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INNOVATIVE PROCESSES IMPACT ON THE FACTORS OPTIMAL NUMBER FORMATION OF THE ENTERPRISE LOCATION

The article deals with today's innovative processes impact on the enterprise location factors. It is grounded that innovations influence the economic and economy process change at the existing enterprises and are urgent. The optimal number of factors to optimize enterprises or to search new enterprises location places is formed.

Keywords: innovations, factors of enterprise location, regional economy, space economy, efficient power location.

Problem statement. The today's innovative development helps to solve social, organizational and economic problems at the enterprises, which are engaged in production or service providing. In order to develop profitable enterprise, one needs to use process of the systematic and dynamic changes, its systems transformations within strategic aims, set by the enterprise. And in its turn it may be achieved owing to the innovative development. Innovations in wide range, i.e. in economy, are leading factors to provide world level of efficiency, conducted through novations in the productive processes, new inventions implementation in the technologies development.

It is resulted in the fact that factors of the enterprises location need modification or even there is necessity to create new such factors. Only right distinguish of the enterprises location factors will have optimal result in search of the best enterprise location place.

Analysis of the latest research and publications. Scientific literature on enterprises location has a lot of approaches to distinguish factors, which have impact on the optimal place finding to locate the enterprise.

Scientist Sivkov V.S. has contributed to research the enterprise location theory and practice. He classifies small producing enterprises only by branch and territory feature. Moreover he points out that food and consumer goods industry, building and connected with it branch productions are leaders. In the regional aspect most development of the small business is spread in the large cities, industrial regions. There are many arguments which indicate the necessity to develop small business taking into account regional specific. They include short-run production and commodity outputs, transportation of which is not profitable for the big distance; service of small territorial markets; location of the enterprises in little and middle cities, urban-type communities and urban settlement, which provide labor power engagement, local raw materials using etc [1]. We consider that such classification will not give right result, and the regional aspect as enterprises classifier can be only the fundament or starting point while searching optimal place for its location. We describe it in more details in [5, p. 858-862].

Popovkin's V.N. study concerning modern territorial planning out-of-dateness is worth noticing. He stresses regional and integral state policy concerning enterprises location [2].

Rudenko V.P. in [6] studies natural and resource potential state in Ukraine. Such

investigations are fundaments to find optimal enterprises location places, which are inclined to the natural resources by their peculiarities.

Particularly, in [7, p. 15-18] the following factors concerning enterprises location, which impact industrial enterprises location place and territorial and producing complexes creation – they can be united by such features: natural and geographical, demographic, technical and economic, social and economic.

The features of natural resources quality and quantity are related to the natural and geographic factors by the author. The main thing there is that the factors impact on the spatiality of the mining industry, hydro energetic, agricultural production processing branches.

The demographic factors comprise quantity and location of the population, and also quantitative and qualitative estimation of the labor resources in regions and districts.

The technical and economic factors include STP, production transportation conditions, social organization of the producing processy. Therefore it is mentioned that main impact is made by scientific and technical progress, because STP fastening weakens demographic and nature and geographical factors influence. Ye. Kachan in [7] emphasizes, that practical implementation of innovations, especially novations in the human labor economy and resource-saving technologies, provides capital coefficient, material intensity, labor coefficient and capital intensity decrease, and during this, – djacent or similar terms creation to increase efficient powers development in the economic regions and its even location.

Social and economic factors of the efficient powers location are oriented to hidden social and economic difference between village and city, agricultural sector and industrial producing. The same factors have to include optimal engagement of population, education development, environment protection, life and labor conditions improvement, health protection, housing and utility sector, and service sector.

Geopolitical factor today has significant impact on space economy development in Ukraine. It concerns convenient position of our state from the point of view of geography: Black and Azov Sea; European and Near East nearness; developed transport net of the interregional and international importance; neighborhood with seven states.

The significant role while location of our state efficient powers is played by national factor (Autonomous Republic or Crimea, compact populating of most Russians on the Eastern regions territory).

As for national security, geopolitical factor is important while establishing and developing of the external economic relations between our state and other countries, which are not only its neighbors but with far foreign countries. The territory of our state is crossed by many transit routes, which provides great currency supply to the budget.

The today's innovation development influences the enterprises location modification factors, because innovations theory plays important role in the science development. Among first innovations researches the study of scientist from the USA was conducted 1943 [8, p. 171]. The founder of innovations research is E. Rogers, because she united the most reasonable results in the innovations introduction sphere into practice [9]. She was first to represent the united theory of the innovations diffusion. These researches concern main the formation of theories, concepts and models to locate efficient powers and regional economy.

Scientists A. Ignatiev [4], D. Ushakov [10], T. Tkachenko [11] study the introduction of the innovation theory in the service sphere. Today's innovative technologies give opportunity to change raw rationally, which earlier was used as base to produce this or that production. This confirmation can be based by such example. Technical revolution was conducted by opportunity to substitute cast iron and metal pipes by plastic ones while laying water pipe line and draining.

Unsolved questions, which are part of the whole problem. Historically, Transcarpathian Region in Ukraine has the biggest concentration of fruit and vegetables recycling plants number in Ukraine, which face the raw lack problem. Choice of these plants location places while their creation (in the faraway past) relied on these enterprises location factor near raw sources.

The innovative development today gives opportunity to avoid bankruptcy, because now economically beneficial and physically possible transportation of raw without costs for its outgoing features. As a result of nowadays technical possibilities development to transport goods, these plants are profitable, and their location place is based by factor, with which enterprises are inclined to the production consumers.

The object of an article is to define the factors number to locate enterprises to search optimal place of its location, therefore grounding the enterprise location place with one or several factors one should take into account innovative development.

Main material. The branches referring to this or that production group will always have relative character and will concern time period, because – various factors value can be changed under influence of innovation introduction. Technological and organizational changes of production with big probability impact effect its location. On the territory of some states or regions the enterprise can be built, which earlier it was not efficiently to build.

Coal use in metallurgical industry gave opportunity to locate metallurgical plants near forestry (using wood charcoal) and in the coal-mining places.

The world famous for food producing “H.J. Heinz Company” which in 1869 started its work with producing of seasonings was oriented to find optimal location place for production process to be close to the raw sources and consumers. Innovations in the refrigerating equipment sphere, and innovations in the pasteurization sphere, as a result of which product unfit became irrelevant, lead to the only one factor to orient this enterprise on raw sources.

The synthetic fibers made the textile industry to be independent on wool production places and fiber crops growing, but dependent on oil products and coal.

Changes in the national economy branches location are planned by transport innovations. The dependence of producing process on energetic bases was decreased as a result of power lines development. Such innovations are especially important for agriculture, light industry. Branchy pipe lines net make gas and oil transportation cheaper. It provides to consume them in the places of petrochemical and chemical origin products producing.

Innovative development effects the changes in factors role concerning power stations location. At the beginning of the power industry formation at this activity area enterprise one relied on consumers’ factor. Such orientation was based on bad development of the electricity transmission means. With development of electricity transmission nets, consumers’ factor impact was decreased, and fuel-energy effect was increased. It means that, as a result of electricity transmission cheapening the fuel-energy factor becomes more relevant concerning power stations location. However, the appearance and building of atomic power stations in electric systems fundamentally simplified electric energy transportation problem, because compactness and high-calorific raw of the atomic power stations give opportunity not to consider raw transportation costs and atomic power station building close to consumers. After Chernobyl accident, when such objects location close to consumers became obviously dangerous, consumers’ factor forwent the factor of technogenic and ecological security. It became reason to locate ecologically dangerous objects in the places remote from inhabited localities.

Taking into account this “innovative prism” concerning enterprises location factor, we can

form ten factors, which are taken by enterprises while searching their optimal location places [5, p. 790-811].

Direction of production attention to raw sources. The enterprises orient to be located close to raw sources and producing based due to this factor.

Direction of attention to the raw sources is reasonably to conduct in the following cases. Firstly, raw procurement, processing or mining (minerals mining, sawmilling industry, fish-processing industry etc) enterprises have raw orientation. Secondly, enterprises, which waste a lot of raw materials in relation to final product, i.e. material-intensive production, direct their attention to the raw sources. Thirdly, enterprises, processing raw, which is quickly spoiled: wine industry, food-canning industry, fish-processing industry etc, are closely situated to the raw sources.

Direction of the producing attention to electric power and fuel sources. Highly energy-intensive productions (fuel and energetic costs component is half of the whole costs for production) have to direct their attention to close location to fuel bases (heat and power stations, petrochemical industry enterprises, etc) or close to the electric power sources (processing of the non-ferrous metals with the help of electrolysis, electric ferroalloys production enterprises, synthetic fertilizers enterprises).

Direction of the producing attention to fresh water sources. Fresh water which is consumed during producing process groups enterprises according to the factor on fresh water sources location. It comprises water-intensive industrial and agricultural enterprises.

Direction of the producing attention to the cheap and numerous labor power. This factor groups enterprises, optimal location of which is place with numerous and cheap labor power. Labor costs in relation to production unit producing are determined by labor resources effect. Such branches need the man power as: instrument making industry, instrument industry, optomechanical production, electronics, machine tool building, automobile production, production of clothing, wool, silk, shoes industry goods.

Direction of the producing attention to the qualified labor power. In big cities, which have higher schools and scientific and research institutes, enterprises are located, which require highly qualified labor power in the production process (machine building, plants- and rockets production etc). Direction of such enterprises in other places without necessary highly qualified man power, would lead to the additional spending of time and costs to train such workers or to involve them from other cities.

Direction of producing attention to the consumers. Such direction of attention occurs, when final product is not reasonably to bring on large distances (bread, dairy products, chemical acids, etc.).

Direction of the producing attention to places, where one may minimize costs for production producing. Such direction of the producing attention may be when costs for final production transportation are not so large.

Orientation of the producing attention to the places with high qualified environment. It is impossible to build instrument building, optic, aviation, pharmaceutical enterprises in the polluted environment. Great costs must be wasted by these enterprises to create artificial space of high quality in sections; however result of such events is limited. For example, in previous places of metallurgy in German it was not financially profitable and sometimes it was impossible, to develop electronic production because of great air pollution [3, p. 27].

Direction of the producing attention to the places, where it is comparatively cheap to shorten the existing level of emissions. The enterprises with high level of environment anthropogenic pollution consider the optimal location place that, where costs to decrease

emissions at the enterprises will be less. As a result of ecological direction in the state development, new enterprises are to decrease emissions analogical to their pollutions emissions on the existing enterprises, if it is cheaper there.

Direction of the producing attention to the places, where danger from their work for population is minimized.

Conclusions. Innovative processes in time space make these or those economy branches top-priority. Particularly, in the middle of the last century the leading role was given to agriculture and textile industry, when today iron industry and transport machine building are perspective. Now innovations are introduced into energetics, machine building, chemical industry and electronics. Taking into account such fast innovative development of the formed 10 factors is enough to optimize enterprises location or search places to locate new enterprises.

Further researches will concern innovative processes impact on the restructuring of the Western region economy in Ukraine.

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І.А. Франів. Вплив інноваційних процесів на формування оптимальної кількості чинників розміщення підприємств

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Вплив інноваційних процесів на формування оптимальної кількості чинників розміщення підприємств

У статті аналізується вплив інноваційних процесів сьогодення на формування чинників розміщення підприємств. Обґрунтовується вплив інновацій на зміну економіко-господарських процесів на існуючих підприємствах і наголошується на їх актуальності. Сформовано оптимальну кількість чинників для оптимізації розміщення існуючих підприємств чи пошуку місць для розміщення нових.

Ключові слова: інновації, чинники розміщення підприємств, регіональна економіка, просторова економіка, розміщення продуктивних сил.

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Влияние инновационных процессов на формирование оптимального количества факторов размещения предприятий

В статье анализируется влияние инновационных процессов настоящего на формирование факторов размещения предприятий. Обосновывается влияние инноваций на изменение экономико-хозяйственных процессов на существующих предприятиях и подчеркивается их актуальность. Сформировано оптимальное количество факторов для оптимизации размещения существующих предприятий или поиска мест для размещения новых.

Ключевые слова: инновации, факторы размещения предприятий, региональная экономика, пространственная экономика, размещение производственных сил.

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