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**INTRINSIC INNOVATIONS FOR INTRINSIC MODERNIZATION  
IN RUSSIA\***

*SUMMARY. This article examines the current conceptual and practical approaches to the implementation of modernization on the innovative basis (taking into account the specifics of social formation), providing the innovation process, as well as to the development of mechanisms to encourage innovative behavior at the municipal level of the Tyumen region. Special emphasis is placed on the theoretical and methodological analysis of the relationship of business economy and the new social configuration, providing the innovation process. A new category of "intrinsic innovation" is introduced into the scientific terminology; the key role of municipalities in the dissemination of innovative entrepreneurial way of life in the chain "an individual – an enterprise – a municipality – a region" is pointed out as the leading method of providing a high level of productivity, standard of life and long-term competitiveness; the differences in the innovative behavior of the population of municipalities on the basis of the study of the influence of economic culture of municipal employees in the cities of Zavodoukovsk and Ishim on their innovative behavior. The proposed approach combines the socio-economic and socio-cultural aspects of intrinsic innovative development with a particular emphasis on the level of municipalities. Basing on the research, the priorities for the formation of a new configuration for the Russian society, providing intrinsic modernization on the basis of innovative development, are identified; two mechanisms of stimulation of innovative activity of the population at the municipal level are proposed.*

*KEY WORDS: intrinsic modernization, intrinsic innovation, entrepreneurial economy, a configuration of the society, providing the innovation process.*

The nature and direction of modernization are determined by its main goals. Russian experts and administration agree that the main goal of modernization is to build new Russia with its competitive abilities and living standards at a high world-class level. This position is determined by the systemic challenges of modern social development, and also by the peculiarities of the current state of Russian society, its needs and concerns.

The systemic challenges of social development in the XXI century can be described as follows.

First of all, the complication of world socio-economic systems as well as accelerated changes in all areas of life lead to increasing role of human capital being

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the key factor of socio-economic and technological development. Secondly, the anticipated new wave of technological developments (biotechnology, IT, nanotechnology) requires the appropriate response from individuals, social groups and companies, with entrepreneurial and innovative approach. Thirdly, the global competition growth affects not only the traditional markets of goods, capitals, technology and workforce, but also the national systems of administration, innovation support and human potential development.

Under the circumstances of globalization, the challenges that are listed above force countries to modernize their socio-economic systems basing on innovative development. To determine effective ways of modernization and innovations, which would suit the socio-economic, cultural and historical features of a given country, becomes one of the main priorities.

The history of the XIX and XX centuries demonstrates three possible types of modernization: revolutionary, intrinsic and “catching-up” [1]. The history of modernization in many countries proves that *intrinsic modernization* has been the most successful one. It allowed the countries to take decent positions in the global division of labor. This type of modernization can be characterized as follows:

Precise prioritization of goals and tasks.

National elite consolidation. It creates background for mutual trust, partnership and agreement on the given priorities between the elite and the majority of the citizens of a country.

Self-reliance and self-confidence.

Well-designed strategy of a country’s participation in the global division of labor and world economy.

Nowadays Russia chooses intrinsic modernization. **Russian model of intrinsic modernization** has to include the general features of intrinsic modernization and cope with the above-mentioned systemic challenges. More specifically, it has to solve two current Russian problems: 1) create the dynamic balance between industrial (traditionally based on raw material) and post-industrial (innovative) economic sectors. This first problem should be solved by developing partnership between business, authorities, innovators and socially active citizens, at federal, regional and municipal levels. The second task is to overcome the existing difference of socio-economic development between different Russian regions and cities by developing the innovative behavior and implementation of the advanced practice among the authorities, representatives of business, science, education and citizens. That should become the main way to increase labor efficiency, standards of living and long-term competitive ability. The implementation of intrinsic modernization in Russia should be based on the adjusted to Russian society innovative development of the whole socio-economic system. In other words, intrinsic modernization in Russia should be based on intrinsic innovative process. By intrinsic innovations we mean the type of innovations that are inherent for such a society that adequately deals with the systemic challenges of the social and economic development in the modern world. Such type of innovative activity aims to create a new society, to establish new socio-economic fields and

technologies that would support people's intentions to create new unique products providing the increase of labor efficiency, high standards of living and long-term competitive ability. Intrinsic innovative development is conditioned, firstly, by the features of transition period between industrial and post-industrial societies; and, secondly, by the socio-economic and cultural features of the country. The transition period trends aim at creating entrepreneurial, knowledge-based economy. The growth of global competition between companies initiates the process of constant innovations as a main factor of world-class competitive abilities of numerous companies, regions and countries. That constant innovative process requires the development of **entrepreneurial vision** (identifying emerging problems, inevitably accompanying the changes, as opportunities) and **action** (search for knowledge, expertise and combining resources and technologies for commercially successful problem solving) among the representatives of national and international business, as well as other different participants. Constant proliferation of the entrepreneurial vision and action creates stable and growing demand for specific knowledge and expertise. It makes the above-mentioned participants the main innovative force which provides long-term competitive ability and growth of national economies. As a result, the entrepreneurial and knowledge-based economy is created.

Such economy requires new social configuration represented by the state, business and "education-and-science" areas. In industrial economies, the main managing role belongs to the state which dominates its relations with business on the one hand, and with "education-and-science" – on the other hand. The state uses administrative and marketing methods while applying its control actions. Marketing methods are most often used for interaction with business than with "science-and-education". In the entrepreneurial, knowledge-based innovative economy the interaction between those three participants has an entirely different nature (that process is described in the model of "triple spiral" by Itskovich, as well as in "innovative ecosystem" model [2, 3, 4, 5, 6]).

*First of all*, the state doesn't have a leading role. The interaction between all the three participants has a "horizontal", partnership nature. *Secondly*, due to the partnership nature of the relations and the proliferation of entrepreneurial vision and action, the participants share their functions. Business begins to pay more attention to education and science and universities join the entrepreneurial activity by increasing their innovative activity, including the establishing of small firms. The state, in its turn, is more often inclined towards partnership with private sector. *Thirdly*, the horizontal nature of partnership between the three types of participants presumes that many smaller participants and mediators are going to be involved. They include not only small business but also consulting and service companies, engineering groups, business-incubators and technology parks. *Fourthly*, the partnership nature of the relations between the three main participants, with entrepreneurial vision and action, creates a new configuration of the society, forming an innovative system with a wide range of resources and conditions for exchange of ideas, knowledge and investments between the participants of the holistic innovative process (the large innovation cycle).

*Moreover*, the new configuration of cooperation of the three main participants directs the innovative process towards the production of new unique products, which can provide a high level of labor productivity, standards of living and long-term competitive ability. *Besides*, the proliferation of partnership and entrepreneurial nature of the relations between the three main participants at federal, regional and municipal levels is essential for creating intrinsic innovations. *Finally*, a sufficient condition for creation intrinsic innovations is the proliferation of innovative and entrepreneurial way of life among the three main participants and a significant amount of citizens as a main way to increase the labor productivity, standards of living and long-term competitive ability.

Based on the two main above-mentioned problems that are to be solved by the Russian model of intrinsic innovations, we can formulate two main priorities for providing innovative process.

First of all, the actions of authorities, business, innovation community and all the active citizens should be coordinated and directed to create a dynamic balance between innovative and raw material complexes. The innovative, creative approach should be implemented in the raw material complex, in the traditional economic sectors of Russia, especially in the underdeveloped ones: infrastructure, housing and public utilities, natural resources processing, agriculture. Russian innovative economy should cooperate with the industrial one (especially connected with raw-material, natural resources processing and underdeveloped infrastructure) [7, p. 567-571] in every region of the country. Such configuration of the national innovative system should provide transformation of the traditional sectors, form the conditions for the consensus between different social groups and pave the way for intrinsic innovation in Russia. As a result, the development of innovative and industrial economy will not only provide the integrity of the country, but will also help to form a consensus between different social groups, which will be affected by the positive changes of modernization.

The second priority for constructing the new social configuration in Russia is determined by the *key role of municipalities* in proliferation of entrepreneurial and innovative way of life among business, authorities, innovative community and active citizens, as a main way to increase the labour productivity, standards of living and long-term competitive ability in the following chain “an individual – an enterprise – a municipality – a region”.

The main reasons for that are the following. *Firstly*, a competitive region includes competitive settlements, towns and cities. *Secondly*, such competitive settlements, cities and towns are the places where competitive individuals live and competitive enterprises are located. *Thirdly*, more competitive participants live in such cities, settlements and towns, thus, the bigger the local budgets are, the higher the quality of life of the local citizens is and the higher the competitive ability of the region is.

Despite the fact that general formula for reaching high competitive ability is common for all the municipalities, the practical implementation for each of them is unique. It is determined by their socio-cultural features, values and settings of the

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local communities, which create significant differences in the mechanisms of innovative activity in different settlements.

In order to study the innovative behavior at the municipal level, we have conducted research of the main differences in behavior in different municipalities. Such differences are caused by varying structure of economic culture. In the beginning of 2013 in the South of the Tyumen region a survey was conducted to reveal the above-mentioned correlations. The methods of the survey are described by Pogodaeva in her article [8]. Analyzing the results, we relied on the assumptions described in the works of M. Weber [9], Duesenberry [10], Kahneman [11, 12]:

1. An economic agent estimates his well-being based on his social rank.
2. Social rank determines a certain way of living.
3. Ways of living of economic agents are discrete and vary by levels of income.
4. A way of living is also determined by that of the people around, who tend to have a similar way of life.
5. There are two main stimuli for activity: unwillingness to make a shift to a level of life with the lower income and the willingness to shift to a level of life with the higher income (“spirit of capitalism” – Weber). There is also an intermediate strategy: maintenance of the current way of life (“traditional thinking” – Weber).

We also analyzed the municipal officers’ understanding of the socio-economic dynamics in municipalities in 2013. All the respondents were preliminarily divided into Zavodoukovsk and Ishim groups. We examined the effect that social environment has on the *innovativeness*, which is evaluated by the increase in labour efficiency. That is why the factors that we examined during the survey were compared with the increase in labour efficiency. Identifying the factors that positively correlate with the increase in labour efficiency we referred to Fechner’s quotient. Excluding the minor exceptions (that will be described later), the study considered the factors with direct correlation (quotient 0.5 – 0.7). Both groups showed equally high level of correlation between the increase in labour efficiency and the following factors:

A. **correlation above 0.6:** application of modern technologies; capital-labour ratio.

B. **correlation 0.5 – 0.6:** the percentage of innovative products in GRP.

Those factors may be considered invariables concerning the social orientation of different groups of economic actors. Those are, in fact, technological factors that allow the innovative potential to be realized. Group A factors are technological means for increase of labour efficiency. Group B factors is the result of innovative potential. The second group has rather high (not less than 0.5) positive correlation with the increase of labour efficiency, but that correlation varies in different groups. Those factors are: *education costs per capita; R&D costs per company; innovation costs per company*. We should note that the first two factors that can be attributed to human capital investment are crucial for Ishim group. And the third factor being general capital investment is more important for Zavodoukovsk group. The rest of the factors with high and direct correlation have different significance for the two groups of

municipalities. For Zavodoukovsk group the crucial factors for the increase of labour efficiency are: workforce, capital, information resources. For Ishim group, respectively: innovative resources, consumption potential, institutional environment. Infrastructure is equally important for both groups.

*Factors that have the opposite types of correlation with the increase of labour efficiency:*

The quantity of personal computers: Zavodoukovsk group – 0.58; Ishim group – 0.08.

Population with incomes below subsistence level: Zavodoukovsk group – 0.37; Ishim group – 0.81.

Share of overdue loans: Zavodoukovsk group – 0.21; Ishim group – 0.39.

Trade and mediatory infrastructure investment per capita: Zavodoukovsk group – 0.7; Ishim group – 0.04.

The results obtained allow to propose a hypothesis that the main growth stimulus in Zavodoukovsk group is willing to improve life by more productive work, while in Ishim group the increase of labour efficiency is more of a “forced” measure, caused by inadequate consumption growth and the need to fulfill the debt obligations. Zavodoukovsk group distinctly demonstrates “spirit of capitalism”, while Ishim group seeks lifestyle improvements by increasing the amount of money (not by production but by rearranging of capital), which leads to more loans, and the necessity to repay those loans causes the increase in labour efficiency. In other words, the hypothesis of the intrinsic inequality of economic actors is proposed. For Zavodoukovsk group the increase in labour efficiency is determined by: the direct innovation investments, which leads to the changes of efficiency of the fixed capital and effects the growth of share of fixed capital investment; the percentage of economically active population (since Zavodoukovsk has the “spirit of capitalism”), when the education costs contribute to increase the labour efficiency; the same effect has the mobile telephony, sufficient amount of personal computers and their connection to city information network; developed industrial (transportation, trade volume, loan resources) and trade infrastructure (its state is tightly connected with the amount of investments in that sector). In Ishim group – the increase of labour efficiency depends on consumption potential (average household consumer spending). The bigger the population with incomes over subsistence level is, the bigger is the increase of labour efficiency. In other words, willingness to increase the level of consumption rearranging the finances and issuing more loans to individuals stimulates the increase in labor efficiency. The growth of unemployment has similar effect. The unemployment and the need to repay the loans causes the growth of small businesses which results, alongside with the increase in labour efficiency, in the increase of the net financial result of GRP. Based on the above-mentioned, we may hypothesize that activation of innovative activity depends on the initial state of economic actors. If the percentage of active population is high, and they are willing to increase their quality of life by productive labour, the stimulation of that activity depends on providing them with resources. If people do not have a direct work stimulus, then it is necessary to affect their views and settings

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by consumption stimulation (including the consumer lending), which will create the conditions for restructuring economic environment and economic views. And this leads to rather unexpected conclusion: the measures for innovative activity stimulation should vary depending on the territories and social groups. Two mechanisms can be implemented for that: stable investment in innovative sphere and consumption stimulation. Yet, these measures should differ for various groups of people.

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