący się naukami ścisłymi oraz społecznymi. W skali lokalnej innowacje mają szczególne znaczenie, ponieważ są jednym z najistotniejszych elementów ustanawiania przewagi, a ich jakość jest warunkiem współuczestnictwa w procesie integracji ze strukturami UE. Stają się one niezbędne do rozwoju i postępu społeczno-ekonomicznego, gdyż przejawia się w nich skłonność i zdolność tworzenia nowych i doskonalenia istniejących produktów, nowych technologii oraz systemów zarządzania i motywacji.

Słowa kluczowe: innowacje, innowacje społeczne gospodarka oparta na wiedzy, polityka innowacyjna