

# ROLE OF HIGHER EDUCATION INSTITUTIONS IN SOCIETY: CHALLENGES, TENDENCIES AND PERSPECTIVES

Academic papers

Nr. 1 (7)

**EDITOR - IN - CHIEF** 

KANKEVIČIENĖ Lina – Assoc. Prof. Dr., Alytus College, Lithuania

### **EXECUTIVE EDITOR**

BALYNIENĖ Rasa – Alytus College, Lithuania

### **TECHNICAL EDITOR**

LEŠČINSKIENĖ Danguolė – Alytus College, Lithuania

#### **EDITORIAL BOARD**

KULVIETIS Genadijus - Prof. Habil. Dr., Vilnius Gediminas Technical University, Lithuania

TERESEVIČIENĖ Margarita - Prof. Dr., Vytautas Magnus University, Lithuania

VOLUNGEVIČIENĖ Airina - Assoc. Prof. Dr., Vytautas Magnus University, Lithuania

GEDVILIENĖ Genutė - Prof. Dr., Vytautas Magnus University, Lithuania

MAŽEIKA Dalius - Prof. Dr., Vilnius Gediminas Technical University, Lithuania

MAMČENKO Jelena - Assoc. Prof. Dr., Vilnius Gediminas Technical University, Lithuania

ŠILEIKIENĖ Irma – Assoc. Prof. Dr., Vilnius Gediminas Technical University, Lithuania

TUMASONIENĖ Inga - Assoc. Prof. Dr., Vilnius Gediminas Technical University, Lithuania

**EJSMONT Aneta –** Dr., Professor Edward F. Szczepanik State School of Higher Professional Education in Suwalki, Poland

SANDAL Jan-Urban - Prof. Dr., Fil. Dr. Jan-U. Sandal Institute, Norway

VAIČIŪNIENĖ Vilhelmina - Assoc. Prof. Dr., Mykolas Romeris University, Lithuania

SLAVICKIENĖ Astrida - Prof. Dr., Aleksandras Stulginskis University, Lithuania

ZAUTRA Rytis - Assoc. Prof. Dr., Alytus College, Lithuania

### **EDITORIAL OFFICE**

Seirijų str. 2, Alytus, Faculty of Information and Communication Technologies, Alytus College, 62114 Alytus, Lithuania, tel. (8 315) 65 012, (8 612) 79 625, fax. (8 315) 79 132.

INTERNET ADDRESS: http://www.akolegija.lt/

E-mail: konferencija@akolegija.lt

# **PUBLISHED SINCE 2012**

The journal is abstracted in the international data basis:

Index Copernicus Journal Master List: http://journals.indexcopernicus.com/masterlist.php since 2012

All rights of the publication are reserved. No reproduction, copy or transmission of this publication may be made without publisher's permission.

# THE ROLE OF MNC'S IT INNOVATIONS IN GLOBALIZATION PROCESSES AND THEIR INFLUENCE ON THE SOCIETY

# Vyacheslav Lushchyk

Kyiv National Economic University, Kyiv, Ukraine Fil. Dr. Jan-U. Sandal Institute, Norway

#### **Summary**

The article is dedicated to the specifications of Multinational Companies' innovative activity, the role of their maintenance of innovative tendencies on the global markets. The article explores the main instruments that MNCsuse to stimulate and develop theirIT innovative activity, uncovers the specific tendencies that take place depending the industry areas the MNC function and geographical differences within MNCs practices. In addition, in the article, IT innovations were considered as a main and most powerful instrument of MNC transformational activity within the global economy and local regions therefore deeply analyzed and overviewed for the impact they bring to the society.

**Keywords:** multinational companies, information technologies, IT innovations, innovative activity, innovation impact, IT development.

## Introduction

The great number of economic sources and literature is defining MNCs and their activity as massive and effective instruments of the new technologies sharing. One may talk regarding the MNCs' activity in terms of innovation and innovative development and define the MNCs as a main driving force of technologies around the world, which, therefore, stimulate and improve the societies' lives. In terms of the variety of definitions in different contexts and its main sources, new products, especially innovative ones, are bringing the increase of consumer satisfaction level, and as a result, gap increase of a consumer surplus due to the great range of products and their specifications (Dixit, Stiglitz, 2011).

When speaking regrading innovations in terms of MNCs' activity and its scientific coverage, one may say that most of the scientific research and literature is dedicated to the particular industries, not deeply covering the innovation activity of MNCs.

In the past few years, due to the increase of the MNCs' role in global technological world development, the attention towards innovative activity, especially in industrialized countries, raised a lot. According to Isaksen, a substantial portion of innovative activity in industrialized economies is now carried out by MNCs (Isaksen, 2012).

The impact of the IT innovative MNCs' activity, as well as the creation and implementation of them, and global integration and social responsiveness of MNCs will be presented in the article following the structure: defining of MNC's creation and differentiations of the innovations, managing the innovations through different channels (including regional), and impact of MNCS' IT innovative activity on the society.

Methodology approaches that are used during the research are: quality search and data and information obtaining from the variety of sources to achieve an independent view on the topic, the deep analyses and differentiated overview on the MNC's global society impact, descriptive and conclusive view to achieve the best results of the scientific research on given topic.

In recent few decades, there is a strong tendency of adjusting and targeting their innovative activities depending on the regions where MNCs operate. It means that dependently on the specifications of cultural and social features, IT innovations are developed and implemented differently depending on the region of existence or planned implementation. Therefore, innovations IT influence differently on the region where they are applied and on the society which feel the impact of their implementation.

The goal of the article is to highlight the main factors of MNC's increasing role in IT innovations development and the reasons for MNCs effective ability to cover the global challenges that society faces nowadays due to the globalization and transformation periods within it. The objectives of the article are defined by its goal and cover the aspects of MNCs innovative practices highlight the specifications of the globalization of MNCs IT innovation development activity and analyze the influence, which MNCs are bringing to the society within their IT innovation development practices.

# Innovations and MNCs' IT innovative practice

The innovation is a new combination of existing resources according to J. Schumpeter. It includes new products, new methods of production, new sources of supply, the exploitation of new markets and new ways of organizing business (Fagerberg, 2012).

In other words, one may define that innovation is an idea, thought, a combination or action that might be perceived as radically new by any individual. In terms of that, the issue of being objectively new is no longer an important one, but replaced by the understating whether it is perceived as a radically new or not used before. In addition, according to Joseph Schumpeter, the perception of whether there is a novelty present might be classified according to the level of differentiation of the technology currently present (Freeman, Soete, 2009).

This is important to define the initial reason and endorsement for the companies to maintain IT innovations and innovative activity. One of the most important reasons is improvement of its performance and marketplace (for example with the help of reducing the production costs, increasing production efficiency, evading new markets using the strategy of brand new product or services etc.). All these instruments work effectively for decreasing a competitive advantage on the market and among the competitors.

Due to the volatility of modern economy and world tendencies, which brings quite shaky conditions of markets, MNCs, although quite resistant to the market flows, have to respond accordingly and adjust the production methods and the products to reach the best results and positions on market. Therefore, MNCs should maintain its innovative activity as an endless, dynamic cognition and learning process. Still some of the innovations occur beyond their activity and only are shared, maintained or implemented by them using the scale effect which empowers an innovation and makes it globally powerful instrument of change for the society (Bartlett, 2006). Therefore, MNCs are not obligatory participating in the full cycle of the IT innovation creation (starting from the conducting research and development stage). However, MNCs may use their scales and influence power to initiate the IT innovation creation, especially in terms of aiming to change the society, but having into the consideration the differentiations of social, cultural, mentality needs of every particular economical region.

In general we can define that innovation is an application or implementation of radically new or improved (specifically updated) object (no matter is this an economic good or service), radically new way of production (as J. Schumpeter stated – combination of resources), either radically new organizational order in production, business or manufacturing practice, corporative structure or service conduction. The only obligatory thing for any of these to be considered an innovation – is being improved to the extent of obtaining radically new functionalities or features.

In that terms the perception of innovation doesn't consist of being purely new research and development process, but any other activity which brings improvement and innovative results, especially to the society. Due to the global call and challenges, including those of critically social features, innovations are not crucially having patents as a reflection of its application any more, but new incremental improvements and changes are more important and bring more positive outcome. As a result, in examining the process of innovation, it is interesting to not only focus on the input and output of innovation, but on other aspects as well (Marin, Bell, 2016).

Therefore,IT innovations and IT innovative processes within MNCs' practices bring broader influences and new characteristics to the global economies and the society, especially if considering the ability of them being heterogeneous and produce or maintain IT innovations with heterogeneity specifications within MNCs' activities.

IT innovations within MNCs' can be discussed in several terms, including the extent of how the innovation is perceived by the MNCs' policies and researchers, as well as how these perceptions are caused by radical differences in the subsidiaries' functioning within the same MNC.

The issue of management and the IT innovation practice, especially within the MNCs subsidiaries, over the past three decades has emerged as a specific field of research (Paterson, Brock, 2014).

MNCs, through their subsidiaries activity conduct the various activity and processes which result in the creation of innovative products, services or technologies. Further subsidiaries implement or previously adjust the IT innovation created by using their experience and resources for the precise and effective usage and responding to the consumers' preferences and needs, market challenges and conditions.

The effectiveness of the subsidiaries activity within IT innovations creation and implementation defines the general MNC's capability to respond effectively towards the regional market's needs and being flexible within their operating activity in various regions, industries or environments. The implementation process within the further innovation support plays a crucial role in MNC's reputation and effectiveness results and influences on the ability to integrate more or less in a global economic development strategy.

The processes of innovation diffusion between subsidiaries and the ability to facilitate it, enables the MNC to exploit economies of scope related to the learning embedded in geographical dispersed operations (Ghoshal, Nohria, 2011).

There are several ways, which MNCs use for IT innovations diffusion between their subsidiaries and more effective way of conducting their activity and improving well-being of the company. However, we may say that usually it does not influence the societal wellbeing much, as in most cases MNCs do not tend to contribute the innovations or knowledge they acquired to their host country aiming to improve wellbeing of its citizens.

Therefore, the most common ways of IT innovations diffusion are:

- when knowledge or IT innovations are transferred directly from their headquarter to regional subsidiaries of foreign MNCs and this connection is as strong as between the domestic business units;
- when knowledge or innovations are transferred directly from MNC subsidiaries to domestic business units and these flows are quite weak and the differentiation takes place on the level or sectors or industries diffusion;
- when MNC subsidiaries are equally and effectively sharing the knowledge and innovative research results between each other;
- when within different world economic and geographic regions MNCs are transferring their IT innovations and knowledge in both directions between the home region to subsidiaries and vice versa;
- when subsidiaries are transferring the knowledge and IT innovation research to MNCs headquarter, where they are diffused, analyzed and wisely and accordingly distributed within the MNCs subsidiaries and their alliance business units around the world or area of their influence.

The last way or method of IT innovation diffusion between MNCs subsidiaries regarded to be the most effective and the most popular one. When we speak regarding the IT innovation diffusion, we might seek for the best rational way to apply and implement it to be sure it will be effective and bring the improvement. Initially only the production and marketing functions were concerned with the imperative of differentiation and integration, which expanded to encompass the innovation function. The process of innovation is both a process of knowledge creation and integration (Nonaka et al., 2006).

So we can summarize that IT innovation, created as a result of powerful MNCs research activity within their subsidiaries practices usually vary depending on their performance and improvement goal, in other words on their three main tasks that have innovation character: creation as a result of research, adoption accordingly to the set requirements and diffusion within the subsidiaries or regions. Furthermore, there also might be a factor of the regional development level differentiation, for instance local subsidiaries would gladly accept and try to implement the IT innovations created within the same MNC but in another region as it might seem to them as more effective or potential to bring more efficient improvement to the production, industry or even region in general. At the same time the more autonomous the subsidiary or business unit is, the more it will stimulate, contribute and diffuse innovations within its production activity, using it as a powerful instrument for IT innovation creation within the so-called activity freedom, being under less control that any others. On the other side, we can affirm that in case of strong and effective communication between the parent company and subsidiaries, it might create stronger and more reliable prerequisites for innovation diffusion and facilitations, as it may play the role of a controlling player who, based on the research data and market or regional analysis, can direct the IT innovation flow to those regions where it is needed more, therefore creating all the conditions for the regional prosperity and in a long-term perspective societal wellbeing.

# Globalization of IT innovations development within MNCs activity

Nowadays innovations, especially IT, has become as a main strategic instrument prioritized by multinational companies. Recently, innovation has changed in its making, unfolding, and localization (Prahalad, Mashelkar, 2010). As it was stated in the first part of the article, the percentage of the subsidiaries' role within the innovations development has grown and continues to grow rapidly. The subsidiaries localization strategy helps MNCs to aim the specific and particular needs, which arise locally, usually with the help of commercial relationship facilitation with regional potential business or commercial partners.

Recently there appeared two main trends, which determine the efficiency subsidiaries' location choosing. First, one completely takes into account the opportunity to access the specific knowledge resources, which are located closely to company either, its subsidiaries. The second trend defines the necessity of prioritizing the feasible allocation closer to emerging markets aiming to gain an ultimate benefit from their potential of highgrowth in the upcoming days. Being equally potential for an efficient appliance within contemporary MNCs' practices, these two trends arealso significantly important in terms of international management of innovations as they are emphasizing the necessity of knowledge acquirement, its leveraging, integration and diffusion, especially on markets, which are growing rapidly.

Few researches on MNCs were conducted to model the scheme of the relationship on the corporate level, the subsidiaries and their environment. In these models, the MNC considers the differentiation factors by adjusting the features and functions of each subsidiary to local or regional needs and practices. As well, it considers IT innovations' tight and relevant integration in order to benefit from corporate resources and to contribute to the overall performance of the company (Ghoshal, Noria, 2011).

Previously the only factors that were taken into consideration were production and marketing functions, which were also, concerned with the imperative of both differentiation and integration processes, which were usually widened in order to comprise the innovation function. As we stated before, the process of innovation includes both the process of knowledge creation and integration. Therefore, even several years ago the study

of MNCs IT innovation strategies were mainly focusing on the knowledge diffusion and transformation within the company practices and between its subsidiaries. The rational allocation of the scientific and research centers, production factors, and the scientific resources were dealing mainly with appraisal of emphasizing the role of innovations in production and the scientific or technical knowledge.

Contrary today, the change acquires much wider character as is related to the issues of the global rational organization of IT innovation research process. Reshaping, relocating and resizing the functional roles within the MNC's practice are considered a key factor of its performance (Doz, Wilson, 2012).

Modern tendencies of the globalization processes induce new focus issues regarding the method oflTinnovation processes organization, whichare currently consideredcrucial factors of competitiveness. These new tendencies are followed by several urgent and important questions which can facilitate more rational and effective MNCs' and its subsidiaries' activity within the globalization, its characteristics and main tendencies. Among them, we can find the next ones.

Firstly, different kinds of innovations and the diffusion methods that are caused by the specifications of the innovation and its implementation needed. For example, it is the classical diffusion mode, from innovation being produced and first adopted indeveloped countries, and after while, being sold to developing countries is challenged. Reverse innovation process is gaining more importance (Govindarajan, Trimble, 2018-04-21). In terms of that there is a variety of the budgets which are considered as needed for a particular innovation acquirement, even radically diverge between the minimum till the huge sums of expenses for the believed best results.

Secondly, the question arises regarding the process of IT innovations development itself, are they developed while being controlled by a head company and diffused only after that or is it better and more efficient to develop them specifically for the certain market considering its special needs and features. Should MNCs account any contingency factors that may influence on further IT innovation implementation market behavior or innovation strategy of the company? Is it really economically profitably to develop innovations for a particular specific market or its niche rather than innovations, which could be distributed throughout the territory of MNCs influence?

Next point is followed by focusing on the marketing and commercial launch phases of the product or service, whichis considered innovation. More recent studies analyze newproduct rollouts and highlight the difficulties encountered when launching IT innovations in different regions (Rubera et al., 2016). However they do not consider the important organizational issues, like a role of the subsidiary in the launching process or any regional or specific market implications which usually are almost unpredictable.

The question arises on whether the participation and collaboration of big number of researchers through different subsidiaries, regions or even research fields is facilitating the innovations diffusion and spread better and more efficiently rather than when it is conducted by subsidiary representatives only. Research showed that somehyperlinked actors could strongly influence the diffusion of IT nnovation. The comprehension of socialcontagion mechanism in information technologies' innovation diffusion within global knowledge communities appears to bean important point in a connected world (Hun, 2014).

In that terms we can speak about the necessity of networking collaboration, especially in terms of theeconomies and markets globalization processes, Networks of collaboration are critical for the production and diffusion of innovation nowadays (Doz, Wilson, 2012). They provide the precise and relevant guidance, which aims to bring the structured orderliness to all the levels of the production and implementation that are involved in IT innovation creation process. Having a clear goal for technology or product improvement, all the participants of this process get the same logic, and refer to the similar aspects of managing IT innovation, from competitive strategies and policies for investment in information technologies innovation capabilities topractices for identifying opportunities and managing projects (Miller, Floricel, 2007).

# MNCs' IT innovative activity in the light of interaction and influence on the society

In all times through the history, society had a great influence on the development of business units. Over the past few years, this issue has become even more spread especially in terms of MNCs activity and their becoming the main players of both global and local markets bringing into them their specifications of the great scale, which needs from society a sort of flexibility within the co-existence in economical prism. However, still this scientific area requires deeper research for more efficient development and implementation of the meeting points between society and MNCs. (Doh, 2009).

As it was described in the article earlier, over the past several years the great economic changes that were caused by globalization, and as a result, liberalization of economies, contributed a lot in their empowerment comparably to local businesses. The world's biggest corporations have revenues that equal or even exceed the gross domestic product of some developed states, a fact that is even more pronounced in emerging economies (Crane, 2018-04-21). The main consequence of that lies within the equal increasing of both, societal expectations and MNCs responsibilities since they receive the power to influence radically on the

state of wellbeing not only through certain countries or regions, but even globally.

Moreover, nowadays several scientists define MNCs as political corporations that are expected to assume a government-like role and undertake generalized social responsibility in society (Grolin, 2012). Along with that an impressive number of governmentally initiated and funded research and support was made regarding that issues in order to highlight the necessity of building the effective and supportive relationship between society and main players of the most strategic and important sectors.

Still even when there is approved presence of society wellbeing improvement goals in MNCs global and regional politics and activity, there are a lot of point of view that this cooperation cannot have any clear character as every player is chasing exceptionally his own interests and goals maximizing their profitability or efficiency. Some of the researchers say that objectives of MNC's activity, which deal with societal aims, are only the way to conquer new markets, new market positions and chasing only commercial priorities, leaving the societal responsibility far behind its consideration. Moreover, the society responsibility practices of MNCs require more investment of many resources, including labor, time, money and it becomes quite disadvantageously for them to align to societal needs or at least expectations, especially when talking in terms of being flexible in the differentiation of needs within different regions and societies.

Radically different and controversial opinions regarding MNCs' role in society, wellbeing and development, together with issues regarding the MNCs' activity and its influence on different development level economies, societies and government intervening in their development, displays the huge and intricate complex of the relationship between the society and MNCs activity with the main feature of this relationship, which derives the reason of the complexity, a multilayredness.

However, we can still face the lack of the quality and up-to-date research on the MNC's influence on the society, especially in terms of its increasing importance. It is partially caused by the fact that the societal factor with MNCs activity is quite complicated and complex, which tangles the process of its study, research of that issues and implementation of them. Therefore, the deep understanding of the relationship scheme between MNCs and society requires preliminary analysis of their relationship complexity with all the connections deep identification. For thatneeds a first stepwhat the intricacy is comprised of and who is encompassed by the term society in the MNC context, will be specified(Crane, 2018-04-01). Even though there is not much ground research on that topic yet, there have been several important achievements within the research of international marketing strategies, where MNCs and the economic, social and political environments' factors were considered as main instruments of influencing the MNCs operational, development and innovation activity.

In the context of modern activity of MNCs and era of global societal and world challenges of different characters, society plays a central role there, but still a relationship between society and MNCs innovations development strategy still lacks a fundamental research and study. Still the complex character of the processes and challenges, which occurwithin the globalization development and require modern innovations implementation for the wise and effective solutions, needs a deep identification of the structured framework which can play a role of guidance to more effective further society existence and MNCs development in terms of IT innovative activity conduction and results implementation.

The challenges that society is facing nowadays require not only an effective innovative solutions implementations, but also a flexibility of those who are implementing – MNCs in our case. Despite the huge and impressive potential opportunities of MNCs in innovations development and scientific research conduction, the business operations scale can be a serious obstacle for being flexible within innovations' implementation and responding to the urgent and critical challenges, that need more or less quicker reaction that MNCs can provide due to their size, even though they are represented by smaller subsidiaries that can be quite flexible. Furthermore the differences in MNC-subsidiaries relationship types, which is caused by several factors, for example the specifications of the development of the region where subsidiary is situated, or the extent of MNCs control of their subsidiaries' activity contributes a lot to the MNCs' relations with society as well (Rodriguez et al., 2018-04-21). In those terms, we should consider these interdependencies as a main factor of facilitating or retarding the innovation development by MNCs.

On the other hand, the deep preliminary analysis and research on the issues of the interdependence can be a great solution to an improvement of the MNCs and subsidiaries relations and as a result, a better contribution and reaction on urgent and specific needs of every particular region or sphere. This relation type knowledge enables an important background emerging for the further innovation development and implementation activity and societies' effective improvements (Johanson, Vahlne, 2009).

Summing up these tendencies, we can say that MNCs should formulate a good IT innovational strategic management for the effective interaction with society in terms of influencing on the challenges, which occur within them in terms of globalization processes. This strategy should include the consideration of basic social values, needs, challenges and expectations of the society for the further prosperous development as a result of future innovations implementations. Moreover, ideally it must correlate with main organizational development and activity strategy. It is vital for any organization, more particularly the more global and larger organizations,

to integrate core ethical and social responsibility values and goals into the organization's overall strategic IT innovation management process(Joong-Woo et al., 2017). For a durable, effective and harmless strategic innovations management process MNCs should critically focus on the sustainable, innovative, responding and worthwhile social responsibility behavior and development.

# Conclusion

Nowadays in terms of fast moving world tendencies and changeability of economic and social environments as well as great diversification of the development level in different regions, MNCs are consideredone of the most powerful players who are able to regulate or respond to challenges effectively and what is more globally. Therefore, the global innovation activity management for MNC considers 4 main strategies for the effective development and interaction with society which are oriented on that frames: initiating innovation development strategies based on the deep preliminary analysis of need and challenges, figuring out and choosing the best innovation development cooperation strategy in relations with Head Company and regional subsidiaries, develop this strategy depending on the specific features of the particular industry or region, and finally doing its best to provide the sufficient and the most effective IT innovation development and implementation activity in terms of maximizing MNCs abilities and societies wellbeing. The way the MNCs are conducting and facilitating the globalization of information technologies innovation development is the effective way to pursue to innovation development and to continue competitive ability for all the participant of this process, including society, whichis influenced a lot as well.

In order to meet the society's challenges at their bests, sometimes MNCs are initiating the innovations research and development in different location aiming on their further internationalization, which will facilitate more efficient and effective responding to them and to global demands. As a result MNCs gets profit, market place and societal acknowledge which might stimulate all that results initially. Sometimes, for that purposes MNCs are establishing the innovational centers, which are centrally responsible for IT innovations development, control for them, their distribution and further implementation. Moreover, in recent years more and more MNCs have started following the development path of expectations meeting and even surpassing them.

Due to the fast movement of the economic globalization in order to reach those MNCs constantly need to expand and reinforce its technology bases, development process, development of alternative solutions and attracting new specialists. All that is required to keep track of the world technological development and challenges connected to that within the world and society development.

So the possible solution might be based on several worlds' technological issues specifications. Firstly, applying innovation key point as a central base of the technological research and development and consider not only large industries like agricultural or medicine but also those who especially need to be enriched with additional research. This can also help to avoid the concentration of research and development, as well as innovative solutions within particular industry. These innovations and development forces are expected to be diffused within industries but also within geographical locations enabling creation of innovation cooperation network and even attracting the competitors' sources in terms of responding to global societal challenges.

While developing IT innovative solutions, especially those, which will be used also for societal needs, MNCs, also should consider the strategy of being socially responsible, considering all the risks and damages that might be caused by MNC's activity and their technological development. This derives the most important issue of MNCs and society interaction and joint facilitating of the world's sustainable development which is promising to be a number one issue of a crucial importance in the next few decades, especially in terms of ecological, political, economic, demographic, inequality factors that already cause a lot of contrary questions regarding the prioritizing focus and capital and sources flow. The upcoming years are promising to bring up more challenges and development inequality issues which are requiring deeper scientific analysis, more background research and strong involving of MNCs, especially due to the global scales of their activity and powerful instruments like the ability of innovations diffusion rapidly through the most indigent and necessitous regions.

#### References

- 1. Bartlett, Christopher A. Building and Managing the Transnational: The New Organizational Challenge, in Porter, Michael E., ed., Competition in Global Industries, Boston, MA: Havard Business School Press, 2006, p.118-204. ISBN 0875841406. 2. Crane, A; Knights, D; Starkey, K. The conditions ofour freedom: Foucault, organization and ethics. Business Ethics Quarterly, 18 (3). Available from: <a href="http://eprints.uwe.ac.uk/11792">http://eprints.uwe.ac.uk/11792</a> (2018-04-21).
- 3. Crane, A; Matten, D; and Spence, L. J. Corporate Social Responsibility: In Global Context. Corporate social responsibility: readings and cases in global context: https://ssrn.com/abstract=1667081 (2018-04-21).
- 4. Dixit, Avinash K; Stiglitz, Joseph E. Monopolistic Competition and Optimum Product Diversity. American Economic Review, American Economic Association, vol. 67(3), 2011, p. 297-308. ISBN 0-226-50723-8.
- 5. Doh, Jonathan P.; Lawton, Thomas C.; and Rajwani, T. Advancing Nonmarket Strategy Research: Institutional Perspectives in a Changing World. Academy of Management Perspectives, 2009, p.22–39.

- 6. Doz, Y.; Prahalad, C. K. Managing DMNCs: A search for a new paradigm. Strategic Management Journal, 2011, p.145–164.
- 7. Doz, Y.; and Wilson, K. Managing Global Innovation: Frameworks for integrating capabilities around the world, Boston: Harvard Business Review Press, 2012.
- 8. Fagerberg, J. A Technology Gap Approach to Why Growth Rates Differ. Research Policy 16, 2012, p. 87–99.
- 9. Freeman, C.; Soete L. The Economics of Industrial Innovation, 3rd edition, MIT Press, Cambridge MA, 2009. ISBN 978-0262561136.
- 10. Ghoshal, S.; Nohria, N. The Differentiated MNC: Organizing Multinational Corporation for Value Creation. San Francisco: Jossey Bass Publications, 2011. ISBN 978-0787903312.
- 11. Grolin J. Corporate legitimacy in risk society: the case of Brent Spar. Business Strategy and the Environment. 2012.
- 12. Hun, Y. Hyperlinked actors in the global knowledge communities and diffusion of innovation tools in nascent industrial field, Technovation, 33, 2014,p. 38–49.
- 13. Isaksen, A. Building Regional Innovation Systems: Is Endogenous Industrial Development Possible in the Global Economy? Canadian Journal of Regional Science, 22, Spring No. 1. 2012, p. 101-120.
- 14. Johanson J; Vahlne J-E. The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership, Journal of International Business Studies, Palgrave Macmillan; Academy of International Business, vol. 40(9), 2009, pages 1411-1431.
- 15. Ma, C.; Gao J. Technological Innovations Key Role In Knowledge Economy. Technical Daily Paper, Vol. 7, No. 4, 2017. 16. Marin, A.; Bell M. Technology Spillovers from Foreign Direct Investment: An Exploration of the Active Role of MNC Subsidiaries in the Case of Argentina in the 1990s', SPRU Electronic Working Paper Series (SEWPS), Brighton, University of Sussex, SPRU –Science and Technology Policy Research, 2016.
- 17. Miller, R.; Floricel S. Games of innovation: A new theoretical perspective. International Journal of Innovation Management, 11(1), 2007, p. 1-35.
- 18. Nonaka, I.; Toyama, R.; Byosiere, Ph. A theory of organizational knowledge creation: understanding the dynamic process of creating knowledge, in: Dierkes, M., Antal, A.B., Child, J., Nonaka, I. (eds.) Handbook of organizational learning and knowledge, pp.487-491, Oxford University Press, Oxford.), 2006.
- 19. Paterson, S. L; Brock, D. M. The development of subsidiary-management research: review and theoretical analysis, International Business Review, Elsevier, vol. 11(2), 2014, p. 139-163.
- 20. Prahalad, C.K.; Mashelkar R.A. Innovation's holy grail. Harvard Business Review 88(7/8), 2010, p. 132–141.
- 21. Rodriguez, J. P.; Beard, T. D; Bennett E.M;. Cumming, G. S.; Cork, S.; Agard S.; Dobson A.P.; Peterson G.D. Trade-offs across space, time, and ecosystem services. http://www.ecologyandsociety.org/vol11/iss1/art28/ (2018-04-21).
- 22. Rubera, G.; Griffith, D. A.; Yalcinkaya, G. Technological and Design Innovation Effects in Regional New Product Rollouts: A European Illustration. Journal of ProductInnovation Management. 2016
- 23. Govindarajan V.; Trimble C. Reverse innovation: a global growth strategy that could preempt disruption at home Strategy & Leadership. https://doi.org/10.1108/10878571211257122

### **Anotacija**

# TARPTAUTINIŲ KOMPANIJŲ INNOVACIJŲ DIEGIMO VAIDMUO GLOBALIZACIJOS PROCESE IR JŲ ĮTAKA VISUOMENĖJE

Straipsnyje pateikiama Tarptautinių kompanijų IT inovacijų diegimo svarbiausių veiklų, novatoriškų tendencijų pasaulinėse rinkose išlaikymo ir jų įtakos visuomenei analizė. Straipsnyje analizuojamos pagrindinės priemonės, kurias tarptautinės kompanijos naudoja IT novatoriškos veiklos skatinimui ir plėtrai, atskleidžiamos konkrečios tendencijos, priklausančios nuo pramonės srities, tarptautinių kompanijų funkcijos ir geografiniai skirtumai. Be to, IT naujovės yra laikomos pagrindine ir galingiausia tarptautinių kompanijų transformacinės veiklos priemone pasaulinėje ekonomikoje ir vietiniuose regionuose.

Straipsnyje atkreiptinas dėmesys į didėjantį tarptautinių kompanijų vaidmenį pasaulio ir visuomenės vystymui, ypač inovacijų plėtros ir įgyvendinimo srityje. Be to, apžvelgtos inovacinės veiklos pagrindinės priežastys ir motyvai, analizuojami svarbių IT naujovių diegimo skirtumai pagrindinėje ir dukterinėse įmonėse, atsižvelgiant į konkretų regioną ar pramonės specifiką. Atsižvelgiant į skirtingo valdymo ir sąveikos būdus analizuojama naujovių diegimo plėtra.

Antroje dalyje akcentuojamos technologinio progreso šiuolaikinės tendencijos, apimančios IT naujovių plėtrą, kaip vieną iš svarbiausių būdų sprendžiant skubius pasaulinius iššūkius. Naujovių diegimo veiksnys pateikiamas kaip pagrindinis veiksnys, skatinantis efektyvų novatorišką pasaulio vystymąsi ir žmonių gerovės gerinimą. Bendradarbiavimo tinklų kūrimo būtinybė yra gana svarbi dėl dabartinio pasaulio permainų ir dėl to, kad tarptautinės kompanijos turi galimybę greitai reaguoti į rinkos, visuomenės ir jų poreikių pokyčius.

Trečiojoje dalyje tarptautinių kompanijų veikla ir jų įtaka visuomenės gyvenimui ir gerovei analizuojama kaip novatoriškos veiklos galimybės užtikrinti aukštą žmonių gyvenimo kokybę ir gerovę. Nagrinėjamas tarptautinių kompanijų lankstumas IT novatoriškoje veikloje ir pagrindinės kliūtys, siekiant atskleisti pagrindinius klausimus, kurie atlieka svarbų vaidmenį tarptautinių kompanijų ir visuomenės santykiuose.

**Esminiai žodžiai:** tarptautinės kompanijos, informacinės technologijos, IT naujovės, inovacinė veikla, inovacijų įtaka, IT plėtra.

# AUKŠTŲJŲ MOKYKLŲ VAIDMUO VISUOMENĖJE: IŠŠŪKIAI, TENDENCIJOS IR PERSPEKTYVOS

Mokslo darbai Nr. 1 (7)

# ROLE OF HIGHER EDUCATION INSTITUTIONS IN SOCIETY: CHALLENGES, TENDENCIES AND PERSPECTIVES

Academic papers Nr. 1 (7)



2018

Editor – in – chief Kankevičienė Lina Executive editor Balynienė Rasa Technical editor Leščinskienė Danguolė Alytus College, Faculty of Information and Communication Technologies, Seiriju str. 2, 62114 Alytus, Lithuania

Internet address: <a href="http://www.akolegija.lt/">http://www.akolegija.lt/</a>, E-mail: <a href="mailto:konferencija@akolegija.lt">konferencija@akolegija.lt</a>, tel. (8 315) 65 012, (8 612) 79 625, fax. (8 315) 79 132.

Vyriausiasis redaktorius Kankevičienė Lina Vykdantysis redaktorius Balynienė Rasa Techninis redaktorius Leščinskienė Danguolė

Išleido Alytaus kolegija, Informacijos ir ryšių technologijų fakultetas, Seirijųg. 2, 62114 Alytus, Lietuva Interneto svetainės adresas: <a href="http://www.akolegija.lt/">http://www.akolegija.lt/</a>, Elektroninis paštas: <a href="mailto:konferencija@akolegija.lt/">konferencija@akolegija.lt/</a>, tel. (8 315) 65 012, (8 612) 79 625, fax. (8 315) 79 132.