

EEIA-2018
**2018 International Conference "Education Environment for
the Information Age"**

**STRATEGIC UNIVERSITY NETWORK VERSUS GLOBAL,
NATIONAL AND REGIONAL CHALLENGES**

Egor V. Neborskiy (a)*

*Corresponding author

(a) PhD (Education), Udmurt State University, Associate professor of Department of Pedagogics and Pedagogical Psychology, Universitetskaya st. 1, Izhevsk, Russia, neborskiy@list.ru

Abstract

Globalization places new demands on universities. In particular, they are forced to compete with each other and address issues which are not always related to the region of their localization. The modern university exists at three levels: global, national and regional. At each of these levels the university is faced with specific problems, the solution of which requires resource expenses – financial, research, administrative, time, etc. To retain sustainable development, the university needs to create a strategic network which will make it possible to expeditiously solve emerging problems as well as realize its functionality in the long term. A strategic network is a complex of relationships between a university and key stakeholders and agents, targeted at establishing long-term relations and addressing ongoing tasks through distributed management (network relationship). Such stakeholders are business organizations, non-profit organizations, endowments, public associations, mass media, governmental bodies, educational institutions, etc. As the research shows, there can be different forms of interaction with the key stakeholders within the strategic network. The critical role here belongs to objectives towards realization of which joint projects and activities are directed. These can be location of companies' offices on the university campus, resource centres, non-profit organizations, project teams, organizational research units, start-ups. To meet global, local and regional challenges, a university strategic network should be built up at the intersections of three levels.

© 2018 Published by Future Academy www.FutureAcademy.org.UK

Keywords: University, management, strategic network, stakeholders.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Globalization as a phenomenon cannot be ignored. Being multidirectional, it impacts a great many aspects of life both in local communities and whole states. It is not rare that globalization exerts its influence upon political, social and even ecological realia (Coulibaly, Erbao & Mekongcho, 2018). There is a cultural imperialism perspective which argues that large companies, such as Disney, Coca-Cola and Microsoft, in the framework of so-called economic globalization influence consumer market. Consumption changes values, which in their turn change lifestyles and culture (Leidner, 2010). A number of studies show that cultural imperialism spreads through the use of English. This entails inclusion into global culture, growth of cosmopolitanism and shift away from ethnocentrism (Cleveland, Laroche & Papadopoulos, 2015). Digital technologies also do their bit, causing changes in the architecture of higher education – the proliferation of MOOCs (Kaplan & Haenlein, 2016) and transformation of approaches to organizing the learning process and assessment of its outcomes for example (Boguslavskiy & Neborskiy, 2017; Ivanova, 2016).

Globalization has also affected the practice of university management forced to look to needs other than regional in its search for contributors of resources. The triple spiral of relations «government-business-university» frequently acts as an agent of change when it is a case of international export and import of academic products (Heitor, 2015). A university does not only exist in the space of region, which is often disregarded by many models of management in certain select universities guided by previous rules. It is evident that globalization invaded universities, forcing them to compete. Paradoxically, being physically located in the region, a university has to compete globally too.

The modern society faces challenges which expand far beyond regional boundaries. Meanwhile, the university still acts as a limitless source of knowledge and technological decisions for innovation ecosystem. The transfer of innovations occurs directly or indirectly through license agreements, business incubators, R&D contracts, consultation services, etc. (Berbegal-Mirabent, García & Ribeiro-Soriano, 2015). As early as in the beginning of 2010th, there was announced a new scientific model in the form of research projects in partnership with stakeholders, to produce the knowledge necessary for societal transformations towards sustainability (Mauser et al., 2013). The university can and must serve as a key actor in designing collaborative development programmes (Trencher et al., 2014). For this, it is critical for the university to create a strategic network which would allow for its own sustainable development.

2. Problem Statement

The modern university exists at three levels in parallel: global, national and regional. At each level it is faced with specific problems, the solution to which requires resource expenses – financial, research, administrative, time, etc. Regions need trained professionals for their labour market having its own architecture. The government expects universities to address national-scale issues: preservation and development of culture, science and economy. On an international scale, universities increasingly happen to participate in joint activities directed at solving global problems: cyber attacks, climate change, rise of chronic diseases, etc.

Attempts to find the answer to regional problems are often complicated by the fact that the architecture of a local labour market does not match global trends. Resource expenditure required for tackling global-scale issues within collaborative research projects often postpones resolving national

problems and can even exhaust local resources (Walsham, 2005). At the same time, focusing on just one level can lead to irreversible consequences for a university: preoccupation with applied or fundamental science narrows down research possibilities, lessens the degree of a university's presence, and, eventually, reduces the sources of funding necessary for its survival.

It is crucial that the university find the balance between the three levels through creating strategic network as a precondition for its sustainable development. The confluence of regional, national and global objectives is attainable in a specialized partnership network of key stakeholders and other agents, such as representatives of academic community, whose dedication could be increased by certain fringe benefits (Disterheft et al., 2015). The formation of a strategic network requires that decisions be taken with consideration of global, national and regional challenges. The article deals with the structuring of strategic network formation mechanism.

3. Research Questions

The development of university in the foreseeable future largely depends on the planning of its activities as well as search for partners and financial resources. This requires formation of a strategic network. What is a university's strategic network and why is it a precondition for sustainable development? At the same time, the contemporary university is faced with the conflict of goals caused by the necessity to perform tasks not only on the regional but also on the national and global scale. How does the formation of a university strategic network occur at a time of global, national and regional challenges? These are the questions addressed in the paper.

4. Purpose of the Study

The sustainable development of a university is possible as long as the results of its efforts aimed at completing specific tasks are reproducible within scheduled time period. This necessitates strategic planning of its activity, the adjustment of the resource base and allocation of its structural elements through building relationships with key stakeholders. A complex of such relationships is defined as a strategic network. The given article makes an attempt to structure the mechanism of formation of a university's strategic network in the face of global, national and regional challenges.

5. Research Methods

As part of the study, the method of expert assessment has been used, which allows structuring the mechanism of formation of a university's strategic network by reference to the practical experience of the experts themselves. University management depends on a whole range of factors: human, organizational, financial, etc. This determines the specific architecture of management in a concrete university, whereas expert assessment makes it possible to discover and summarize similarities in university managers' practices and priorities.

Using the interpretation method, the elements of strategic networks of a number of regional universities have been analyzed. In its turn, this helped to identify the types of interaction between a university and key stakeholders. It is obvious that the list of interaction models presented in the research findings is not ultimate and open for further discussion.

6. Findings

The modern university is a complex aggregate implementing various functions. It includes the formation of educational space and creation of educational product, development and support of innovations, commercial activities. The university does not only continue to serve as a centre of academic culture, but also of culture at large, through community engagement. The complexity and multitasking of university management increases, as does the variety of university formats (Boguslavskii & Neborskiy, 2016).

To retain sustainable development, the university needs to create a strategic network which will make it possible to expeditiously solve emerging problems as well as realize its functionality in the long term. For instance, the quality of an educational product can be enhanced through building customer feedback channels and stable relations with the labour market in the form of business organizations. As an example of interaction between a university and labour market, there can be offices of large companies located on a university campus, where short-term re-training courses are held for companies' employees. For a university this is not only a source of income, but also a feedback channel leading to the constant upgrade of educational programmes and proficiency enhancement.

A strategic network is a complex of relationships between a university and key stakeholders and agents, targeted at establishing long-term relations and addressing ongoing tasks through distributed management (network relationship). Such stakeholders are business organizations, non-profit organizations, endowments, public associations, mass media, governmental bodies, educational institutions, etc.

The mechanism of strategic network formation is as follows:

1. The identification of the resource capacity of a university and its place in the hierarchy of universities;
2. The classification of a university's objectives at three levels (global, national and regional);
3. The development of a university's strategy (behavior model);
4. The formation of strategic network as a condition for sustainable development through short-term and long-term commitments and partnership agreements.

It may seem at first sight that there can be no general prescriptions when it comes to the process of developing a university's policy in its local context. However, it is not quite so. Here is an attempt to address the assertion.

Global challenges as such are most general in nature. In particular, the threat of cyber attacks and technological failure is challenging for most of the states, banks, private companies and major corporations. It is only innovative developments that are able to restore the balance and provide information security – something that a university can and must contribute to, including protection of its own information network (Joshi & Singh, 2017). Climate change, environment aggravation, human-induced disasters – these are the challenges exerting huge impact on most countries. University-based research projects can become a part of campaigns aimed at mitigation of negative consequences. For example, academic community is broadly presented in projects concerning agriculture and food problem (Dentoni & Bitzer, 2015).

National challenges often depend on geopolitical processes, State resources and nation's economy. The role of university in large measure is determined by its historical traditions, political reforms and public

demands. In many countries the agendas are similar. National security is one of the priorities, and participation of universities in related projects would be mutually beneficial. The ageing population signifies a greater economic burden on the workforce, tax increases and other such measures. All this necessitates research studies and development of social, economic and other tools for resolving the problem with the involvement of university resources. The rise of chronic diseases also poses challenge to universities: it becomes particularly important to create new medications as well as design technologies meant for improving diagnostics, treatment and support of patients.

Regional challenges are determined by the specifics of the local economy, geography and other factors. Meanwhile, in many regions the issue of employment is topical. This entails implementing educational programmes aimed at training skilled human resources employable on a local labour market. Equally important is the problem of city growth, solution to which implies developing infrastructure and designing comfortable urban environment.

At each of the three levels, a university faces the task which becomes a matter of priority. Situations are possible, when a global-level task can correlate with those from national and regional levels. The strategy of university development is often directed at a set of tasks, but regardless of their classification by levels. The strategy identifies weaknesses and strengths of a university's base, resource capacities and limitations. The development of the strategy requires consideration of these indicators, whereby determining a university's position among other universities and its specificity, on which management policies will be based. Such popular modern rankings as Times Higher Education, Quacquarelli Symonds and Academic Ranking of World Universities add even more confusion to a complicated and mixed picture of a university area, ignoring diversity of regional universities' missions and peculiarities of national education systems (Millot, 2015). These rankings do not correlate even in measuring such important criteria as teaching and research (Olcaya & Bulu, 2017).

University managers have to recognize the specificity of their university and plan its activities on the basis of sustainable development in the long term rather than on such external indicators as publication activity, number of international students, etc. What distinguishes a particular university from others? What will ensure its survival in the foreseeable future? These are the questions which must underlie the strategy conception. A regional university may be even globally famous for its research into the solid state physics, for example, but it cannot compete with major research universities from the Times Higher Education list. It is indicative that the differential approach was discussed at the Hamburg Transnational University Leaders Conference (Altbach, 2017).

The development of a model of university behaviour in the framework of strategic network formation can be facilitated by the structure presented in table 1. It should be noted that a task being implemented at the regional level can have clear correlation with global challenges, which may require further elaboration and search for outside partners.

Table 01. Structure of university behaviour.

Potential	Identifying university's capacities (technical, financial, human, etc.) for market entry and setting development goals.
Innovations	Design of projects potentially attractive to partners.
Effect	Identifying potential effects of projects implementation, which allows assessing their attractiveness.
Return	Identifying channels of return on the costs of implemented projects (either in the form of financial gain or various assets, laboratory equipment, etc.).

As the research has shown, the formats of interaction with key stakeholders in a strategic network can be various. They will depend on the tasks which must be completed through a joint project or activity.

1. Companies' offices on a university campus, especially when it comes to further training or retraining of company employees.
2. Resource centres at a university, with an extended autonomy in choosing objectives and means of their achievement.
3. Non-profit organizations founded by partners in the person of a university and a company, or individuals.
4. Project teams established to accomplish a concrete task – so, they can be temporary.
5. Organizational research units representing small structural subdivisions where university staff members from different departments gather to promote activities aimed at applying for grants, for example.
6. University-based start-ups founded by large companies, which helps to avoid financial risks at the stage of product development and testing.

7. Conclusion

The formation of university strategic network aims to ensure its sustainable development. The change of tasks on the agenda of university management is caused by many challenges and demands placed by society. Being one of the most important social institutions, university cannot ignore these demands; however, quick transformations are not always possible due to a long period of time required for research and development. A strategic network, based on the principle of network organizational structure, allows universities to complete on-going tasks emerging in the foreseeable future. The formation of a university's strategic network in the face of global, national and regional challenges should be based on the point of overlap between the three levels. This will help to create a more effective project portfolio and establish criteria for search of partners. As the university practice shows, network partnership can be used in university management due to traditional academic structure, where relatively autonomous institutes are united by common values. This allows one to promptly address the challenges and more flexibly respond to external changes on the agenda.

Acknowledgements

The research study was carried out with the financial support of Udmurt State University within the frame of the contest «Scientific Potential – 2017».

References

- Altbach, P.G. (2017). Postsecondary Systems, Massification and the Research University. *International Higher Education*, N.91, 5–6.
- Berbegal-Mirabent, J., García, J., Ribeiro-Soriano, D. (2015). University–industry partnerships for the provision of R&D services. *Journal of Business Research*, V.68, Issue 7, 1407–1413.
- Boguslavskiy, M.V., Neborskiy, Ye.V. (2017). Development of Russian Universities in the Information Era. *The European Proceedings of Social & Behavioural Sciences EpSBS*, V.XXVIII, 182–189.
- Boguslavskii, M.V., Neborskii Y.V. (2016). Development of the university education in the context of globalization. *SHS Web of Conferences*, V.29. DOI: 10.1051/shsconf/20162901011
- Cleveland, M., Laroche, M., Papadopoulos, N. (2015). You are what you speak? Globalization, multilingualism, consumer dispositions and consumption. *Journal of Business Research*, V.68, Issue 3, 542–552.
- Coulibaly, S., Erbao, C., Mekongcho, T. (2018). Economic globalization, entrepreneurship, and development. *Technological Forecasting and Social Change*, V.127, 271–280.
- Dentoni, D., Bitzer, V. (2015). The role(s) of universities in dealing with global wicked problems through multi-stakeholder initiatives. *Journal of Cleaner Production*, V.106, 68–78.
- Disterheft, A., Caeiro, S., Azeiteiro, U., Leal Filhod, W. (2015). Sustainable universities – a study of critical success factors for participatory approaches. *Journal of Cleaner Production*, V.106, 11–21.
- Heitor, M. (2015). How university global partnerships may facilitate a new era of international affairs and foster political and economic relations. *Technological Forecasting and Social Change*, V.95, 276–293.
- Ivanova, S.V. (2016). Pedagogical aspect of information and communication technologies influence upon the educational space. *SHS Web of Conferences*, V. 29. DOI: <https://doi.org/10.1051/shsconf/20162901027>
- Joshi, C., Singh, U. (2017). Information security risks management framework – A step towards mitigating security risks in university network. *Journal of Information Security and Applications*, V.35, 128–137.
- Kaplan, A., Haenlein, M. (2016). Higher education and the digital revolution: About MOOCs, SPOCs, social media, and the Cookie Monster. *Business Horizons*, V.59, Issue 4, 441–450.
- Leidner, D. (2010). Globalization, culture, and information: Towards global knowledge transparency. *The Journal of Strategic Information Systems*, V.19, Issue 2, 69–77.
- Mausser, W., Klepper, G., Rice, M., Schmalzbauer, B., Hackmann, H., Leemans, R., Moore, H. (2013). Transdisciplinary global change research: the co-creation of knowledge for sustainability. *Current Opinion in Environmental Sustainability*, V.5, Issues 3–4, 420–431.
- Millot, B. (2015). International rankings: Universities vs. higher education systems. *International Journal of Educational Development*, V.40, 156–165.
- Olcaya, G., Bulu, M. (2017). Is measuring the knowledge creation of universities possible?: A review of university rankings. *Technological Forecasting and Social Change*, V.123, 153–160.
- Trencher, G., Bai, X., Evans, J., McCormick, K., Yarime, M. (2014) University partnerships for co-designing and co-producing urban sustainability. *Global Environmental Change*, V.28, 153–165.
- Walsham, G. (2005). Development, global futures, and IS research: a polemic. *Journal of Strategic Information Systems*, V.14 (1), 5–15.