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DEVELOPMENT OF THE ENTERPRISE DISTRIBUTION SYSTEM TAKING INTO ACCOUNT THE REGIONAL LOGISTICS POTENTIAL

The article defines the procedure for the development of the enterprise distribution system on the basis of regional logistics potential studies. It increases the validity of the decision due to the objectification of data on the status and opportunities to attract logistics and marketing intermediaries, to rationalize the system of material and accompanying flows' management in the region. For this purpose, the essence of logistics potential of the region was formulated and its structure was proposed.

Keywords: logistics potential, region, structure, diagnostics, distribution system.

Problem statement. Current conditions indicate that one of the important indicators determining the competitiveness of a region is its logistics status. Region's logistics status means the level of its logistics efficiency. It is important today because uninterrupted and sustainable logistics in the region is the factor that contributes to its economic growth and integration into the global supply chain.

According to the specified, question of the regional logistics potential investigation becomes more and more important. It helps not only to form competitive advantages of the region, but also to make reasonable decision while building distribution system of a certain region.

Review of recent publications. The development of the logistics potential of region in theory and practice was examined by many scientists. The essence of region's logistics potential and its structure were studied by such scientists, as Koblianska I.I., Rubalko N.A., Mishchenko O.V. [1] (consider logistics potential as a set of the following components: geographic, socio-economic, transportation, infrastructure, institutional), Kuznetsova N.P. [2] (provides the structure of the logistics potential which includes communications, freight turnover, passenger turnover, the availability of modern reservation system, transit cargo transportation by all transport modes, services availability, introduction of modern systems of logistics).

Methodological and practical issues of the region's logistics potential assessment were examined by such scientists, as: Freidman O. [3; 4], Kovalska L., Savka B. [5], Rakhmangulov A., Kopylova O. [6], Rodymchenko A. [7], Rozhko O. [8], Shostak L. [9], Syzdykbaeva B., Raimbekov Zh., Zhumataeva B. [10].

In addition, the logistics potential of regions and countries is measured by World Bank's International Finance Corporation (IFC) (The Agility Emerging Markets Logistics Index)

[11; 12] and The International Bank for Reconstruction and Development/The World Bank (the Logistics Performance Index (LPI)) [13].

Unresolved issues. Despite the wide range of publications based on that topic, an estate and perspectives of regional logistics potential in terms of distribution system's forming still need deeper investigations.

The aim of this research is to form an order of enterprise distribution system development in bases of previous investigations of regional logistics potential.

Basic material. Nowadays there are a lot of methods for territories' logistics potential measuring. Previously this term was given in consideration with amount of cargo transported and implemented through the territory, but now it is supplemented by quantitative and qualitative aspects of logistics processes in the region.

Authors claims that *logistics potential of the region* is a sum of existing and potential elements and factors of logistics infrastructure, which help to form and distribute material and accompanying flows. Forming and using of the logistics potential is aimed to ensure timely and effective movement of logistics resources with a minimum cost.

To indicate logistics potential of the regions international organizations, develop their own methods. E.g., the Logistics Performance Index (LPI) contains such components as [13]: the efficiency of customs and border management clearance; the quality of trade and transport infrastructure; the ease of arranging competitively priced shipments; the competence and quality of logistics services – trucking, forwarding, and customs brokerage; the ability to track and trace consignments; the frequency with which shipments reach consignees within scheduled or expected delivery times.

Overall LPI score for Ukraine in 2007, 2010, 2012 and 2014 are given in Figure 1. Thus, Ukraine ranked 61st among 160 countries in the survey for 2014 (2,98 points out of 5 possible). Comparing, in 2007 Ukraine ranked 73rd among 150 countries, in 2010 it ranked 102nd among 155 countries and in 2012 Ukraine ranked 66th among 155 countries. So still Ukraine must work on its logistics potential.

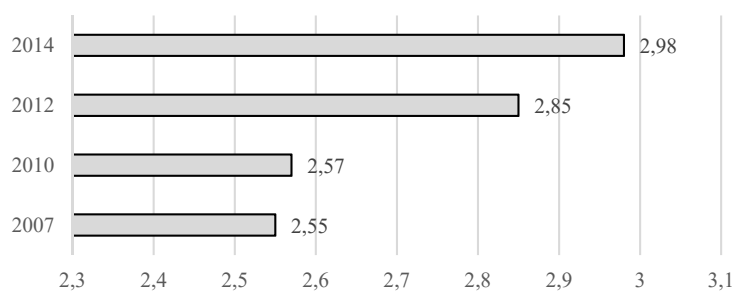


Figure 1 – The Logistics Performance Index for Ukraine in 2007, 2010, 2012 and 2014 (own processing of [13; 14])

The Agility Emerging Markets Logistics Index uses three metrics to assess and rank 45 emerging markets. The metrics measure the countries' [11; 12]:

– Market size and growth attractiveness (a country's economic output, its projected growth rate, financial stability and population size);

– Market compatibility (a country’s development through the importance of its service sector, urbanisation of population, distribution of wealth throughout the population, foreign Direct Investment (FDI), market accessibility, security);

– Market connectedness (the frequency and range of destinations of its liner shipping connections, the level of airport infrastructure relative to the market’s size, a rating of its overall transport infrastructure, a rating of the efficiency of its customs and border controls).

Ukraine’s overall score in 2016 is 4,09 (34th ranking), in 2015 Ukraine’s overall score was 4,46 (30th ranking). The reason of overall score declining is that in 2016 Market Size and Growth Attractiveness sub-index has crashed by 0,42 points and Compatibility sub-index score decreased by 1,30 (Figure 2).

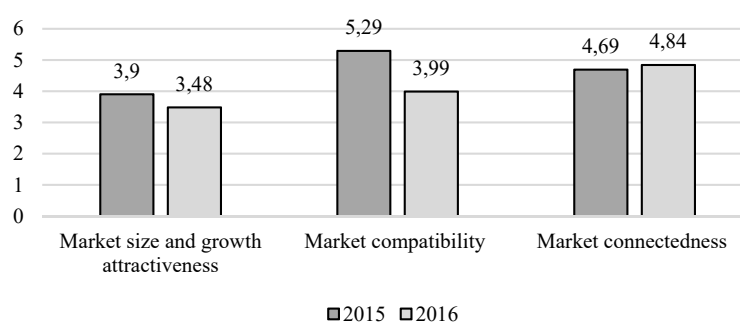


Figure 1 – The Agility Emerging Markets Logistics Index by metrics for Ukraine in 2015 and 2016 (own processing of [11; 12])

Connectedness sub-index has grown by 0,15 points. Unfortunately it didn’t help Ukraine to keep positions of the previous year.

Authors, as the base for the further investigation, have chosen works of O. Freidman [3]. The structure of logistics potential, which influences on validity of decisions connected with the distribution channels formation in specific region, was improved. It was proposed to identify such elements of the regional logistics potential as: transport potential; storage potential; transit potential; human resources potential; customers and sales potential; marketing and services potential; advantages of the economical and geographical position, or dimensional potential.

Transport potential is the capacity of the region’s transport system. It displays reasonableness and wideness of transport system, existence and quantity of stations targeted to multimodal transportations, quantity of parallel regional transport routs for different means of transport and transportations.

Storage potential is a marker of regional storage system efficiency. It helps to evaluate existing storage areas and perspectives of their enlargement, improvement and place organization.

Transit potential is an amount of cargo which is carried through the territory in some period of time, and also the amount of transit cargo transported through the territory according to contracts limits.

Human resources potential reflects opportunities to ensure all objects of transport and logistics infrastructure with specialists of different specialization, to learn and investigate

logistics systems and processes and to develop them constantly. This index must not only display the quantity of educational institutions and amount of specialists in certain sphere, but also functioning of scientific institutions, departments, and scientific discoveries in the field of regional logistics.

Customers and sales potential characterizes actual and potential volume of sales in the region, that depends on the value of demand, general market conditions, population's income and business activity.

Marketing and services potential characterizes marketing intermediaries, development of the enterprises of wholesale, retail, and market of intermediaries services.

Advantages of the economical and geographical position (dimensional potential) is an integrated index which combines comfort and peculiarities of climate and geographical position, attractiveness of social and manufacturing sphere of the region (dynamics of population changes, indexes of import and export, index of manufactory, agriculture and building development).

Thereby, use of the system of regional logistics potential monitoring will allow creating conditions for logistics service improvement and rational distribution system choice. Logistics potential of the region is a key factor that influences positively or negatively on the process of distribution. Generalized scheme of distribution system development in terms of certain region and its logistics potential is given in Figure 3.

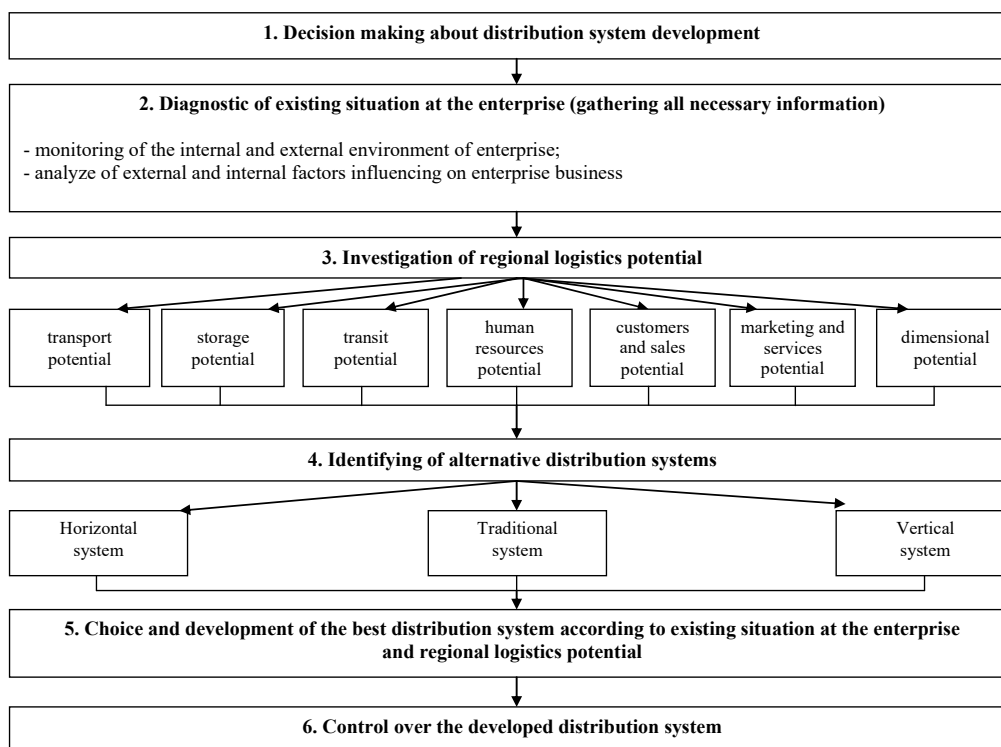


Figure 3 – The scheme of the distribution system development at the enterprise in terms of regional logistics potential (developed by the authors)

Consequently, taking into account regional logistics potential will help enterprise to consider all advantages and peculiarities of the region and decries potential risks. That, in turn, will stimulate development of distribution system that will absolutely meet needs and peculiarities of the region.

Conclusions. As a result, investigation on regional logistics potential, on base of proposed structure, allows identifying logistics status of the territory more efficiently on any level (city level, regional or country level) and facilitating well-organized distribution system in specific region.

Future investigations will be targeted to identification of the logistics potential of Ukraine's regions, and recommendations making.

1. Коблянська І.І. Логістичний потенціал регіону: сутність і методичний підхід щодо його оцінювання / І.І. Коблянська, Н.О. Рибалко, О.В. Міщенко // Вісник СумДУ. Серія "Економіка" – 2015. – №2. – С. 23-30.
2. Кузнецова Н.П. Логистический потенциал как фактор инновационной активности региона // Вестник ОрелГИЭТ. – 2012. – №1(19). – С. 73-81.
3. Фрейдман О.А. Логистический менеджмент потоковых процессов в регионе / О.А. Фрейдман. – Иркутск : ИрГУПС, 2011. – 137 с.
4. Фрейдман О.А. Методы критериальной оценки логистического потенциала региона / О.А. Фрейдман // Российское предпринимательство. – 2013. – №3 (225). – С. 127-130.
5. Ковальська Л.Л. Формування та розвиток логістичної інфраструктури регіону / Л.Л. Ковальська, Б.Р. Савка // Вісник Національного університету "Львівська політехніка". – 2012. – №749. – С. 410-416.
6. Рахмангулов А.Н. Оценка социально-экономического потенциала региона для размещения объектов логистической инфраструктуры / А.Н. Рахмангулов, О.А. Копылова // Экономика региона. – 2014. – № 2. – С. 254-263.
7. Родимченко А.О. Формування методичних підходів до оцінки рівня розвитку регіональної логістичної системи / А.О. Родимченко // БІЗНЕСІНФОРМ. – 2014. – №4. – С. 45-49.
8. Рожко О.Н. Оценка логистического потенциала региона / О.Н. Рожко // Вестник экономики, права и социологии. – 2015. – №3. – С. 72-75.
9. Шостак Л.В. Формування логістичного потенціалу підприємства / Л.В. Шостак // Вісник ОНУ імені І.І. Мечникова. – 2015. – Т. 20, Вип. 4. – С. 151-154.
10. Сыздыкбаева Б. Оценка эффективности развития транспортно-логистического потенциала регионов Казахстана / Б. Сыздыкбаева, Ж. Раимбеков, Б. Жуматаева // Актуальні проблеми економіки. – 2013. – №5(143). – С. 473-481.
11. Agility Emerging Markets Logistics Index 2015 [Electronic resource] // Transport Intelligence. – 2015. – 75 p. – Access mode: <http://www.agility.com/EN/About-Us/Documents/Agility%20Emerging%20Markets%20Logistics%20Index%202015.pdf>.
12. Agility Emerging Markets Logistics Index 2016 [Electronic resource] // Transport Intelligence. – 2016. – 84 p. – Access mode: <http://www.agility.com/EN/About-Us/Documents/Agility%20Emerging%20Markets%20Logistics%20Index%202016.pdf>.
13. Arvis Jean-François. The World Bank Connecting to Compete Trade Logistics in the Global Economy. The Logistics Performance Index and Its Indicators [Електронний ресурс] / Jean-François Arvis, Daniel Saslavsky, Lauri Ojala, Ben Shepherd et al. – Режим доступу: http://d21a6b425f3bbaf58824-9ec594b5f9dc5376fe36450505ae1164.r12.cf2.rackcdn.com/LPI_Report_2014.pdf.
14. Logistics performance index: Overall (1=low to 5=high) [Електронний ресурс]. – Режим доступу: <http://data.worldbank.org/indicator/LP.LPI.OVRL.XQ>.

1. Koblianska, I.I., Rubalko, N.O., & Mishchenko, O.V. (2015). Lohistychnyi potentsial rehionu: sutnist i metodychnyi pidkhid shchodo yoho otsiniuvannia [Logistic potential of a region: Essence and methodical approach to its evaluation]. *Visnyk SumDU. Serii "Ekonomika" – Bulletin of the SSU. Series "Economy"*, 2, 23-30 [in Ukrainian].
2. Kuznetsova, N.P. (2012). Lohistycheskii potentsial kak faktor innovatsionnoi aktivnosti rehiona [Logistic potential as a factor of innovative activity in the region]. *Vestnik OrelHIET – Bulletin Of OrelHIET*, 1(19), 73-81 [in Russian].
3. Freidman, O.A. (2011). *Lohisticheskii menedzhment potokovykh protsessov v rehione [Logistics management of flow processes in the region]*. Irkutsk [in Russian].
4. Freidman, O.A. (2013). Metody kriterialnoi otsenki lohiysticheskoho potentsiala rehiona [Methods estimations of the logistic potential of the region]. *Rossiiskoe predprinimatelstvo – Journal of Russian entrepreneurship*, 3 (225), 127-130 [in Russian].
5. Kovalska, L.L., & Savka, B.R. (2012). Formuvannia ta rozvytok lohistychnoi infrastruktury rehionu [The formation and development of logistics infrastructure in the region]. *Visnyk Natsionalnoho universytetu «Lvivska politekhnik» – Herald of National University "Lviv Polytechnic"*, 749, 410-416 [in Ukrainian].
6. Rakhmanulov, A.N., & Kopylova, O.A. (2014). Otsenka sotsialno-ekonomicheskoho potentsiala rehiona dlia razmeshcheniia ob'ektov lohisticheskoi infrastruktury [Assessment of the socio-economic potential of the region for the facilities of logistics infrastructure]. *Ekonomika rehiona – The region's economy*, 2, 254-263 [in Russian].
7. Rodymchenko, A.O. (2014). Formuvannia metodychnykh pidkhodiv do otsinky rivnia rozvytku rehionalnoi lohistychnoi systemy [Formation of methodical approaches to the assessment of development level of regional logistics system]. *BIZNESINFORM*, 4, 45-49 [in Ukrainian].
8. Rozhko, O.N. (2015). Otsenka lohisticheskoho potentsiala rehiona [Estimation of logistic potential of the region]. *Vestnik ekonomiki, prava i sotsiologii – Bulletin of Economics, law and sociology*, 3, 72-75 [in Russian].
9. Shostak, L.V. (2015). Formuvannia lohistychnoho potentsialu pidpriemstva [Formation of logistic potential of an enterprise]. *Visnyk ONU imeni I.I. Mechnykova – , Vol. 20, 4*, 151-154 [in Ukrainian].
10. Syzdykbaeva, B., Raimbekov, Zh., & Zhumataieva, B. (2013). Otsenka effektivnosti razvitiia transportno-lohisticheskoho potentsiala rehionov Kazakhstana [Development efficiency estimation of transport logistics potential of Kazakhstan regions]. *Aktualni problemy ekonomiky – Actual problems of economics*, 5(143), 473-481 [in Russian].
11. Agility Emerging Markets Logistics Index 2015. (2015). *Transport Intelligence*. Retrieved from <http://www.agility.com/EN/About-Us/Documents/Agility%20Emerging%20Markets%20Logistics%20Index%202015.pdf> [in English].
12. Agility Emerging Markets Logistics Index 2016. (2016). *Transport Intelligence*. Retrieved from <http://www.agility.com/EN/About-Us/Documents/Agility%20Emerging%20Markets%20Logistics%20Index%202016.pdf> [in English].
13. Arvis, J.-F., Saslavsky, D., Ojala, L., Shepherd, B., Busch, Ch., & Raj, A. (2014). *Connecting to Compete Trade Logistics in the Global Economy. The Logistics Performance Index and Its Indicators*. Retrieved from http://d21a6b425f3bbaf58824-9ec594b5f9dc5376fe36450505ae1164.r12.cf2.rackcdn.com/LPI_Report_2014.pdf [in English].
14. *Logistics performance index: Overall (1=low to 5=high)*. Retrieved from <http://data.worldbank.org/indicator/LP.LPI.OVRL.XQ> [in English].

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Розроблення системи розподілу на підприємстві з урахуванням логістичного потенціалу регіону

У статті визначено порядок розроблення системи розподілу підприємства на основі попереднього дослідження логістичного потенціалу регіону, що збільшує обґрунтованість прийняття відповідного рішення за рахунок об'єктивізації даних про стан та можливості залучення логістичних та маркетингових посередників, раціоналізації системи управління матеріальними та супроводжуваними потоками регіону. Для цього сформульовано сутність логістичного потенціалу регіону та запропоновано його структуру.

Ключові слова: логістичний потенціал, регіон, структура, діагностика, система розподілу.

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Разработка системы распределения на предприятии с учетом логистического потенциала региона

В статье определен порядок разработки системы распределения предприятия на основе предварительного исследования логистического потенциала региона, что увеличивает обоснованность принятия решения за счет объективизации данных о состоянии и возможности привлечения логистических и маркетинговых посредников, рационализации системы управления материальными и сопровождающими потоками региона. Для этого сформулирована сущность логистического потенциала региона и предложена его структура.

Ключевые слова: логистический потенциал, регион, структура, диагностика, система распределения.

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