

БИЗНЕС СТРАТЕГИИ В ИНДУСТРИЯТА 4.0

Юлия Неделчева

BUSINESS STRATEGIES IN INDUSTRY 4.0

Yulia Nedelcheva¹

Received: 16.10.201X, Accepted: 10.11.2017

Abstract

The aim of the paper is to present business strategies to reduce operating costs. Outsourcing and similar models are defined as basic strategies for exporting business activities. Bulgaria is listed as part of the target group for outsourcing considering the state's policy of attracting foreign investment through low corporate taxes and a low-cost expert hand.

The results of the paper define outsourcing as a strategy that is economically justifiable for a limited number of cases. Exporting business activities is a consequence of globalization and the consequent cost equalization on an international scale reduces the use of traditional business strategies. The current outlook is focused on business strategies in countries with a policy to stimulate innovations, as opposed to the lack of prospect for the other type of outsourcing - low-cost manufacturing countries.

Keywords: *outsourcing, operating costs*

JEL Codes: *D24, F61, L25*

INTRODUCTION

The consideration of organizational resources in terms of the New Institutional Economy is accepted to be called outsourcing. Transaction costs reject the opportunistic behavior of managers and impose a strategy of more effective co-operation. To reduce the shortcomings of the economic approach, reducing the importance of coordination issues and focusing solely on vertical processes, a managerial approach to innovation and competence enhancement applies.

Making a decision to conduct business activities outside the organization on the basis of market contracts finds a theoretical beginning by R. Coase

¹ Union of Economists in Bulgaria, Sofia, Bulgaria, yulia.nedelcheva@abv.bg

(1937). His theory of transaction costs directs organizations to produce goods within the organization if the transaction costs of the market are higher or to enter into a transaction on the market if these costs are lower than the production within the organization.

OUTSOURCING

Outsourcing is a form of restructuring a large modern organization with complex production networks that go beyond national borders. The ultimate effect of outsourcing is reducing fixed costs (Grossman & Helpman, 2002) or replacing its employees at lower costs (Dube & Kaplan, 2010).

On a theoretical level, the outsourcing is a switch from the "make to organization" strategy to "buy from the market" without changing the structure of the organization. In the manufacturing sphere, the "make or buy" decision is to change the vision of the organization's input - whether the end product is produced in the organization or by outsourcers. Transaction costs are declining due to greater product standardization and less consumer investment. Due to this fact, theoretical concepts find practical application in outsourcing in industries where there is a large number of component manufacturing and final assembly activities, in automotive and electronics, to creating open product architectures and standardized modules that can be mixed and matched. In the newest literature, the basic theory of choosing between "to produce" or "buy" is complemented by two new possibilities: "to acquire" and "to unite" (Nedelcheva, 2016).

When products become more and more differentiated and require constant updating, it appears that the best strategy is for the organization to focus on core competencies. Such fragmentation of the hierarchy of a major organization and intermediary organizations is more effective as production is done at a lower cost or higher performance is achieved. The situation is described by M. Aoki (Aoki, 1988). The common practice among countries in outsourcing is to achieve product and process innovation.

In the developed economies, there is a different meaning in the concept of outsourcing. The difference reflects the time and manner of outsourcing:

- In the US, the outsourcing involves delegating responsibilities between individual manufacturers (Swider, 2011). For example, in pharmaceutical

sector, the Federal Medicines Agency defines outsourcing as "hiring another organization to carry out part of the overall manufacturing process" (US Department of Health and Human Services, 2006). According to this normative definition, the outsourcing pursues the following goals: lower production costs and the use of modern technologies to perform a particular production activity. The most common type of cooperation agreement for production involves the production of a biological product from one organization and the production of biological substances by another organization. I.e. outsourcing can be considered depending on the role and responsibilities of organizations. Unlike organizations, the motivation of the competent regulatory authority for outsourcing is aimed at patients - faster development of new products and their application to the market.

- In the European Union, the European Economic and Social Committee (European Economic and Social Committee, 2014) defines the circle of organizations involved in outsourcing in the pharmaceutical sector: large organizations that provide a significant number of jobs; small and medium-sized enterprises whose profits often vary according to the size of the enterprise; partners in the face of universities and laboratories. All participants are included in the so-called integrated "system" of life sciences.

As a point of departure of outsourcing in the pharmaceutical industry, we accept the entry of European organizations into the USA market. Since the middle of the XIX century, some chemical companies such as Sandoz and Bayer have developed from organic chemistry in the pharmaceutical industry and started parallel business in the USA with some of the big companies like Eli Lilly, Abbott and Smithkline. Their cooperative activity is the production of pharmaceutical products based on natural resources and is dependent on European chemical synthesized companies. The dependence of American production on European components increases after the discovery of penicillin, along with other products such as vaccines and vitamins. This leads to pharmaceuticals commercialization and government financing dependence on further research and development (most relevant to Merck and Pfizer in the US). These pharmaceutical companies are expanding and already include research, production, marketing and distribution.

Outsourcing research is primarily based on anecdotal evidence and self-reported data to support claims (Jiang & Qureshi, 2006). The dynamics of

outsourcing definitions reflects its multi-facet - while in the 1990s, outsourcing was described as an "economic phenomenon", in the early 21st century it was qualified as a "business process" (Domberger, 1998).

There are two types of outsourcing in the specialized literature:

- Outsourcing oriented at low costs. This type of outsourcing reduces costs at the expense of limiting investment in future innovations. In practice, the most frequent cases of this type of outsourcing are aimed at improving the organization's performance by reducing fixed costs (lower salaries, higher profits, reducing the number of managers, and replacing employees with cheaper contractors). In practice, this type of outsourcing is more commonly used for the markets of Eastern Europe (Kyurova, 2017).

- Outsourcing oriented at innovations. In the second type of outsourcing, the trend is to higher costs but increases the likelihood of future innovations. In practice, this type of outsourcing is suitable for the pharmaceutical sector. Outsourcing to a country with lower salaries reduces manufacturing costs and leads to wage cuts in the sending country (especially in research countries). As production costs are lower (as a result of outsourcing) and innovations are cheaper (due to lower wages in the host country), organizations have incentives to invest more in innovation and more often to offer better -new products.

OFFSHORING

A number of factors contribute to the main activities being carried out outside the home country. Improving information and communication technologies, which facilitate better coordination, better social, technological and economic resources that have provided the necessary infrastructure, and overall improvement in international patent protection, make it easier to protect foreign inventions.

The process of locating activities abroad is called offshoring. In theory, the definition of offshoring is a combination of trade flows, foreign direct investment, and employment. In practice, offshoring is a migration of productive economic activity into low-wage countries such as India and China.

The offshoring strategy began from the period of multinationalization of business (1950-1970) when foreign direct investment is governed by the characteristics of the economy in the host country or "location advantages"

(abundant natural resources, lower labor costs or available skills). During this period, labor-intensive production stages, such as assembly and processing, for the first time in the traditional industries (footwear and textile industry), then in high-tech manufacturing (electronic components and assembling) moved to economically less developed countries, especially in Latin America and Asia.

Contemporary vision of offshoring is geared to the process of global change in production, leading to a new international division of labor (UNCTAD, 2004). Thus offshoring is a revolution in commerce. A characteristic feature of offshoring is its focus on activities that are tradable; there is a difference between the location of production and the location of consumption. Personal services not subject to offshoring, such as restaurants, hairdressing salons and medical care, should be mentioned here.

NEW STRATEGIES FOR REDUCING COSTS

With the effects of the global economic crisis, the leading producer organizations in OECD countries start to bring back home production activities (De Backer et al., 2016). The process has a major impact on unemployment levels and creates the hope that it will create added value and jobs in manufacturing and will help regain competitiveness. Last but not least, the process leads to new investments.

Reshoring

The reshoring is defined as process of "moving production back to the parent company" (Ellram et al., 2013). The reason for reshoring is creation of a strong manufacturing sector. The reasons are: job creation; higher wages than the services sector; manufacturing companies spend more money on research, potentially generating key innovation and intellectual property, and increasing jobs; creating the potential to increase exports and reduce imports.

Practice in the US is richer than the European Union, given the large volumes of activities that the United States has exported, especially in China. The Boston Consultative Group has identified four reasons for US companies that are considering returning production to the national economy: labor costs (57%); product quality (41%); easy work (29%); proximity to customers (28%). In the United Kingdom, the reshoring process is seen as an opportunity to

restore the balance of the economy, and in Germany it is seen as a factor in its economy (Industrie 4.0).

Nearshoring

The nearshoring is a process to move activities not back to the home country, but rather to a neighboring country. In most cases, the nearshoring is related to moving to a country that is closer geographically, in the same time zone or cultural area of the home country. For example, the economy of Mexico is attractive due to location closer to USA (Bogar & Holmes, 2013). Turkey and Morocco are in the same position to EU companies in the fields of automobile industry.

Backshoring

Backshoring is a "re-concentration of components from production by its own overseas companies as well as from foreign suppliers to the domestic production of the organization" (Kinkel & Maloca, 2009).

The European Commission's formal policy on similar processes is contained in the Communications "A stronger European industry for growth and economic recovery" (2012) and "For European Industrial Revival" (2014). The guideline is to increase the share of output in GDP and return the pre-crisis share from 15% to more than 20% after 2020. The ultimate goal is a proactive industrial policy to boost competitiveness. The policy is mostly about manufacturing and services from third countries.

CONCLUSION

The results of the study on the emergence of business strategies to reduce operating costs lead to the conclusion that outsourcing is increasingly used as a way out of interdisciplinary situations and less and less explain its nature. The situation with literature on new theoretical productions, incl. for outsourcing, is similar to other innovative tools such as risk management and information technology, where a variety of authors and views lead to many interpretations and ultimately reduce the importance of these tools.

The comparative analysis of the two types of outsourcing, oriented towards low costs and innovation-oriented, reflects the economic development of Bulgaria in the last 30 years. The policy of implementing the first type of

outsourcing, highly qualified and low-paid labor combined with low corporate taxes and good infrastructure has determined the country's development in a trajectory that has limited investments in future innovations.

Improvements in computers and telecommunications have made the modern world more open to global trade. The motivation of significant cost reducing organizations to remain competitive in the changing world has led to the opposite trend of outsourcing. Different strategies such as backshoring, nearshoring, and reshoring are often used interchangeably and largely contribute to confusion around this new phenomenon. In contrast to the traditional forms of operating costs reduction, in similar business processes, organizations create positive publicity.

REFERENCES

- Aoki, M. (1988). *Information, Incentives, and Bargaining in the Japanese Economy*. Cambridge University Press, Cambridge
- Bogar, M., M. Holmes. (2013). *Made in Mexico, An Increasingly Viable Alternative to Chinese Outsourcing*. The Boston Company
- De Backer, K., C. Menon, I. Desnoyers-James, L. Moussiégt. (2016). *Reshoring: Myth or Reality?* OECD Science, Technology and Industry Policy Papers, No. 27, OECD Publishing, Paris
- Domberger, S. (1998). *The Contracting Organization. A Strategic Guide to Outsourcing*. Oxford: Oxford University Press
- Dube, A., E. Kaplan. (2010). *Does Outsourcing Reduce Wages in the Low wage Service Occupations? Evidence from Janitors and Guards*. *Industrial and Labor Relations Review*, 63(2), pp. 287-306
- Ellram, L., W. Tate, K. Petersen. (2013). *Offshoring and reshoring: an update on the manufacturing location decision*. *Journal of Supply Chain Management*, vol. 49(2) pp. 14-22
- European Economic and Social Committee. (2014). *Opinion of the European Economic and Social Committee on 'Industrial Changes in the European Pharmaceutical Sector'*. 2014/C 311/04
- Grossman, G., E. Helpman. (2002). *Integration versus Outsourcing in Industry Equilibrium*. *Quarterly Journal of Economics*, 117(1), pp. 85-120
- Jiang, B., A. Qureshi. (2006). *Research on outsourcing results: current literature and future opportunities*. *Management Decision*, Vol. 44(1), pp. 44-55
- Kinkel, S., S. Maloca. (2009). *Drivers and Antecedents of Manufacturing Offshoring and Backshoring – A German Perspective*. *Journal of Purchasing & Supply Management*, Vol. 15, pp. 154-165

- Kyurova, V. (2017). *Dynamics of the foreign trade of Bulgaria with Balkan countries*. Entrepreneurship, V, 1, pp. 47-56
- Nedelcheva, Y. (2016). *The dynamics of outsourcing: a bibliometric study*. Entrepreneurship, Volume: IV, Issue: 2, pp. 301-310
- Swider, M. (2011). *Regulatory Challenges in Global Outsourcing FDA Perspective*. Pharmaceutical Outsourcing, Volume 12, Issue 3
- U.S. Department of Health and Human Services. (2006). *Quality Systems Approach to Pharmaceutical CGMP Regulations*
- UNCTAD. (2004). *World Investment Report: The Shift towards Services*, New York and Geneva: United Nations Conference on Trade and Development