
Role of Business Administration in the Process of Formation of Post-Industrial Economy

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Abstract:

The purpose of the article is to determine the role of business administration in the process of formation of post-industrial economy. The research is based on statistical analysis of time rows. With the help of the method of correlation and regression analysis, the author distinguishes the role of entrepreneurship in the process of formation of post-industrial economy through analysis of dependence between the level of development of business and level of development of post-industrial economy in the countries of the world.

For provision of representation of the data, the objects of the research are countries from various geographical and socio-economic regions of the world: Sweden, the USA, Russia, China, and India. The author determined the role of business administration in formation of the foundations of post-industrial economy and offered the corresponding model that allows for maximization of business administration's contribution into the process of formation of post-industrial economy.

Key words: *business administration, entrepreneurial structures, post-industrial economy.*

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Introduction

The topical tendency of development of modern global economy is its post-industrialization, i.e., change of the type of socio-economic system and search for new vectors of its growth. As of now, post-industrial economy is the highest stage of economic development and a key landmark of development of the countries of the world.

The most important advantages of development of economy according to post-industrial type is its high sustainability to influence of negative external factors, high living standards, bringing down to the minimum or full refusal from harmful industrial production, domination of market mechanism over state regulation, etc. Apart from the countries' striving to getting these profits, transition of economic systems to post-industrial path of development is one of the stages of their evolution.

That's why conservation of industrial economic system contradicts the idea of economic growth and development, as well as interests of the global society. Differences in the types of economic systems of the countries of the world cause multiple socio-political contradictions and are one of the reasons for differentiation of the level of development of various members of the global economic system. Inequality of transition to the post-industrial path of development of global economies slows down the rates of global economic development.

This article supposes that one of the most important reasons for socio-economic systems' being at different stages of the process of post-industrialization is differences in the level of development of entrepreneurship in approaches to business administration. The purpose of the article is to determine the role of business administration in the process of formation of post-industrial economy.

Materials and methods

Importance of formation of post-industrial economy is emphasized in most of conceptual and empirical works of modern scholars who analyze preconditions and consequences of post-industrialization of the global economic system. These are works by (Vogt, 2016), (Stepanov *et al.*, 2015), (Rumyantsev, 2015), (Huber and Stephens, 2015), (Vaslavskaya and Yangirova, 2015), (Volodina, 2015), (Kravets *et al.*, 2014), etc.

Business administration is a process of management of modern enterprise within execution of four main functions of management: planning, organization, management, and control (Saratun, 2016). Provision of effectiveness of business administration requires complex approach to management (Fujii and Managi, 2016) and the use of modern managerial methods and mechanisms (Dutta *et al.*, 2016). Specifics of business administration at modern stage of development of economic systems is studied in multiple works of modern authors, in which principles and

priorities of business administration are determined, and criteria of evaluation of effectiveness of enterprise management are distinguished. These are works by (Formentini and Taticchi, 2016), (Park et al., 2016), (Tomek *et al.*, 2016), (Bezrukova *et al.*, 2013), (Dzhandzhugazova *et al.*, 2015), etc.

Analysis of recent publications on the topic of the research showed that the study of theoretical and practical aspects of management of entrepreneurial structures is paid a lot of attention from modern scientists; analysis of specifics of formation and development of post-industrial economy is also viewed.

At the same time, interconnection between the above processes is beyond the performed research, which causes existence of a serious gap in modern economic science and practice. This work is devoted to filling this gap and determining the role of business administration in the process of formation of post-industrial economy.

The methodology of this research is based on statistical analysis of time rows. According to the author of this paper, the method of correlation and regression analysis could help to determine the role of entrepreneurship in the process of formation of post-industrial economy. The author's idea consists in the hypothesis that there's dependence between the level of development of business and level of development of post-industrial economy in the countries of the world.

If this hypothesis is proved, this will mean that there's dependence between business administration and the process of formation of post-industrial economy, as management constitutes the basis of development of entrepreneurship in market economic conditions. For analysis of time rows, this work uses the data of official statistics of the index of post-industrial economy (Knowledge economy index) and index of entrepreneurship development (Global entrepreneurship and development index) in the countries of the world in 2010-2015.

With the help of Microsoft Excel, the author determines dependence of function y (index of post-industrial economy) on variable x (index of entrepreneurship development). The objects of the research are countries from various geographical and socio-economic regions of the world: Sweden, the USA, Russia, China, and India.

Results

Let us view the role of entrepreneurship in the process of formation of post-industrial economy. The data for analysis of time rows are given in Table 1.

As is seen from Table 1, the higher the level of development of entrepreneurship in the country, the more developed is the post-industrial economy. According to the 2015 data, index of post-industrial economy takes the largest value in Sweden,

constituting 9.46 with entrepreneurship development index 70.99. In the USA, index of post-industrial economy constitutes 8.81 with the entrepreneurship development index 82.63.

Table 1. Dynamics of values of the index of post-industrial economy (y) and index of entrepreneurship development (x) in 2010-2015 in selected countries

Country	Indicators	Value of indicators for the years					
		2010	2011	2012	2013	2014	2015
Sweden	y	9.40	9.42	9.43	9.44	9.45	9.46
	x	70.53	70.68	70.76	70.83	70.91	70.99
USA	y	8.74	8.75	8.77	8.78	8.80	8.81
	x	81.98	82.07	82.26	82.35	82.54	82.63
Russia	y	5.74	5.76	5.78	5.79	5.81	5.82
	x	32.81	32.92	33.04	33.10	33.21	33.27
China	y	4.34	4.36	4.37	4.39	4.41	4.42
	x	40.97	41.16	41.25	41.44	41.63	41.72
India	y	3.01	3.04	3.06	3.07	3.09	3.11
	x	30.54	30.84	31.05	31.15	31.35	31.55

Source: (Global entrepreneurship and development index, 2015); (Knowledge Economy Index Rankings, 2015).

Index of post-industrial economy in Russia constitutes 5.82, and index of entrepreneurship development – 33.27. China's index of post-industrial economy equals 4.42, and entrepreneurship development index – 41.72. In India, the value of index of post-industrial economy constitutes 3.11 with the entrepreneurship development index 31.55.

The results of regression correlation analysis showed strong direct dependence between the value of index of post-industrial economy (y) and index of entrepreneurship development (x) in 2010-2015 in the selected countries. In Sweden, correlation coefficient constitutes 98%, in the USA – 99%, in Russia – 95%, in China – 96%, and in India – 94%. That is, direct average of this index equals 96.4%.

The results of economic analysis confirm the author's hypothesis and allow passing to the next stage of this research – determination of the role of business administration in formation of foundations of post-industrial economy. For that, let us use Table 2.

As is seen from Table 2, business administration plays a key role in formation of foundations of post-industrial economy. The most important attributes of post-industrial economy include high effectiveness of production and distribution processes. It is achieved by determination and realization of directions of optimization of business processes within business administration.

One of the key characteristics of post-industrial economy is high level of

competition; it is also largely ensured by business administration, within which new sources and means of achievement of enterprise's competitiveness are searched for. Large diversity of markets is achieved due to active marketing activities, production of new good, and creation of new markets in competitive struggle.

Table 2. Role of business administration in formation of foundations of post-industrial economy

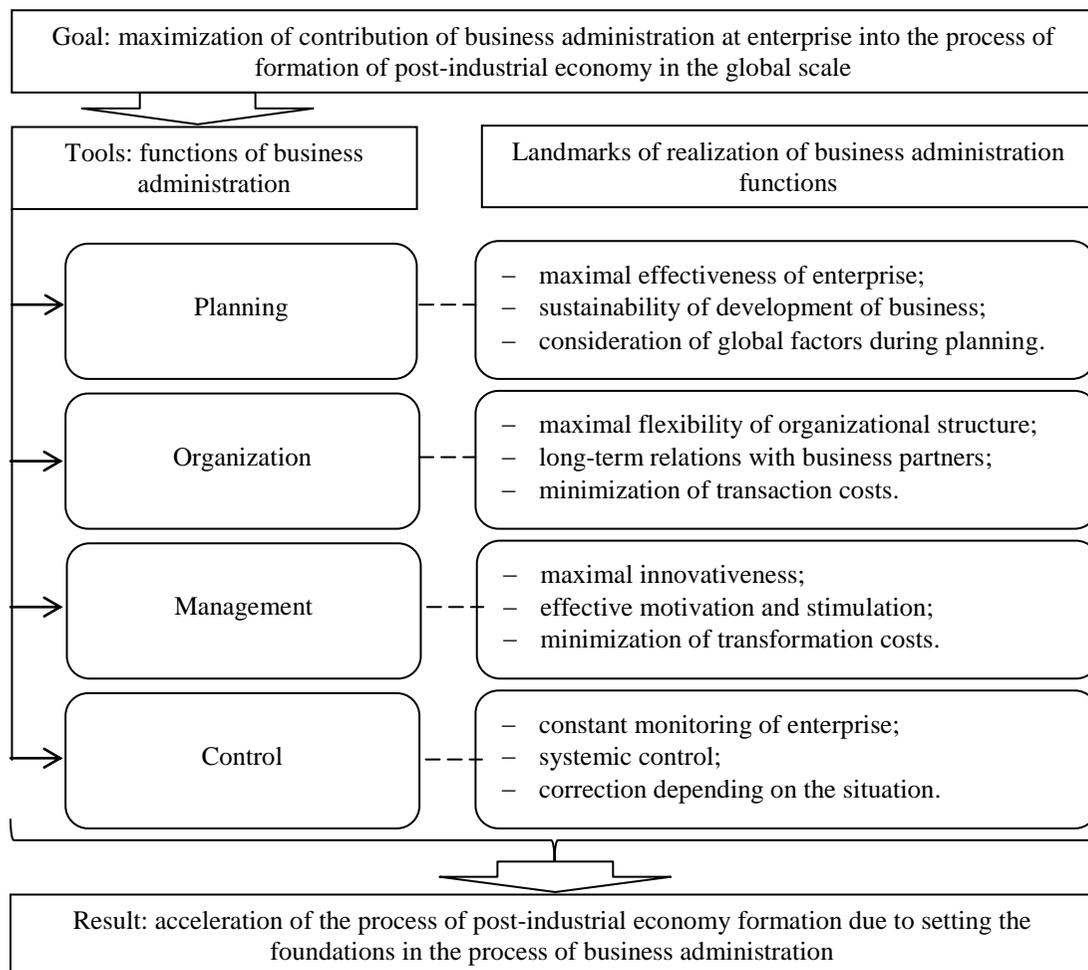
Foundations of post-industrial economy	Role of business administration
High effectiveness of production and distribution processes	Determination and realization of directions of business processes optimization
High level of competition	Search for new sources and means of achievement of enterprise's competitiveness
Large diversity of markets	Active marketing activities, manufacture of new goods, and creation of new markets in competitive struggle
Global character of business	Expansion of geography and spheres of enterprise's activities
Sustainable economic development	Development and realization of the policy in the sphere of corporate social and ecological responsibility
Intense development of innovations	Stimulation of human capital for manifestation of innovational activity
Commercialization and practical orientation of knowledge and technologies	Determination of perspective spheres of practical application of new knowledge and technologies and their acquisition

Business acquires global character within expansion of geography and spheres of activities of the enterprise within business administration. Sustainable economic development is ensured due to actions of separate economic agents and development and realization of policy in the sphere of corporate social and ecological responsibility within business administration.

Intense development of innovations takes place due to stimulation of human capital for manifestation of innovational activity. Commercialization and practical orientation of knowledge and technologies are conducted in the process of determination of perspective spheres of practical application of new knowledge and technologies and their acquisition within business administration.

In order to maximize contribution of business administration into the process of formation of post-industrial economy, this work offers specially developed proprietary model (Fig. 1).

Figure 1. Model of business administration in the process of formation of post-industrial economy



As is seen from Fig. 1, the offered model pursues the aim of maximization of contribution of вклада business administration at the enterprise into the process of formation of post-industrial economy in the global scale. The tools for achievement of the set goal are functions of business administration and landmarks of their realization.

In the process of planning, landmarks are maximal effectiveness of enterprise, sustainability of development of business, and accounting of global factors during planning. Within the organization's function, maximal flexibility of organizational structure, long-term relations with business partners, and minimization of transaction costs are envisaged.

In the process of management, it is necessary to orient at maximum innovativeness, effective motivation, and stimulation, as well as minimization of transformation costs. There's also necessity for constant monitoring of enterprise, systemic control, and correction of the policy, strategy, and tactics of management depending on the situation.

As a result of realization of this model, acceleration of the process of formation of post-industrial economy due to setting the foundations in the process of business administration is expected.

Conclusion

Concluding, it is necessary to say that post-industrialization of economy should be spontaneous or initiated by the state. Maximal success of this process – provision of its succession and prevention of crisis under the conditions of transitional period of economic systems – it is necessary to find the balance of state regulation, which is brought down to establishment of common landmarks of development and business administration of private business.

The study is performed within the concept of post-industrial economy and concept of enterprise management and contributes into their development due to determination and substantiation of existence of dependence of formation of post-industrial economy on business administration, which proves scientific and theoretical significance of this work.

This study is also practice-oriented, as the developed model of business administration in the process of formation of post-industrial economy could be used in the process of modern enterprises management in various countries of the world for acceleration of the processes of post-industrialization in global scale.

During further research, it is possible to pay special attention to the issues related to approbation of the offered model and search for individual deviations from the common regularities of development of post-industrial economy under the influence of business administration of entrepreneurial structures. Perspectives of development of the concept of post-industrial economy are related to search for new approaches to business administration which allow accelerating the processes of post-industrialization of the global economy.

References

- Bezrukova, T.L., Morkovkina, S.S., Russia, B.B., Shanin, I.I. and Popkova, E.G., 2013, "Methodological approach to the identification of predictive models of socio-economic processes for investment and innovative development of enterprises", *World Applied Sciences Journal* 27 (11), 1443-1449.
- Dutta, S.K., Lawson, R.A. and Marcinko, D.J., 2016, "A management control system to

- support corporate sustainability strategies”, *Advances in Accounting* 32, 10-11.
- Dzhandzhugazova Elena A., Natalia A. Zaitseva, Anna A. Larionova, Maria V. Petrovskaya & Vladimir Z. and Chaplyuk V.Z., 2015, “Methodological Aspects of Strategic Management of Financial Risks during Construction of Hotel Business objects”, *Asian Social Science* 11 (10), 229-234.
- Formentini, M. and Taticchi, P., 2016, “Corporate sustainability approaches and governance mechanisms in sustainable supply chain management”, *Journal of Cleaner Production* 112, 1920-1933.
- Fujii, H. and Managi, S., 2016, “Trends in corporate environmental management studies and databases”, *Environmental Economics and Policy Studies* 18 (2), 265-272.
- [Global entrepreneurship and development index, 2015, https://thegedi.org/research/gedi-index/ \(date accessed: 29.04.2016\).](https://thegedi.org/research/gedi-index/)
- Huber, E. and Stephens, J.D., 2015, “Postindustrial social policy”, *The Politics of Advanced Capitalism* 259-281.
- Knowledge Economy Index (KEI) 2015 Rankings, 2015, <http://siteresources.worldbank.org/INTUNIKAM/Resources/2015.pdf> (date accessed: 29.04.2016).
- Kravets, A., Shcherbakov, M., Kultsova, M. and Iijima, T., 2014, “Knowledge-Based Software Engineering”, 11th Joint Conference, JCKBSE 2014, Volgograd, Russia, September 17-20, 2014. *Proceedings (2014) Communications in Computer and Information Science*, 466 CCIS.
- Park, E., Kwon, S.J. and Kim, K.J., 2016, “Assessing the Effects of Corporate Sustainable Management on Customer Satisfaction”, *Sustainable Development* 24 (1), 41-52.
- Rumyantsev, A.A., 2015, “Post-industrial technological mode of production: Theory, economic and environmental features, discussion questions”, *International Journal of Economics and Financial Issues* 5 (3S), 194-201.
- Saratun, M., 2016, “Performance management to enhance employee engagement for corporate sustainability”, *Asia-Pacific Journal of Business Administration* 8 (1), 84-102.
- Stepanov, A.A., Zotova, A.I., Savina, M.V., Guznina, G.N. and Kochetkov, A.A., 2015, “Efficiency estimation criteria of agro-industrial systems in post-industrial economy”, *Asian Social Science* 11 (14), 141-148.
- Tomek, G., Vávrová, V., Červenka, P., Naščáková, J. and Tomčíková, M., 2016, “Corporate vision from management development in the globalization context”, *Production Management and Engineering Sciences - Scientific Publication of the International Conference on Engineering Science and Production Management, ESPM 2015*, 297-304.
- Vaslavskaya, I.Y. and Yangirova, Y.Y., 2015, “Russian new industrialisation policy as a change-over method to the postindustrial economics”, *Mediterranean Journal of Social Sciences* 6 (3), 174-180.
- Vogt, K.C., 2016, “The post-industrial society: from utopia to ideology”, *Work, Employment and Society* 30 (2), 366-376.
- Volodina, V.O., 2015, “Innovation interests of entrepreneurship as an integral component of postindustrial economy”, *Actual Problems of Economics* 163 (1), 8-14.