

HOW CAN LITHUANIA MOVE TO A NEW KNOWLEDGE ECONOMY

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Abstract. New methods of strategic management and competitiveness-boosting networking based on knowledge management are presented in the article. The article shows how the general trends of the global knowledge based economy can be adapted to conditions of Lithuania. Special attempt is made for analysis of local business problems and solutions which are relevant to Lithuania in the context of knowledge and globalization. In this context special attempt is made for developing new business strategies which play roles of key drivers in moving Lithuania's economy towards radical knowledge-based economic changes. The paper attempts to make proposals for generating and effective use of synergy effects through establishing science& technology parks, business incubators, transport hubs and innovation centers in Lithuania.

Keywords: new knowledge economy, globalization, knowledge economy index, internationalization of higher education, academic and business collaboration, entrepreneurship, key drivers.

Jel classification: O52

1. Introduction

The aim of this paper is to reveal pillars of competitiveness and trends of knowledge – based economy development in the world, the EU and Lithuania in particular; to analyze the KEI (knowledge economy index) by outlining the main characteristics of knowledge based economy, having target to show Lithuania's move towards radical, knowledge based economic changes.

New methods of strategic management and competitiveness-boosting networking based on knowledge management are presented in the article. The article shows how the general trends of the global knowledge based economy can be adapted to conditions of Lithuania.

Proposals are made for generating and effective use of knowledge economy as a key driver of Lithuania's move towards radical knowledge-oriented economic growth.

2. Global economic challenges towards competitiveness and growth 2011-2012

The global economic situation as presented in Global Competitiveness Report of 2011-2012 in the World Economic Forum, showed that after a number of difficult years, a recovery from the economic crisis is tentatively emerging, although it has been very unequally distributed: much of the developing world/China, India/ is still seeing rela-

tively strong growth, despite some risk of overheating, while most advanced economies/Japan, USA/ continue to experience sluggish recovery, persistent unemployment and financial vulnerability, with no clear horizon for improvement. In addition, rising commodity prices are eroding the purchasing power of consumers and are likely to slow the pace of recovery. Such uncertainties are being exacerbated by growing concerns about the sustainability of public debt amidst the recession of some economies such as Greece, Ireland, Italy, Spain, and the Europe in general. The damage that would be wrought by the first sovereign defaults among advanced economies since the 1940s is impossible to gauge, although the mere possibility of this eventuality has already hit investor confidence, put the very viability of the euro into question, and further undermined the US dollar's value and its place as the world's preferred reserve currency (*The Global Competitiveness Report 2011–2012*) by world Economic Forum.

According some researchers, the world economy (now turned global economy) is influenced as a subject to ebb and flows called long waves or Kondratieff waves (after a brilliant Russian economist who proved the existence of long waves). These waves are about 50 years long (give or take 5-10 years or so) and are usually caused by major technological breakthroughs. Last such a long wave started in 1950s and lifted all the boats of the

Western world emerging from the war with pent-up demand and cranked up by the Marshall Plan and other US aid but underwritten, so to speak, by a new technological paradigm (cars, highways, TV, space research, etc). What followed in the 1950s and 1960s was a period of sustained and high growth of about 4 % per annum and 4 % inflation, very moderate by the yardstick of those times. So we had good (4 % and 4 %) times during the 1950s and the 1960s.

Some half a century later, we are again experiencing a new flow in the global economy brought about by the information & communications technologies (ICT) revolution this time, especially the internet revolution which, as far as the potential impact on our lives is concerned, can only be compared to the invention of print by Johannes Gutenberg some 500 years ago. The Internet's effect on the global economy can be compared to the reverse (or positive) oil price shock. The Internet is bringing lower prices or slows inflation down (not pushes it up as was in the year 1973 the case with oil price increases by OPEC) and higher economic growth (not depression caused by higher oil prices in so oil-dependent Western economies). If you study the economic history of the world, all great technological revolutions (breakthroughs like invention of paper, steam engine, cars, railways, TV, computers, mobile telephones, etc) brought similar great benefits to humanity.

The transition towards direction of competitiveness & growth requires us to understand what theoretical and methodological potential social sciences and separate economies need for to do its job and to justify the confidence and the support of the population.

The social science in Europe needs well trained scholars, the resources of time and equipment to gather data, skills and tools for to analyze the multifaceted information and finally, the social science need willingness of policy makers to listen to the evidence and to conclusions of social scientists for the ability to communicate its findings for solving local problems which arise from global context.

3. Global tendencies in development of knowledge based economies

Knowledge – based economy is constantly renewed and competitive economy of new knowledge, the core of which is to apply new knowledge in economic processes.

The success of knowledge economy depends on the interaction between national knowledge basis and innovation systems.

Development tendencies of knowledge – based economy in different countries and regions are variable. The authors of scientific research maintain that the USA is a cradle of knowledge economy and forecast that the same development trends will continue till 2020 (Global Trends 2015, 2000; Mapping the Global Future, 2004).

According to an expert, Japan is one of the leading countries in knowledge – based economy. But the following question arises: at what level is the EU?

The aim of the Lisbon Special European Council of 23-24 March 2000 was to invigorate that EU should become the most competitive and dynamic knowledge – based economy in the world.

The implementation of the Lisbon Strategy provided for developing research and innovatory enterprises by creating innovations in all fields of human activities, by creating and using new technologies, by promoting competition, by supporting education, improving the social policy and consolidating the free market.

4. Tendencies in European Union knowledge based economies development

Looking at the current region of European development trends it seems that the initial implementation of the Lisbon strategic goal was difficult, that's why in 2004 it was reassessed and the goal was revised. That strategy was based on three main directions of the development: research and innovations was the main propeller of the growth for Europe having target Europe to become more attractive to investors and businesses. This could be done by consolidating the social model of Europe, which was based on a general activity and a larger social community.

Lithuania also formulated its purposes. The Government and Council for National strategy approved the Lithuanian information community strategy of development till the years 2010 and 2030. The following directions can be distinguished: competence of the population and the social community, the resumption of public administration and knowledge – based economy. To ensure a rapid development of knowledge economy, it is important that macro economy should be stable and strong. The KEI should devote attention to the development tendencies calculated by the World Bank. According to the calculation results of the World Bank, Denmark, Sweden, Finland, Holland, and Norway which are overtaking the USA and Japan, are leading countries. The UK and Ireland are overtaking the USA, which is left in position 9. Unfortunately, Japan stays in position 20 (8.42).

Table 1. Knowledge economy index(KEI) comparison (World Bank)

Region and country	Knowledge economy index			Economy incentive regime	Innovation	Education	ICT
	1995	2006	2009				
World	6.02	5.63	5.95	5.21	8.11	4.24	6.22
Sweden	9.20	9.17	9.51	9.33	9.76	9.29	9.66
USA	9.11	8.50	9.02	9.04	9.47	8.74	8.83
Japan	8.48	8.26	8.42	7.81	9.22	8.67	8.00
Lithuania	5.91	7.17	7.77	7.98	6.70	8.40	7.99

KEI makes calculations by measuring the main characteristic of knowledge. At the present time Sweden is the leader in the development of knowledge economy, KEI reached 9.51. Finland is in the second place (9.35), next comes Holland (9.35), Norway (9.31), Canada (9.17), UK (9.10), Ireland (9.5), USA (9.02). Lithuania is in the thirty first position (7.77), in 2006 it was in the thirtieth. Latvia is in position 21 (7.65). The Baltic States' leader is Estonia (8.42), which is 20 position in, it means, that Estonia is one step behind Japan.

When comparing the results of different countries we can see that European countries are leaders. Also, if we compare 2006 and 2009 years, we see that situation was changed and the leaders were European countries too. According to the 2006 data the Oceanic region was in the first place (8.71), Western Europe was in the third position (8.27), and Europe and Central Asia were in the fourth position (6.02). This year the situation has changed and is Western Europe occupies the first position (8.76), the G7 region is in the second position (8.72), Europe and Central Asia are third (6.45), Eastern Europe and the Oceanic Region come fourth (6.41), the fifth place goes to all World countries in which KEI is indicated (5.95), Middle East and North Africa are in the sixth position (5.47), Latin America is seventh (5.21), Africa is eighth (2.71) and South Africa is in the last position (2.58).

5. Knowledge based economy creation process: the challenges for Lithuania

A national political consensus was reached and the national agreement was signed calling for Lithuania to become a knowledge-based economy. The term "knowledge economy" has been coined to reflect the increase importance of knowledge as a critical factor for economic performance. Lithuania together with researchers in different European countries was prepared for developing collaboration and scientific synergy in areas where European scale and scope are required to reach the critical mass necessary for top-class science in a global context.

A knowledge based economy is one where organizations and people acquire, create, disseminate and use knowledge more effectively for greater economic and social development. This requires:

- An economic and institutional regime that provides incentives for the efficient creation, dissemination and use of existing knowledge.
- An educated and skilled population that can create and use knowledge or in other words critical mass that values knowledge capital that sustain a culture that values knowledge.
- A dynamic information infrastructure that can facilitate the effective communication, dissemination, and processing of information.
- A system of research centers, hubs, universities, think tanks, consultants, firms and other organizations that can tap into growing stock of global knowledge assimilate and adapt it to local needs.

The decision was made, that further development of the knowledge economy infrastructure (e.g. better access to high-speed Internet) is needed. That will necessitate a better public sector-private sector collaboration so as to arrive at innovative management models and strategies underpinning the knowledge economy in Lithuania.

Europe has recognized Lithuania as the prime transport centre in the region linking the EU and East. Therefore country is prepared to become a part of two EU priority transport corridors: West – East and South – North.

- North-South direction: I corridor (the VIA BALTICA highway and the RAIL BALTICA railway), connecting Tallinn - Riga – Saločiai - Panevėžys - Kaunas - Kalvarija - Warsaw, and I A corridor (Tallinn – Riga - Šiauliai - Tauragė – Kaliningrad);

- East - West corridor: IX corridor, IX B corridor branch (Kiev - Minsk - Vilnius -Klaipėda) and IX D corridor (Kaunas - Kaliningrad).

These corridors are as a key for an effective development, safe and environmentally friendly handling of the increasing amount of goods going East – West and North – South. Moreover, it helps to enhance sustainable transportation and smart IT

solutions in the field of transport. As a result, these corridors stimulate the economic growth and business development.

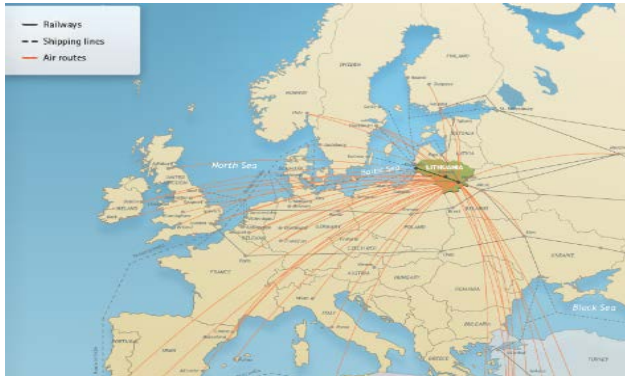


Fig.1. EU's prime transport hub and interconnection of international transport corridors

Having target to gain ranking and competitiveness, government has set a strategic goal for Lithuania to become the Northern Europe Service Hub by 2015-2030 with the share of exports of services making approximately 1/3 of Lithuania's total exports and 1/3 of total FDI in Lithuania settling down in the service sector.

6. New nature of business and transition of Lithuania towards knowledge based economy

The 21st century knowledge revolution created new opportunities and possibilities for the access and use of knowledge and information. The transition towards a knowledge economy required from policy makers to understand the comparative strengths and weaknesses not only their countries but economic systems also and then act upon them to develop appropriate short and long term policies and investments. Edmund Phelps, Nobel prize winner in economics, maintains that there are two economic systems in the West. Several nations including the US, Canada and the UK have a private-ownership system marked by great openness to the implementation of new commercial ideas coming from the entrepreneurs.

The other system-in Western Continental Europe-though also based on private-ownership, has been modified by the introduction of institutions aimed at protecting interests of "stakeholders" and "social partners". Interesting research was made by Swiss Federal Technology Institute in Zurich which investigated 37 millions of corporations, investors and its social partners. Decision was made that the 60 % of world economy is managed by network of 147 huge international corporations; most of them consist of financial institutions. The both systems include employer confederations, big

Unions and Monopolistic Banks. According some authors both of them (Europe, North America) represent corporate downsizing, or the dark side of global economy. All economies and especially new born post communist market countries are looking for the personal way of development. In today's global economy, knowledge has become an even more decisive factor of competitiveness, productivity and growth. The global digital/knowledge economy offers unprecedented opportunities to produce and sell on a mass scale, reduce costs, and customize to the needs of consumers – all at the same time. Whether you live in a large country such as the USA or China, mid-sized country such as India or Canada or a smaller country such as Lithuania, your potential market is of the same global size. And you can source (net source) inexpensively wherever you wish.

Various management writers have for several years highlighted the role of knowledge or intellectual capital in business. The economic integration and globalization are the two trends of current development of the world economy. In the global digital village every individual or small business can go global and directly compete with any company. Competition in the goods and services market has been brought to new, higher levels, and permanently so.

Developed countries can no longer hide behind politically motivated barriers, physical or other walls to protect themselves from competition from developing countries or emerging markets. Rather than clinging to old models, individuals and corporations in developed and (increasingly) in developing or transition nations need to upgrade their competitive advantages through more education and training.

New information and communication technologies (ICT), especially the Internet (increasingly wireless), bring new opportunities; to concentrate on core competencies, specialize and increase trade and investment flows. For these gains to occur, however, what needs essential transformation is the corporation itself.

Corporations need to change the ways they do business, they must become more flexible, amorphous networks of international entrepreneurs and knowledge managers working on particular projects. How such corporations should be governed is a new challenge before the managers working under the conditions of the global knowledge economy.

In the global economy any country, if it is serious about rising its standards of living must open its economy so as to avoid itself of opportunities of trade, interact with and learn from it. Modern growth strategy was developed at Harvard by

(Porter1990), where the different stages of competitive development of the nations are presented. (Lahti 2007) resumed Porter’s economic growth stages presenting them in the form of chart and named them like Global Challenge and the new economics (Fig. 2.).

Stage A: Factor-driven. Practically, any of the internalized or globalized industries have drawn their competitiveness from the basic factor conditions, such as low-cost labor and access to national resources. Firms typically produce commodities more than specialties. The rate of technology and R&D investments is low. The local economies are highly sensitive to fluctuations in commodity prices and exchange rates. There are only a few truly international firms. Domestic demand for exported goods is modest. The role of foreign firms is considerable, as they act as a channel for foreign markets and they bring foreign technology, knowledge and management with them to the host country. Technology is assimilated through imports, imitation, or foreign direct investment (Lahti 2007). Key for factor driven economies are: institutions, infrastructure, macroeconomic environment, health& primary education.

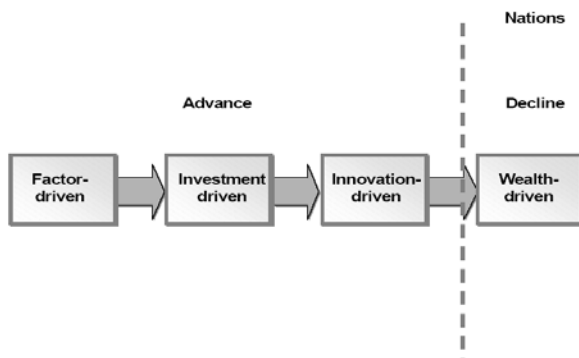


Fig.2. Porter’s model of the stages of competitive development of nation

Stage B: Investment-driven. In the investment-driven stage, countries develop their competitive advantages by improving their efficiency in producing standard products and services which become increasingly sophisticated.

While the advanced technology still comes mainly from abroad, with licensing and joint ventures, local firms' invest in process technology and modernization of production facilities etc. Firms often produce under contract to foreign manufacturers that control marketing channels. Home demand is still rather undeveloped, and related and supporting industries are not functioning optimally. It is typical to this stage that wages and input prices are higher than before and employment is increasing. Public policy concentrates on long-term matters. One of the major areas is infrastructure

projects. Harmonization of customs, taxation, and corporate law may allow the economy to integrate more fully with global markets (Lahti 2007). Main keys which enhances efficiency driven economies are: higher education& training, efficiency of goods market, labor market efficiency, financial market development, technological readiness and market size.

Stage C: Innovation-driven. In the innovation-driven stage, the number of industries operating successfully at international level increases and broadens. Firms create new technologies and methods and compete with low costs due to high productivity rather than low production factor costs. Home demand increases and becomes more sophisticated. Clusters are well developed, fostering innovation and technological change. A country's competitive advantage lies in its ability to produce innovative products and services at the global technology frontier using the most advanced methods. Institutions and incentives supporting innovation are crucial for further development. The economy becomes stronger against outer shocks, like cost shocks, because of its ability to compete with technology and product differentiation. Improvements related to externalities, market imperfections and incentives are important to develop the well-functioning factors, product and financial markets (Lahti 2007).Main keys for innovation driven economies are: innovation and sophistication factors, such as, business sophistication and innovation.

Stage D: Wealth-driven. Unlike other stages the wealth-driven phase is driven by past accumulation of wealth and becomes unable to generate new wealth. Firms become more vulnerable to uncompetitiveness. They innovate less and the investment rate decreases. Employees begin to lose motivation and so on. The result is that firms lose competitive advantage compared with foreign firms and may even start to move their headquarters from their original home country to other countries. The standard of living and welfare is still rather high. The policy attempts in this stage try to increase the dynamism of the economy, innovations and profitability (Lahti 2007).

First three stages involve successive upgrading of a nation competitive advantages and will be associated with progressively rising economic prosperity. The transition through the four stages is not automatic since countries may get stuck in a stage. Most investment-intensive economies are finding that their relatively high-cost labor make them vulnerable from really lower-wage countries, such as China, India. The transition towards knowledge economy requires understanding the comparative advantages of their countries.

7. Challenges for Lithuania-Target 2030

Having in mind that the French National Geographic Institute has concluded that Europe's geographical centre is situated 26 km North of Vilnius (this is now registered in the Guinness book of World Records), Lithuanian business market is very easy to access, because of the geographical proximity, which can serve for incubation of new technologies. Moreover location of the country which imagine it's business opportunity to be in crossroads of such three huge markets: EU (Western Europe and Scandinavian), BSR (The Baltic Sea Region Innovation Network), and Eastern market (Russia and CIS (Commonwealth of Independent States)) in which operates more than 700 million litas, create opportunities for companies expand their competitive edges moving their activities out of the region generating 'spread' of technological innovations globally (Fig.3).



Fig.3. Lithuania on the world market crossroads

Lithuania is a member of the international organizations and unions such as World Trade organization (2001), European Union (2004), NATO (2004) and Schengen (2007). Therefore Lithuania ensures free trades between numerous markets, gets possibility to provide for customers more choices and broader range of products and qualities, and most importantly stimulates economic growth. Moreover, these memberships allowed Lithuania's access to developed markets at the lower tariffs and ensure free traffic flow at internal borders. Additionally, country gets international support and cooperation. And finally, membership makes easier and cheaper doing business in other countries and helps to expand and develop Lithuania's business market and environment as well.

The widening and deepening of the European integration markedly increased competitive pressures, so companies began looking for new, sustainable and dynamic advantages. Given that the continent is aging pretty rapidly and immigration presents a problem for a number of reasons, a shortage of qualified labor is developing, which

can be best addressed by taking advantage of the digital/knowledge revolution and of the potential of new EU members such as Lithuania.

Under these circumstances, a better use of the continent's resources has become critical to winning the competitive game or surviving in the unified Europe and the integrated world. Large European and multinational corporations (e.g. BT, Buckman Labs, Nokia, Siemens, Barclays Bank, Computer Science Corporation, etc) were the early adopters of new thinking. They first realized that high initial costs of research, human/intellectual capital costs, etc, are efficiently spread only over longer periods and larger geographical areas. The vision they have, specifically their new-frontier mentality and the ability to develop integrative thinking across functional areas of business, not only at the highest management levels but, what is even more important, at lower management levels resulted in knowledge-sensitive enterprise cultures and the resultant organizational learning regarding new business models and strategies. Also, such issues are pretty high on the EU institutions' agenda (e.g. Lisbon Strategy). The unique European competitive advantage (e.g. compared to the USA) is that EU institutions are able to give push and pull to many continent-wide initiatives that fall within the public goods category (e.g. earlier adoption of continent-wide standards for mobiles, knowledge management practices, etc).

The chief criterion for Lithuania before to become a full member of the EU was the capability to withstand the European competitive pressures and become competitive and visible in globalizing world. While in the first period lower labor costs do provide certain competitive advantages pretty much across the branches of economic activity, this factor was of rather short duration in the case of Lithuania or other transition economies. Lithuania's strategy was to develop higher added-value market niches that will precisely call upon the Lithuanian capabilities to create an entrepreneurial economy that is integrated continentally and globally. Knowledge economy provides such opportunities especially in the context of knowledge and innovation in the European and global business. The main goal was strengthening of Lithuania's knowledge economy having target to catch up and surpass Western Europe in terms of dynamism. For that purpose was developed Lithuania- 2030 scenario, where new challenges of values and challenges to the leadership were chosen as a priority. People not technologies were priorities. In this scenario dynamism of the people was chosen as a prerequisite and dynamism of technologies was chosen as a destiny. Having in disposition dynamic and highly skilled talent pool: 30 % of

overall population with higher education, compared to the EU average(24 %), 50 % speaking two foreign languages,49 higher education institutions (22 universities and 27 colleges),7 universities and 8 colleges hold IT curriculums,40 % talent in science and technology, with leading in the world position in mobile e-signature, highest fiber optic density in Europe, world's fastest upload Internet in 2009, exemplary GSM penetration and densest network of public Internet access points in Europe, Lithuania is more than prepared for radical start in to creation of innovative economy and a country creating innovations for entire world.

8. Strengthening of education and knowledge intensive business as a key driver for Lithuania's future growth

The dominant challenge for Lithuania is how to use a considerable theoretical research (e.g. biotech, lasers, semiconductors, game theory) potential of the Lithuanian research institutes, universities, and industry. There is a need to develop a practice-oriented strategy for knowledge-based economy in Lithuania.

The theory-practice gap has been something of a problem inherited from the communist period, as are the inter-institutional collaboration shortcomings. One important aspect of that challenge is the interdisciplinary and cross-disciplinary nature of modern business models that mandates integrative thinking and puts a premium on those managers who are able to integrate functional perspectives.

Educational institutions in European countries are still somewhat attached to the subject-based teaching/learning; and this problem is therefore more pronounced in Europe than in North America. Nowadays all over the world universities must be prepared for new challenges which are predicted by aging population, global energetic and climate changes and other social processes. They must be prepared to identify, detect and analyse new business opportunities.. It could well be that knowledge management is that vehicle and that frame of mind that can help support research networks, which are the lifeblood of the integration in to European research. As concerns Lithuanian universities, they also must be prepared for new challenges which are posed by the European aging population, global energetic and climate changes. Solving these problems universities must be prepared to identify, detect, analyze and prepare recommendations for new business opportunities which are most feasible to invest in. Moreover universities should be initiators or leaders of this activity in their local regions. Therefore Univer-

sities have to develop a new curriculum that applies to professors and students.

Bridging science and business or academic collaboration is a new agenda and new target how to survive under conditions of uncertainty, we have in mind conditions of global recession.

9. Academic and business collaboration as starting position for Lithuania's move towards radical economic changes

In today's world in spite of global transformations separate market participants are unable to achieve good results which knowledge economy requires.

The key for solving problems are networks, clusters and other common activities. In the network of such knowledge institutions there are very popular objects of knowledge economy such as knowledge camps, houses, towers, islands, technological parks, valleys, etc.

Couple years ago five programmes of integrated research, higher education and business centers (valleys) were prepared in Lithuania. The integrated research, higher education and business center (valley) is a research, higher education and knowledge-intensive business potential concentrated in a single territory, which has a common or related infrastructure and purposefully contributes to the creation of knowledge-based society and knowledge-based economy. Valleys were established during period of years 2007 – 2009 , two of which are situated in Vilnius (Santara and Sunrise valleys of electronics, nanotechnologies, ITT and biomedicine), two are situated in Kaunas (Santaka and Nemunas valleys of ITT, mechatronics, chemistry and agriculture) and 1 maritime valley in Klaipeda.

By developing valleys in Lithuania it is sought to create clusters of research, higher education and knowledge-based economy of an international level, to speed up the creation of knowledge-based society and to strengthen Lithuania's competitiveness.

Valleys in Lithuania were created seeking to concentrate, renew and optimize the infrastructure, which would enable state-of-the-art technologies and other most promising sectors of science, technologies and businesses to be developed, relations between scientific research and higher education to be strengthened, close interaction between scientific research, science, higher education and knowledge-intensive business to be ensured, as well as to engage in training researchers and other specialists.

Also, it is sought to develop scientific cooperation of the highest level on the national and international scale, to attract necessary foreign investments of great intellectual potential, and on

the basis of research and higher education, as well as knowledge-intensive business to create clusters of knowledge-based economy.

As concerns “Sunrise valley” in Vilnius is one of innovative centers, which was deliberately modeled after the Silicon Valley, California, where “Eastman Kodak”, “General electric”, “Intel Fairchild”, “Lockheed”, “Hewlett Packard” and other companies started and developed their activities.

Knowledge economy clusters were successfully created near universities in different countries. Very successfully towards this direction are developing our neighbors-Nordic countries. In recent years Finland and Sweden tweaked their resources for R&D especially in the last decade that influenced growth of high tech level of production in exports of those countries. Technological parks “Kista” and “Techno polis” are well known knowledge economy clusters in all over the world. The neighboring country Poland also has great achievements in this field of activities. Poland is successfully developing 45 ha square Technological Park “Techno port” near the capital Warsaw. Good conditions for successfully activities started in Vilnius “Sunrise valley” where special social enterprise “Sunrise valley” in May of 2003 was established.

Vilnius University and Vilnius Gediminas Technical University, well known Lithuania’s corporate leaders: ALNA, SONEX, OMNITEL, BITE GSM, EKSPLA, Laser Research Institute, the members of the Knowledge Economy Forum of Lithuania have been founders of this public unit. This project was supported by municipality of Vilnius, which became shareholder of this establishment. In reality “Sunrise valley” accumulated theoretical and practical potential of the best Lithuanian research Institutes, Universities, think tanks, consultants, firms and organizations and is ready to tap into the growing stock of global knowledge and adapt it to local needs.

In the long run (till 2015) “Sunrise valley” the largest unit of Lithuania’s knowledge clusters must be developed into the largest innovation centre in the Baltic States, where high added-value products and services will be created. According to the evaluations by the year 2015 in territory of 2.5 ha about 150 new high tech enterprises with more than 3000 employees will be created, among them: Innovation Center for the development of laser and IT as well as the formation of business incubator and a scientific-technological park. It will be companies established by universities and research centers, where students, professors and researchers from those institutions will work.

10. Conclusions

The paper concludes the importance of global and local business environment, its stages of development for generating countries move towards radical economic changes:

1. The any countries transition towards economic growth and prosperity requires that policy makers understand the comparative strengths and weaknesses of their countries and then act upon them to develop appropriate short and long term policies and investments.

2. Lithuania will need to develop higher added-value market niches that will precisely call upon the Lithuania’s target to create an entrepreneurial and innovative economy that is integrated continentally and globally. Knowledge economy provides such opportunities especially in the context of knowledge and innovation in the European and global business.

3. Bridging science and business together provides a compelling platform to research the issues of upgrading competitive advantage in developed countries and contract out non-core competencies to emerging markets.

4. Conclusion was made, that the academic and business collaboration via creating a network of knowledge institutions and projects based on innovative scheme deliberately modeled after the Silicon Valley, California and others, create the starting position. Post communist and other emerging market countries are well advised to jump to these new opportunities as they represent the best chance yet to realize the “latecomer’s advantage” by leapfrogging to technologies and models of doing business which are new for Western countries as well.

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