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Intellectual Capital as a Key Factor in the Economic Development of the Region

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Abstract

Modern economic development under globalization and increased competitiveness requires the availability of intellectual capital. Nowadays, intellectual capital has become one of the most demanded resources, which is explained by its ability to generate new ideas and find creative approaches to existing economic processes. Intellectual capital is developed in two ways: education – skilled personnel training, and involvement of foreign specialists.

In the article that relies on existing approaches intellectual potential assessment model is formed and can be applied to the regions of the country. With the help of this model the intellectual potential of the Samara region is assessed. In the article the quantity level link of gross regional product and intellectual regional potential is analyzed. Built regression model shears that intellectual capital significantly affects a regional income level.

The Samara Oblast has many skilled specialists that form its intellectual capital. New educational institutions should be established and innovative projects should be funded to improve the level of the oblast's intellectual capital.

Keywords: Economic development; Gross regional product; Intellectual capital assessment methods; Intellectual potential; Investment attractiveness; Region

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Introduction

In a modern economy, intellectual capital is recognized as a leading resource, availability and use of which is the basis of individual activities, any economic entity (Organization, region) and influence its effective functioning [1,2]. The significance of this factor increases every day, because in the modern world, the priority takes intellectual (creative) individual activity.

Mechanism for effective functioning of intellectual capital is impossible without its assessment [3,4]. But at present moment, there is no unified methodology for intellectual capital assessment. At first it is due to the fact that there is no a unified approach to an intellectual capital structure. Furthermore, intellectual capital is very difficult to assess using only accounting data, because it focuses primarily on the assessment of "past" activity, and intellectual capital is aimed at the future.

Views on Methods for Evaluating the Intellectual Capital

Works of many scientists such as A Poltorak and P Lerner [5],I Edvinsson and M Malone [6], RS Kaplan and DP Norton [7] are devoted to solve the problem of intellectual capital assessment.

The most comprehensive review of intellectual capital assessment methods, in our view, is represented by KE Sveiby [8,9]. The author allocates 25 assessment methods of intellectual capital, grouping them into 4 categories.

Direct assessment methods of intellectual capital Direct Intellectual Capital methods (DIC). This category includes all methods based on identification and assessment in individual assets or in individual components of an intellectual capital [10-12]. After individual components or even individual assets of intellectual capital have been assessed, an integral assessment of intellectual capital is concluded. It's not necessary that individual components assessment are added. More complex formulas can be applied.

Methods of market capitalization-Market Capitalization Methods (MCM). The difference between company market capitalization and its shareholders equity is calculated. The resulting value is

treated as a cost of its intellectual capital or intangible assets [13].

Methods of return or assets-Return on Assets (ROA) methods: Tire ratio of average company income before taxes for a certain period to tangible assets- ROA of the company – is compared with the same indicator as a whole. To calculate an average additional income from intellectual capital, a received difference is multiplied by tangible company assets. By direct capitalization or discounting ot received cash flow we can get the cost of company intellectual capital.

Methods of calculating score-Scorecard Methods (SC): Different components of intangible assets or intellectual capital are identified; indicators and indexes in a form of scores or graphs are generated and reported. Application of SC methods is not supposed to get monetary assessment of intellectual capital. These methods are similar to die methods of diagnostic information system.

Thus, all known methods of intellectual capital assessment developed by various authors, are easily distributed into four categories [14-16]. Relative closeness of DIC and SC methods as well as MCM and methods of ROA should be mentioned. In the first two cases the movement occurs from individual components identification of intellectual capital, in the second case it happens because of a cumulative effect.

ROA and MCM methods that offer monetary assessment, are useful when companies are merged and in situations of purchase and sale business. They can be used to compare companies within the same industry. They are very good to illustrate financial value of intangible assets. Finally, they are based on established rules of accounting, they are easy to be communicated to professional accountants. Their disadvantages are that they are useless for non-profit organizations, internal departments and public sector organizations. Tins is especially true tor MCM methods, which can be applied only to public companies.

Advantages of diagnostic and information system and SC methods are that they are applied at any organization level. They work closer to the event, so the received message may be more accurate than financial measurements. They are very useful for nonprofit organizations, internal departments and public sector organizations and for environmental and social objectives. Their shortcomings are that indicators are contextual and must be configured for each organization and for each objective, which makes comparisons very difficult. In addition, these methods are new and not easy to be accepted by society and managers who are accustomed to treat everything from financial point of view. Complex approaches generate large amounts of data, which are difficult to analyze and relate.

Considering the concept content of an intellectual capital in a regional context, it is reasonable to talk about the possibility of concept application in issues of regional strategic development. The intellectual capital can be considered as a factor of innovation development that is proved by a direct link between the condition of an intellectual capital and the level of regional innovation development.

Calculation of the Intellectual Capital in the Samara Region

To test methods for intellectual capital assessment we have calculated not a monetary assessment of an intellectual capital (capacity) of the Samara region. At present moment literature there is no common methodology for calculating an intellectual potential of the region, we took a standardized calculation methodology close to the economic meaning, as well as for calculating human development index (HDI) that was developed in 1990 by a Pakistani economist Mahbubom ul-Hakom, under UNESCO auspices and widely used in international comparisons.

Human development index has an ultra-integral character, according to certain rules there are three indicators of population life quality that are summed up in it: welfare level, that is expressed in figures per capita income; health level that is expressed in life expectancy rate; education level that is measured by the literacy level and the share of young people that are getting higher education in higher education institutions. In other words, in a Human development index economic, environmental, and cultural factors of people life are summarized.

Intellectual potential as well as HDI is an integral concept, but more specialized. Methods application of human development index calculating for assessing regional intellectual potential is possible only it analyzed indicators are significantly corrected. In this context human development index modification is attempted in works of VK Levashov and MN Rutkevieh [14]. They suggest that two elements are fundamental in intellectual potential assessment: science and education.

The model that was proposed by VK Levashov and MN Rutkevieh [14] seems to us to be interesting, however, focusing only on the two areas of public life may not give a complete picture about the condition of regional intellectual potential.

The structure of intellectual capital comprises three interrelated elements: human, structural and consumer (relationship) capital. Analysis of education sphere condition gives an idea about the level of human capital development, scientific -structural, but consumer capital is not described in the model of VK Levashov and MN Rutkevieh [14]. Therefore, to assess intellectual potential we offered a broad system of indicators (**Table 1**).

Below there is an algorithm of regional intellectual potential assessment.

On the first stage of the analysis indicators were identified that characterize basic elements of intellectual potential. A measurement system was formed, taking into consideration that it should not be complex; it should be easily checked and added with sociological and statistical information.

On the second stage selected indicators were converted into comparable kind by linear scaling method that is used in calculating human development index. At the feedback of an assessed indicator the calculation is made according to the following formula:

$$Y_{ij} = \frac{\max X_{ij} - X_{ij}}{\max X_{ij} - \min X_{ij}}, j = \overline{1,n}; i = \overline{1,m}, \quad (1)$$

At direct connection of an assessed indicator the following formula is used:

$$Y_{ij} = \frac{X_{ij} - \min X_{ij}}{\max X_{ij} - \min X_{ij}}, j = \overline{1,n}; i = \overline{1,m}, \quad (2)$$

where: Y_{ij} – is an index of an intellectual potential indicator;

X_{ij} – is an actual value of i-indicator;

maxX_{ij} and minX_{ij} – maximum and minimum values of an indicator within the period among all researched regions;

i – the number of indicators.

The results are presented in the **Table 1**.

On the third stage five intermediate indexes were calculated with the help of method of arithmetical average of corresponding indicators: an index of educational potential (IEP=0,3871), an index of social well-being (ISW=0,75), an index of scientific potential (ISP=0,6667), an index of information and communication component (ITC=1) and an index of relational capital (IRC=0,7217) (**Table 1**).

An integral index of regional intellectual potential (IP) was calculated by the method of weighted arithmetical average of intermediate indexes. Coefficients weight was determined on the base of expert assessment:

$$IP = \frac{0,25 \cdot IEP + 0,15 \cdot ISW + 0,25 \cdot ISP + 0,15 \cdot ITC + 0,2 \cdot IOC}{(0,25 + 0,15 + 0,25 + 0,15 + 0,2)}. \quad (3)$$

So, the integral index of an intellectual potential of the Samara region in 2013 was equal to 0.6703.

Analysis of index dynamics of integral intellectual potential of the Samara region is presented in **Table 2**. For analyzed years the index of intellectual potential of the Samara region increased more than 2 times. The integral assessment of intellectual potential of the Samara region 0.6703 (at maximum value of an index that equals to 1) can be assessed higher than an average level in the country as a whole. However, although this kind of assessment can serve as an indicator of general state of intellectual capital, its elements assessment are more important for the analysis of regional intellectual capital. If we compare the elements, we can see the imbalance of current state of the most influential element of intellectual capital, human capital (educational potential indicator has significant negative deviation, **Table 3**).

The value of regional intellectual potential, the degree of balance between its structural elements are very important indicators that have a significant impact on the amount of gross regional product (GRP).

In the article on the basis of an econometric model the link of GRP level is analyzed, general indicator of regional economic activity, and regional intellectual potential are also analyzed.

As an effective sign Y is examined as a volume of gross regional product (mln. rub.).

14 factor signs, indicators, are allocated, that reflect individual aspects of regional intellectual potential of the Russian Federation for 2013.

The population size is 72 units (Russian Federation subjects). They included mainly regions and republics. National territorial subdivisions were not included as separate units because there was no official statistical information.

5 factors groups were formed including specific criteria, indicators of this or that phenomenon.

Table 1 Indicators of intellectual potential of the Samara region.

Group indicators	Element	Indicator	Value				Index
			data	2013	Within the period 2002-2013		2013
					max	min	
Human capital	Educational potential indicators	EI	The share of employed population with higher professional education,%	37,4	37,4	23,4	1
		E2	Share of costs on education in GRP,%	2,0	4,6	1,5	0,1613
		E3	Number of students with higher professional education per 10000 people	406	568	406	0
	Indicators of social well-being	SW1	Gini coefficient	0,441	0,452	0,430	0,5
		SW2	Coefficient Unemployment rate,%	3,2	6,1	3,2	1
Structural capital	Indicators of scientific potential	S1	The number of organizations performing research and development	62	63	51	0,9167
		S2	Share of internal costs on scientific and research development in GRP,%	1,8	2,5	1,3	0,4167
	Indicators of information and communication component	IT1	Number of PCs connected to the Internet per 100 employees	44	44	20	1
		IT2	The specific weight of PC with Internet access,%	59,1	59,1	30	1
Consumer capital	Indicators of relationship capital	OI	Investments into fixed assets per capita, mln. rub.	81665	81665	12317	1
		O2	Number of used advanced manufacturing technologies	7291	7291	3738	1
		O3	Number of created advanced manufacturing technologies	21	51	19	0.0625
		O4	Specific weight of innovative goods, works and services in the total volume of goods, works and services %	22,9	26,5	6	0,8244

Table 2. Dynamics of the integral index of intellectual potential of the Samara region.

Yeats/Subject	2005	2006	2007	2008	2009	2010	2011	2012	2013
Samara region	0,3268	0,5823	0,7476	0,6649	0,5867	0,5140	0,6388	0,6674	0,6703

Table 3. Elements assessment of intellectual capital, 2013, the Samara Region.

Group of indicator	Index	Deviation from integrated assessment
Indicators of educational potential	0,3871	-0,2832
Indicators of social well-being	0,75	+0,0797
Indicators of scientific potential	0,6667	-0,0036
Indicators of information and communications component	1	0,3297
Indicators of relational capita!	0,7217	0,0514
Integral index	0,6703	-
Total		0,1740

Factors of an educational level of the population:

X_1- The share of employed population with higher education,%;

X_2- The share of expenses on education in the GRP,%;

X_3 -Number of students with higher professional education per 10000 people.

In this group the volume of GRP is closely correlated with die share of employed population with higher education (r_{yx1}=0.586). In general, each factor in this group has a direct relation with a productive criterion that confirms the thesis about the rote of education in economic development (high level of higher education causes higher labor productivity and, as a consequence, a higher salary that is taken into account when GRP is calculated).

Social factors:

X_4-Gini Coefficient;

X_5 -Unemployment rate,%.

The Gini coefficient is a deviation indicator of actual incomes from absolute equality in incomes distribution. The higher its value, the higher its inequality degree, Tins indicator actually reflects disproportions in benefits volume. It is very closely correlated with the volume of GRP (r_{yx4}=0.772). The relation with an unemployment level has a reverse character because a high percentage of the unemployed in the region worsens business activity and reduces the rates of economic development.

Factors of scientific activities:

X_6- Number of organizations implementing scientific research and development;

X_7- Share of internal costs on Scientific and Research Development m GRP,%;

X_8 -Internal costs on Scientific and Research Development in GRP, mln. rubles.

Each of these factors has a direct relation with the criterion *Y*. The closest connection was marked with the factors X_6 (r_{yx6}=0,010) and X_8 (r_{yx8}=0,900). It proves the role of research capacity in the region to raise the level of economic development.

Factors of info urination and communication technologies development (ICT):

X_9 - Number of PCs per 100 employees;

X_{10} -Specific weight of PCs with Internet access,%;

X_{11}- Number of PCs per 100 employees with Internet access, units.

The transition of Russian economy into information development way is urgent, because with the help of information and communication technologies (ICTs) the possibility of free information exchange, business correspondence is created, borders of marketing information communication are widened; payments and sale of goods (services) are implemented. Information and communication technologies are impossible without appropriate equipment, personal computers (PCs). Each factor in this group has a positive pair correlation coefficient with the volume of GRP. The closest relation is marked with a factor X_{11} (r_{yx11}=0,659).

Innovation and investment factors:

X_{12}-Investments in fixed assets per capita million rubles;

X_{13}-The number of advanced manufacturing technologies;

X_{14}-Specific weight of innovative goods$_5$ works and services in total volume,%.

These indicators in a pure form characterize quantity results of regional innovation development, and each of them is directly related to the volume of GRP. The highest value of a pair correlation coefficient is observed by the factor X_{13} (r_{yx13}=0,704). The value of actually used innovative technologies gives rise to a high level of regional product.

Selected factors-arguments must be relatively independent on each other. There should not be a significant correlation relation between them, i.e. there shouldn't be multicollinearity. The notice of multicollinearity is provided by building and analyzing the matrix of pair correlation coefficients (**Table 4**). In order to eliminate multicollinearity build a matrix of pairwise correlations and eliminate if necessary overlapping factors based on the performance of the following system conditions:

$$\left|r_{x_i x_j}\right| \le 0,8;\ \left|r_{x_i x_j}\right| \le \left|r_{yx_i}\right|;\ \left|r_{x_i x_j}\right| \le \left|r_{yx_j}\right|, \quad (4)$$

where: *r* – correlation coefficient;

x_i, x_j – factors;

Table 4. Matrix of pair correlation coefficients.

r	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}	X_{13}	X_{14}
Y	1														
X_1	0,586	1													
X_2	0,037	0,088	1												
X_3	0,431	0,546	0,161	1											
X_4	0,772	0,473	0,149	0,445	1										
X_5	0,411	0,321	0,070	0,279	0,372	1									
X_6	0,910	0,689	0,005	0,538	0,719	0,456	1								
X_7	0,284	0,407	0,037	0,301	0,341	0,410	0,471	1							
X_8	0,900	0,689	0,006	0,475	0,683	0,458	0,981	0,301	1						
X_9	0,560	0,575	0,063	0,468	0,449	0,207	0,632	0,344	0,628	1					
X_{10}	0,381	0,240	0,008	0,228	0,365	0,162	0,395	0,127	0,354	0,283	1				
X_{11}	0,639	0,567	0,040	0,489	0,340	0,234	0,719	0,327	0,698	0,882	0,689	1			
X_{12}	0,334	0,097	0,001	0,055	0,433	0,127	0,072	0,059	0,062	0,220	0,046	0,171	1		
X_{13}	0,704	0,471	0,030	0,299	0,638	0,508	0,734	0,605	0,734	0,302	0,196	0,353	0,118	1	
X_{14}	0,139	0,115	0,022	0,015	0,259	0,228	0,189	0,222	0,187	0,156	0,133	0,179	0,337	0,257	1

y – the resulting figure.

Multicollinear factors are in bold in the table.

For the analysis only statistically significant factors must be taken that are related with a modeled indicator.

The multifactor regression model that describes GRP dependence on regional innovative development factors has the following form:

$$Y=-454688 + 14097,6\cdot X_6 + 6,l\cdot X_{12}, \quad (4)$$

where: X_6-The number of organizations that conduct research and development, units;

X_{12}-Investments in fixed assets per capita, million rubles.

Multiple correlation coefficient in a model is 0,949. In the regions variation of GRP is stipulated by a variation of factors that are included in the model (90,0%), and by a variation of other factors that are not included in tins model by (10,0%).

The increase of scientific organizations in the region by 1 unit leads to GRP increase by 14097,6 million rubles in average. Rising levels of investment by 1 million rubles per person leads to GRP increase in average by 6,1 million rubles.

A similar study of GRP dependence on innovation development factors was conducted in the Samara region. As the object of the study was narrowed down to one Federation subject, we supposed that it is necessary to build й temporal data model.

Originally to build a model the same 14 factors were used, which had been presented earlier. To get correlation coefficients characterizing cause and effect link between studied series we should get rid of false correlations that is caused by trends in each row. There are several ways to get rid of it; we will use the method of inclusion a time factor into a regression model (t). The advantage of this method is that it takes into account all the information that source data contains (without losing part of observations and without substituting variables by consistent differences), and also it allows you to assess parameters by Least Square Method.

As a result of a selection procedure, two factors remained significant the same that were included in the model (4). However, taking into account multicollinearity between them, two separate models were built (5) and (6).

Model of GRP of the Samara region dependence on the number of organizations that implement scientific research and development (X_6):

$$Y=-276800,6 + 7608,7\cdot X_6 + 663l5,7\cdot t. \quad (5)$$

When the number of scientific organizations in the region increase by 1 unit, GRP grows by 760S.7 million rubles. Factors that are included in the model explain 97,3% of annual variation of GRP.

Model dependence of GRP of the Samara region on investment volume per capita (X_{l2}):

$$Y=104243,6 + 6,6\cdot X_{12} + 35218,2\cdot t. \quad (6)$$

With an increase of investment levels by 1 million rubles per person there is a GRP increase in average by 6.6 million rubles. Determination model coefficient is 99,4%.

Representation of the Impact of Intellectual Capital in the Samara Region

Based on obtained data we can conclude close quantity relation of scientific potential indicators of the region and its level of GRP. Tins fact is confirmed not only by built models, but also by international research in this area, So, in a survey of 192 countries the World Bank concluded that only 16% of economic growth is stipulated by physical capital (equipment, buildings, and industrial infrastructure), 20% is stipulated by natural capital, the remaining 64% is linked to human and social capital. Most developed countries get up to 40% of gross national product due to effective education system development.

In terms of investment attractiveness and willingness to build their own intellectual potential of the Samara region holds a high position among Russian regions.

The Samara region is included among the strongest industrial regions of countries with diversified economy. The core of the economy is the high-tech manufacturing with high added value; car-manufacturing, aviation and space complex, industries with high processing in raw-material industries, chemistry and metallurgy. Introduction of innovation technologies is an essential condition for their development, modernization that is based on technical upgrading, and innovative management techniques.

Today the Samara region refers to the regions of Russia where the complex of necessary conditions is formed tor successful modernization and tor a new innovation economy construction. Leading positions of the region in this area are confirmed by high ratings of independent experts:

3-rd place among die regions of the Volga Federal District and 11th place among the subjects of the Russian Federation according to the level of innovative capacity and to a complex assessment of rating agency "Expert RA" in 2013;

8-th place in the ranking of innovative Russian regions for the purposes of monitoring and managing the Association of Innovative Regions of Russia.

In 2013 in the Samara region there were innovative products that cost 239,0 billion rubles. The share of innovative products is 22,9% and has exceeded an average Russian level by 3-4 times.

The expenses on research and development in 2013 made 23.6 billion rubles. This is by 26,9% more than in 2011 (18,6 billion dollars). The share of domestic costs on research and GRP development in the Samara region is about 2% (for comparison, the share of domestic costs on GDP research and development in Russia more than 1%).

According to the results of 2013 the Samara region is the leader among Russian regions of the Volga Federal Distinct and in number of key indicators of scientific and innovative development:

4th place in Russia and 2nd place in Volga Federal District by share of costs on technological innovation in the total volume of shipped goods, performed works and services (6,3%), as well as the share of innovative goods, works and services in the total volume of shipped goods, performed works and services (22,9%);

5th place in Russia and 1st place in Volga Federal District by share of organization costs on technological innovation (65,8 billion rubles);

1st place in Russia and 2nd place in Volga Federal District by the volume of shipped innovative goods, works, services (239,0 billion rubles);

6th place in Russia and 2nd place in Volga Federal District by domestic costs on research and development (18,9 billion dollars), as well as by a number of new used technologies (7,3 thousand units);

7th place in Russia and 2nd place in Volga Federal District by a number of personnel that is engaged in research and development (16.7 thousand people).

Intellectual property is created, rights on it are consolidated: among the regions of RF the Samara region was in the following places of applications in 2013:

In utility models- on the 5th place (Volga Federal District-2nd place);

In inventions- on 10th place (Volga Federal District-3nd place);

In trademarks and service marks- 10th place (Volga Federal District-3nd place).

In the region there are a number of organizations specializing in the field of legal protection and use of intellectual property, 26 patent attorneys work more than in any other region of Russia, with the exception of central legions of Moscow, St. Petersburg and the Moscow region.

Share of innovation companies amounted to 5,4% in 2013.

The cost of technological innovation made 65, 8 billion rubles in 2013, which is almost 4 times higher than the volume in 2011. The main funding source on technological innovation are own organizations funds (47, 5%).

In 2013 in the Samara region 11 organizations were engaged to create advanced manufacturing technologies, they created 21 new technologies.

In 2013 organizations used approximately 7,3 thousand advanced manufacturing technologies, of which:

33,7% in the field of manufacturing, processing and assembling;

44,5% in the field of communication and management;

14,9% in the field of design and engineering.

In the Samara region legal, regulatory and institutional base was formed that covers the use of all forms of state support for innovation activities that are stipulated by the legislation. The diversity of support forms of innovative projects and developments in the Samara region includes giants, subsidies, loans, share capital, co-financing projects with federal institutions, consulting and organizational support.

In the region systematic actions were implemented to form an effective innovation infrastructure, creating a platform for completed innovative cycle.

By the initiative of Samara region Government infrastructure organizations system was created by regional budget means, with the assistance of federal funding to support and promote innovation developments – Innovation Fund of the Samara region, a Regional innovation center, Regional Venture Fund, Technopark, business incubators, innovation development center and cluster initiatives, Guarantee fund, Information and consulting agency, microfinance and other organizations.

From 2012 year the Samara region is a member of the Association of Russian innovative regions. This opens up additional opportunities for the region of interregional cooperation in terms of innovation development, especially experiences exchange in the field of favorable legal, economic and social environment creation to develop innovations on the territories of Russian Federation subjects, to develop and promote joint projects of the Association members and other opportunities within common interests.

The main objectives of Samara region Government are searching for new formats and capabilities to support latest developments introduction into manufacturing, to build communications

between the parties of innovative activity, to increase transfer of scientific and technical developments into a real economy sector, to prepare innovative companies of the Samara region for the entry of private capital and commodity markets.

To enhance innovation activity and emergence of new and innovative businesses the Samara region works in the field of major infrastructure projects implementation; Technopark is being created in the sphere of high technologies "Zlugulevskaya Valley", a special economic zone of an industrial type.

The basis of scientific potential of the Samara region is higher education, academic science and scientific units of industrial enterprises. In the field of research and development there are 61 scientific research organizations in different areas in the region.

Research in the field of fundamental sciences is coordinated by Samara scientific centre of the Russian Academy of Sciences (SamSC), which unites 8 and 3 research institutions of the Russian Academy of Sciences.

In the Samara region 28 education institutions of higher professional education prepare specialists, 17 institutions are state. The number of students in the universities in 2012/2013 was 141.7 thousand people [17].

A special role in the process of modernization and economy technological re-equipment of the Samara region are created by small innovative enterprises in the universities, which are a kind of bridge between theoretical science and industry. Thanks to initiating activities of innovative infrastructure organizations the Samara region took a leading position in Russia according to the number of functioning small innovative enterprises in the universities (in terms of realization of Federal Law 217), there are 62 economic companies with the participation of 6 higher education institutions of the region.

In 2013, a huge project was initiated on innovation infrastructure development -project of Technopolis "Gagarin Center" establishment in Samara as a university research-and-production campus with a unified world-class scientific and industrial, educational, residential, cultural and consumer area.

Tills project will develop as a legacy of FIFA World Cup 2018 after that the ground that is joined to the complex will be a part of the Technopolis including a stadium and infrastructure. On a unified ground there will be a university campus, residential buildings and dormitories tor students, graduate students, teachers and researchers, business incubators, technoparks, engineering companies, innovation support organizations, scientific and technical centers of large global companies, innovation and R&D centers, facilities for pre-college education and pre-school preparation, Congress Exhibition complex, as well as objects that provide a unified socio-cultural space and sports space.

Conclusion

Innovation activity will be based on the integration of accumulated development and competency of leading scientific schools and territorial clusters of the Samara region in the fields of mechanical engineering and machine-tool construction, space missile and aerospace, automotive, chemical and petrochemical industry, power and energy, nanotechnologies, biotechnologies and medicine, IT-technology, transport systems and logistics.

It is supposed that developed mechanism of innovation activity support in the Samara region will soon allow to see the results of your work as coordinated work of established institutions of innovation development, large innovation projects with tangible results, new competitive businesses based on scientific and technological development, effective "corridor": demand-suggestion, changes in the economy structure in favour of innovative industries, attract federal funding for innovative technologies introduction.

Titus, we can conclude that the most important condition tor socio-economic development of the region is intellectual capital development.

To realize this condition not only a comprehensive regional programme is required, that takes into account multifaceted nature of this phenomenon, but also a high level of financial investment in its major areas, as well as effective mechanisms tor tins programme implementation. One of these mechanisms is to conduct regular monitoring of regional development level of intellectual capacity, that allows on the example of the Samara region to determine not only achievements but also unresolved problems and unused reserves.

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