

AIRITA BRENCA & AIJA GRAVITE**INTELLECTUAL CAPITAL IMPORT FOR THE BENEFIT OF HIGHER EDUCATION****Abstract**

The article explores the role of intellectual capital in the development of higher education system. The description of economic and marketing values of intellectual capital demonstrates its importance for an institution's establishing in education market. Import and export of intellectual capital is a reality of globalisation processes, and it is considered to be of great importance in the economy of a knowledge society. However, its accounting does not allow to evaluate qualitative changes in higher education system. A research in the recent history of Latvian higher education after regaining of independence gave us an opportunity to discover: what were the patterns of importing the intellectual capital; what were the elements of change, or new beginnings generated by imported intellectual capital; and how sustainable were these changes and beginnings.

Introduction

Intellectual capital is the amount of individual or collective knowledge which can be used to create other forms of capital or increase their value. In higher education it determines the competitiveness of higher education institutions. The intellectual capital is comprised of non-material values which secure vitality and uniqueness of the institution.

Higher education establishments sell a product (the degree to be earned) and services (teaching and learning, socialising, goods sold on campus) as accessories developed to increase its expected and true value. If the quality of services is increased - the quality of education product itself is higher evaluated by the client. The degree earned can be considered a token of documented study experience at this particular higher education establishment, which in turn allows the higher education establishment to look forward to a positive cooperation with the graduate in future (by getting other potential students interested in enjoying an identical experience etc.). Students are the outcome of education and at the same time they are consumers of education as a product. These clients demand a good price, a good value to be gained and a good product in terms of the study experience. For this reason it is crucially important to provide an appropriate level of intellectual capital in the higher education institution where its human capital is being ceaselessly maintained both by achieving personal development and securing development and introduction of innovations in the area of arts or sciences represented.

Economic characteristics of intellectual capital

Already some time ago the classical economists (Schumpeter, 1943) concluded that innovation is not just an important phenomenon but the primary driver of economic growth. Competitiveness of an economy is characterised mainly by two factors: the technological level and the qualifications of personnel, which determine

productivity and quality of the product as well as costs. Development and reproduction of the innovative environment is determined by the triangle: education – science – economy. The intellectual capital strategy (ICS) secures a regular, effective and systematic exploration, management and assessment of intellectual capital.

The overall development strategy of the higher education institution is effective provided that it is developed based on the interplay of its business plan, ICS and marketing plan. Traditionally human capital, structural capital and relationship capital are seen as the components of the intellectual capital (Stewart, 1998). The human capital in the higher education establishment is knowledge which its human resources (academic and administrative personnel) have; the structural capital is knowledge which remains within the higher education establishment irrespective of turnover of human capital (legally secured intellectual property, data bases, system, procedures, organisational chart etc.); the relationship capital comprises resources of external relationships which involve the higher education establishment in various ways (internal and external clients; parents of students, sponsors, cooperation partners, state and non-government organisations etc.)

It has to be recognised that the evaluation of intellectual capital is insufficiently incorporated in the academic management of higher education establishments and also – a unified model of intellectual capital has not been created for the purposes of practical application. This is not a simple task as evaluation criteria for the intangible assets are more difficult to develop and quantify for the balance sheet than those for tangible assets. Although human resource accounting has been put forward already in 1960's (Hermansson, 1964; Brummet, Flamholtz & Pyle, 1968) the old understanding of accounting and money has to be upgraded through adding new content (e.g. Yeh-Yu-Lin & Edvinsson, 2010).

Higher education and research in Latvia after regaining of independence

After 50 years of Soviet occupation Latvia's independence was restored in 1991, radically changing all walks of life, including the education. Back then the foundation was laid for what today is Latvia's education system. The legislation acts – Law on Education and Law on Entrepreneurship – ensured the implementation of two key principles that changed higher education radically: academic freedom and private initiative and funding of education.

At the same time there was a sharp decline in R&D. While in 1990 this field employed 2,2% of the Latvia's entire workforce, it was only 0,5% after 1994. This decrease has occurred mainly due to the elimination of the so-called branch institutes of Soviet Academy of Sciences. Employees of these institutes were either forced to leave research work or left by themselves. Many of them took the opportunity to switch to another better-paid job, e.g., in the state administration institutions etc. A number of scientists established their own companies. A sizeable number of scientists from Latvia work abroad. According to a rough estimation it is 1/3 of the country's scientific potential and for both 1990s and 2008 the number of Latvian scientists who have moved to work in other countries stands at about 1000.

On the other hand, transition to market economy brought rapid changes in labour market: large soviet industrial enterprises had to wind down and the associated vocational schools stood unable to provide any training with reasonable

application. The number of simple jobs suited for upper secondary school graduates with no additional training decreased and new areas of social-economic activities related to the existence of independent state and democratic society emerged, generating demand for new fields of education.

During the transition period Latvian academic society was concerned about the damage done to the science by fifty years of isolation from the world's scientific thoughts and research progress. In these circumstances the import of intellectual capital was considered to be the quickest way to raise the level of Latvian research and academic standards to a competitive global level. The re-establishing of contacts with Western academics as quick as possible was of great importance, and Latvian academic society was fortunate to have a strong supportive agency in Western countries – Latvian academic diaspora (Abens & Gravite, 2012).

The Soviet occupation of the Baltic States in 1940, the Second World War and Stalin's deportations in the 1940s and 1950s destroyed Latvian academic society: hundreds of university professors were fired, died in concentration camps of both fascist and communist regimes, or emigrated to save their lives. As a result of these turbulent events the Latvian academic diaspora began to emerge in the Western Europe, the Americas and Australia. There were little, or no professional contacts between the academic society in Soviet Latvia and Latvian academics abroad until the mid-1980s. Initial changes occurred as a result of Gorbachev's glasnost and perestroika when the political thaw made contacts between Western and local Latvian scientists and academics possible once again.

Intellectual capital import in Latvian higher education

The quantitative description of the import and export of intellectual capital does not provide sufficient grounds to evaluate the impact of these processes on the sustainable development of higher education itself. An assessment of qualitative changes in higher education system caused by the import of intellectual capital might give us more clear picture. The recent history of Latvian higher education gives us an opportunity to discover: what were the patterns of importing the intellectual capital; what were the elements of change, or new beginnings generated by imported intellectual capital; and how sustainable they were.

Two sources were used in order to determine how the first contacts between Latvian scientists in Latvia and abroad were initiated and maintained, who initiated them, what was the nature of the first activities and what was the impact of these activities on Latvian higher education: newspaper articles and oral testimonies of participants.

The official position and direction of the activities initiated by Latvian academia is clearly defined in the newsletter of Union of Latvian Scientists – *Zinātnes Vēstnesis* [Scientific Courier]. The National Awakening began in 1988, and the Union of Latvian Scientists was one of the public and professional organizations established to support the country's road to independence. The newsletter was usually published monthly and contained quite accurate descriptions of the activities of the Union of Latvian Scientists: transcripts of discussions, business trip reports, work plans and initiatives for cooperation with foreign scientists and organizations. Partner institutions and organizations, as well as individuals involved in establishing contacts with Western academic societies were mentioned, signed and planned

agreements described. Also problems, such as language barriers and financial obstacles, are described in the articles.

In addition eight members of the Latvian academic diaspora were interviewed. The interviewees represented different academic areas – linguistics, military, psychology, theology, political science, communications and education sciences. They were involved in academic activities and education policy-making in Latvia during the transition period. The interviewees were asked to describe the type and nature of first professional contacts with Latvian academic society, their role in developing Latvian higher education system in 1990s, and to give a self-evaluation of the results of their activities. Also four Latvian academics, who collaborated with Western academics in 1990s were also interviewed about activities during this time.

Findings

Several organizations established and maintained contacts between Latvian academics across the borders during this time. In Latvia the Union of Latvian Scientists was the most active. It was founded under the auspices of the Latvian Academy of Sciences, which at the time was subordinate to and financed by the USSR Academy of Sciences. Regular business trips to Moscow were held to report on activities and to receive permission and funds to proceed with new initiatives.

The Union of Latvian Scientists founded two other organisations. The scientific association *Latvia and Latvians in the World* was founded specifically to gather information and maintain contacts with the academic diaspora. The *Fund for Young Latvian Scientists* was established to raise funds to help finance periods of study or internships abroad. This was especially crucial after the flow of money coming from the USSR Academy of Sciences was cut off.

During the first years of collaboration the support of changes in Latvian academic life from the academic diaspora was mainly consultative. The common form of using their intellectual capital was guest lectures, seminars and workshops held by Western academics. They also actively were involved in organisation of the First World Congress of Latvian Scientists which was seen as a culmination of cooperation at that time. After 1991 several diaspora academics decided to return to Latvia and establish their academic career in their motherland. Four participants of current research were amongst them.

The ease of cooperation differed depending on the academic field. Diaspora academics referred to full support of their activities from local academics in natural sciences, theology, sociology, military sciences, clinical psychology. The experience in the humanities, however, is described almost exclusively in negative terms stressing scepticism and fear of competition on the part of the local academics.

The most substantial results of collaboration were reflected in the founding of new research departments and study programmes – sociology, psychology, military, theology and ecology. Thus one of the leading Latvian scientists Elmars Grens noted: “Scientifically grounded sociological research would debunk quite a few illusions cultivated in various social circles, would deter some from taking the floor ‘on behalf of the entire nation’ and voicing their interests in an inappropriate manner.” (Grens, 1989, p. 3). Professor Cimdins recalled the fruitful trip to the US and Canada that resulted in support from diaspora scientists, who funded the first laboratory for ecological research at the University of Latvia. One of the

interviewees stressed out the importance of founding the National Defence Academy in the process of establishing independent Latvia's defence system and joining NATO.

Both newsletter and interviews showed a distinct tendency to encourage young Latvian researchers to leave the country and gain experience abroad instead of starting something new in Latvia. This was considered to be the quickest way to raise the level of Latvian research to a competitive global level. The newsletter allowed to track down the names of first 17 post-graduate students and young researchers who had the opportunity to go abroad. Most of them represented natural sciences, medicine and finance, and there were no representatives from humanities. Some of young researchers sent abroad have returned to work in their field in Latvia, but others have remained abroad and form a new Latvian academic diaspora.

Conclusions

Four ways of importing the intellectual capital were mainly used in Latvia to secure the qualitative development of higher education during and after regaining of independence: the participation of Latvian academics in scientific conferences, the guest lectures and seminars of Western academics, the involvement of Latvian diaspora academics in establishing new study fields and programmes, and study and internship periods abroad.

Latvian academic diaspora played a significant role to secure success of transforming the higher education and academic standards in Latvia.

The import of the intellectual capital in early 1990s allowed to establish new fields of research and study programmes that were essential for an independent country at that time and still serve the democratic society and enrich the offer of Latvian higher education market. The re-engaging of Latvian academics with international scientific community and introducing it to the younger generation brought new knowledge, research methodologies and study methods that still are used and developed in Latvian universities. The understanding of importance of diversity and academic freedom injected back then changed the system of values of Latvian academic society.

The import of intellectual capital is not implemented by residents only: it can be brought also by diaspora or foreign academics. Therefore the definition of the intellectual capital import needs to be reconsidered.

References

- Abens, A. & Gravite, A. (2012): Academic Diaspora – Western knowledge and post-Soviet expectations in the development of higher education in 1990s. *ISCHE34-SHCY-DHA Internationalization in Education (19th-20th centuries). Abstracts*, p. 260.
- Brummet, R. L., Flamholtz, E. G. & Pyle, W. C. (1968): *Accounting for Human resource*. Michigan Business Review.
- Central Statistical Bureau of Republic of Latvia – online link: www.csb.gov.lv
- Grāmatiņš, A. (1989): *Baltijas Universitāte* [Baltic University]. Minstere: Latvija.
- Grēns, E. (1989): Zinātne un sabiedrība [Science and Society]. *Zinātnes Vēstnesis*, 2, 1–3.
- Hermanson, R. (1964): *Accounting of Human Assets*. Bureau of Business and Economic Research, Michigan State University.

- Higher Education Quality Evaluation Centre – online link: www.aiknc.lv (07.12.2012)
- Latvian Science Indicators Key Figures 1990-2000 – online link: <http://science.lza.lv/statistics.htm> (10.01.2013)
- Law on Education of Republic of Latvia, 19.06.1991 – online link: <http://www.likumi.lv/doc.php?id=67960> (07.11.2012)
- Prikulis, J. (1989): Zinātniskās asociācijas “Latvija un latvieši pasaulē” perspektīvais darba plans [Scientific Association “Latvia and Latvians in the World” prospective work plans], *Zinātnes Vēstnesis*, 1, 15–16.
- Projekts Latvijai un ES Ziemeļu Dimensijai: Mikroelektronikas rūpniecības inovatīvā un ražojošā potenciāla atjaunošana [Project for Latvia and EU Nordic dimension: the restoration of innovative and production potential of micro-electronical industry] – online link: www.innovation.lv (03.01.2013)
- Schumpeter, J. (1943): *Capitalism, Socialism and Democracy*. New York: Harper.
- Stewart, T. E. (1998): *Intellectual Capital: The New Wealth of Organizations*. Crown business.
- Yeh-Yu-Lin, C. & Edvinsson, L. (2010): *National Intellectual Capital: A Comparison of 40 Countries*. Springer.

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