

The Way for a Hungarian University to Become a Learning Organisation

Réka Barabás

Széchenyi István University RGDI, Hungary

Zsuzsanna Pupp

Széchenyi István University RGDI, Hungary

Abstract

Ever since the Lisbon Summit in 2000, the European Commission has treated universities as engines of economic development. The University of the 21st century has to foster an entrepreneurial culture and encourage students to develop entrepreneurial initiative and seek innovation, and university needs to adapt its academic services to market realities, managing this process. Due to various reasons, e.g., universities operate supported by state, and could in the same time function as entrepreneurial organisations. However, universities do not have the pressure for performance improvement, as in the market-driven sector, mainly since enrolment is centralized, indicating that university reforms in Hungary are inevitable. Széchenyi István University has maintained and developed a cooperation with Audi Hungaria for the last 20 years which has permitted the establishment of an extended cooperation network in the region with many actors of the economic sector. From this point of view, we analyse the opportunities and needs of Hungarian universities to change, develop and to search for a way for our university to become a successful learning organisation.

Keywords: triple helix, university reforms, entrepreneurial university, learning organisation

JEL classification: I23

Introduction

In order to operate and maintain a competitive economy, it is indispensable to establish the strong bases of a knowledge-based society. A strong basis can only be established with the active cooperation of the participants. The Triple Helix model creates a complex innovative theory about the triple relationship of three spheres: the economic sphere, the university-academic institutions and the government bodies. At a local level, it presumes a close relationship among higher education institutions, institutions operating in the city, the local government and enterprises. As the main statement of the Triple Helix model, it claims that the continuous and two-way communication of these three units (university, economy, government) provides the development of each sector (Etzkowitz et al., 2000).

The university is one of the determinant characters of the Triple Helix model. It plays an elegant and important role in the knowledge-based society and economy as the formation of new knowledge, its transfer through education and training and its usage in new industrial procedures, products and services are the prerequisites of economic growth. Universities are also public service institutions which constitute a kind of transition, a bridge between the market and the public sector (Filep et al., 2012b). In their organisational nature they need to approach their effective cooperation with the market, their communication and the nature of organisations

operating in the market (Barabás et al., 2016). Therefore, during the examination of university organisations it can be an interesting viewpoint to relate the present operation of Hungarian higher education institutions to the student organisation nature which is currently considered effective.

The changing role of higher education institutions

The classical function of higher education institutions, which focused on educational and research activities, has significantly changed. The traditional sphere of basic activities has been fundamentally reshaped by the significant expansion of the circle of those who need the activities, services of the institutions, as well as by the appreciation of the competitive and social/business success of knowledge (Shattock, 2009). Besides the two original functions a so-called "third-mission" has also appeared which is not only about the economic sale of knowledge items any more. Basically the third mission includes all institutionalised relationships which are maintained with partners from the non-academic world (Benneworth et al., 2009). In that regard we must classify here the transfer of new competencies generated by the trainings based on research activities to economic operators, and the possession of new technological knowledge and science (patents and other intellectual property rights), their own use (establishment of university spin-off companies) and external utilisation (enterprises, public institutions) (Farkas et al., 2011).

A qualitative assessment of higher education institutions

Higher education rankings attempt to compare higher education institutions. Global higher education rankings internationally focus on the following areas: publication performance; reputation; scientific capacity; educational features; resource-building capability; international attractiveness (Kiss, 2011).

It is strategically important for each of the higher education institutions to be included in the international higher education ranking. Rankings provide simple information for the university stakeholders, thus they can influence international student and professor mobility decisions, the establishment of international cooperations and the access of funding opportunities (Bander, 2012).

A Central-Eastern European institution cannot reach the top 200 places in the traditional global international absolute rankings. There can be several reasons for this. On the one hand, European universities appear on the rankings compiled mainly in the United States of America or Asia in a small number, as the indicators have been determined on the basis of local conditions. On the other hand, Central-Eastern European countries have a lower level of attractiveness to foreign students or professors than a Western European one. Thirdly, their economic state also provides an explanation for the poorer performance of the countries of this region in international rankings. A country in a better economic situation can obviously spend more on the development of its higher education than a country disposing of a lower GDP. Moreover, the level of internationalisation is relatively low in Central-Eastern Europe for historical reasons. Because of this, institutions find it more difficult to attract foreign professors, students and the participation in international conferences together with a low level of publications in international journals (Myers et al., 2009).

Hungarian universities cooperate on the domestic level and partially compete with each other. The higher education rankings can mean some kinds of measures of the competitions. Several international rankings already make regional rankings (for example Central-Eastern European QS ranking; the ranking of emerging

countries; the THE ranking of BRICS countries), but global rankings can also be filtered in certain regions.

The performance of Hungarian higher education institutions in international rankings is said to be good compared to Central-Eastern European institutions. National institutions usually reach a higher point than the Central-Eastern European average in the indicators measuring references and in the educational dimension.

The U-Multirank is a ranking system devised by a European Commission initiative which does not line up institutions but makes categorisations and evaluations on the basis of more dimensions. It does not only measure the publication performance and the number of academic awards traditionally favouring renown research universities. The U-Multirank examines the performance of higher education institutions on the basis of five dimensions: (1) teaching and learning, (2) research, (3) knowledge transfer, (4) internationalisation and (5) regional embeddedness. Along these dimensions the national universities perform similarly to their Central-Eastern European partners (Van Vaught et al., 2012). However, some changes have begun in the higher education system in Europe which can significantly influence performances in the future.

Changes in higher education

University reforms have been taking place (or have already been performed) all over Europe which will lead to a change of the profile of higher education in the long run – the entrepreneurial university as an idea determines changes and modifications. In the so-called evolutionary process, the entrepreneurial university is preceded by the “managing” and “service providing” university. The managing university was created as a result of the economic crises of the 1980s when governments around the world decreased the support allocated to higher education, introduced indirect management mechanisms and started to motivate institutions to acquire tertiary sources of income. At the service providing university which interpretes the social environment in a broader sense, some kind of strategic planning and the centralisation of resources also appear and the decision-making power is gradually shifted from the academic staff to the administrative staff and to the university managers. One of the most radical types of service providing universities is the entrepreneurial university (Gibb, 2012). The introduction of the concept of entrepreneurial university is attached to Clark's name (1998). Later more researchers have also expanded and used this concept. According to Etzkowitz's (1983) interpretation higher education institutions operating as entrepreneurial universities typically look for new funding opportunities, thus actively seek opportunities for research contracts, cooperation with companies or the utilisation of patents. Later Kirby (2002) emphasises innovation potential, and defines the entrepreneurial university as an institution which recognizes, creates and takes advantage of its opportunities, is able to innovate, to work in teams, to take risks and to respond to the challenges. Gibb et al. (2013) takes this definition even further – according to him, the entrepreneurial university authorises students and colleagues to operate in entrepreneurship, to be equally innovative and creative in the fields of learning-teaching, research and the third mission.

The Hungarian higher education system

The Hungarian higher education system faces several problems (Hrubos et al., 2004; Polónyi et al., 2008; Filep et al., 2010; Filep et al., 2012b; Kornai, 2014), but changes have already started since 2014, which can solve the following problems:

- **Ownership rights.** Prior to 2014, universities were working without the lack of pressure to perform and real market competition, which are characteristics on the corporate sphere: university leadership exercised ownership rights and managerial competencies without having to bear real responsibility for the university's wealth and success. In 2014, the Hungarian government introduced chancellorship in state-run higher education institutions. With this step, the government's stated aim was to make the economic, financial and management tasks of the higher-education institutions more professional. Public higher education institutions came under dual (dual) governance with the new regulation: the rector elected by the Senate is responsible for the management of scientific and educational activities, and the chancellor appointed by the government is responsible for the organizational and management tasks.
- **Legal framework.** State-controlled higher education institutions are currently operating as budgetary organs for which, the Public Finance Act imposes strict requirements in the area of utilization of sources, which mean fundamental competitive disadvantages for institutions in the case of market emergence (Filep, 2009). Strict rules hinder the cooperation with companies and the high quality delivery of services to companies on a timely basis (e.g. procurement procedures, procurement rules, administrative burdens). The sector strategy called "The Change in Higher Education"/"Fokozatváltás a Felsőoktatásban" was published in 2014 and it aims at creating a legal environment that complies with a new business model".
- **Performance Incentive.** Legally regulated public employment requirements and remuneration options make the institutions uncompetitive in obtaining and retaining the best professionals. Motivation tools for performance stimulation are missing, and the system can only provide a responsible higher education career for instructors through additional tasks and second job.
- **Problems arising from the decrease in student numbers.** In Hungarian higher education, public funding fell by 15% between 2008 and 2015, but the number of students also decreased by 20% over the same period. The number of teaching and research staff is unchanged in addition to the decreasing number of students, while wages have increased by almost 30% on average. The currently normative student-based funding means a problem in the long run due to the above-mentioned rate changes. Institutions should increase their own revenue.
- **High exposure to EU tendering resources.** Projects valued more than EUR 430 million can be implemented by the institutions up to 2020 from the European Union's tender sources. High exposure to EU support can be seen. Within the revenues, there are a high proportion of sources of community origin. This is a problem because, on the one hand, high exposure to a single revenue channel is risky and on the other hand the resources co-financed by the EU may not be available in the current form in the next EU budget cycle. Furthermore, these sources fundamentally finance developments, not the operating deficits of the institutions. Increasing the rate of own revenue is needed in the revenue structure.
- **General and working culture.** Along with changing legal and financial frameworks, culture change is also needed in the institutions. An entrepreneurial type of university means a completely new environment for employees that were socialized in a not market-based and not performance focused higher education. After the usual lifelong job, the basic salary without

performance measurement and the lack of real quality assurance, a new situation is created by the changes launched. As a result of the changes, clear demands can be made for university staff, their performance continuously and with the results achieved in their wages can be evaluated; while the expectation of improving the quality of student-centered education is continuous. Accepting this is a longer process, while motivating factors need to be identified and clearly communicated.

The solution of these problems can be found in the strategy paper called "The Change in Higher Education"/"Fokozatváltás a Felsőoktatásban" adopted by the Government in 2014. The aim of higher education policy is to create a system of operation and financing of higher education which is based on the actual cost of the training and is a performance-based type. It motivates institutions to develop the quality of educational activity, on the other hand, improves the institution's market absorption capability, in other words, it provides a legal background that provides equal conditions in the operation on the market for the higher education institutions and the market players.

The Chancellery system introduced in 2014 has already helped in many areas; the ownership approach has appeared in the management of the institutions, but the boundary conditions of the legal framework and the operational model have not changed substantially. However, it is possible to build on the processes that have already begun. The European good practices can be examples for the Hungarian higher education.

Good practices

To be able to solve the above problems, it is indispensable to examine European good practices. Finland was the first country to make the legal independence of universities possible; by this it has led the way for higher education reforms in other countries.

The new university law FINLEX 558/2009 (Ministry of Education and Culture, Finland 2009), was adopted on 24th July in 2009. One of the most significant changes was the change of the legal status of universities; they became separate legal personalities (see Section 5 of the law), and the majority owners (2/3) of university assets. One third of the assets remained in state ownership; the universities received total management freedom and they could make their own decisions concerning their assets. One of the foundations of the law is that universities have to become autonomous in order to be able to freely provide the high level of academic and art education. Autonomy goes together with the fact that the university is allowed to make decisions in connection with its operation. (Section 3)

Institutions could make a decision to adopt the separate legal status of a state company or a foundation. 14 universities continued their operation as state companies, while 2 universities (Aalto in Helsinki and the Technical University of Tampere) work as foundations, on the basis of the regulations of the law on foundations.

University autonomy has also increased in the field of property management. The properties used by universities – instead of the 100% state ownership – have become owned by organizations which have the universities as majority owners, and the state as minority owners. As a result of this change universities can make use of their possessions even as collateral for loans. The government expects an increase in fund-raising capacity and international competitiveness from the strengthening of independence.

According to the law, the employment status of university employees has been modified from being public servants to being standard employees. Under these salary conditions, the acknowledgement of performance have been adapted to the rules of the private sphere. This change gives opportunity to significant differentiation, thus giving a significant means of human resources management to universities. Universities can motivate and remunerate the outstanding research, educational performances. Besides, the "liberation" of wages has made it possible for the institutions to compete with the private sector in obtaining world-famous researchers and professional experts. The state has further supported the institutions, to an extent equivalent to the former ones, with an amount indexed with cost increase. Besides state income, the institutions can freely manage their properties and other assets, can acquire other support, can perform activities to produce revenue.

In Finland, on the basis of data from 2014, the state turns 2% of the GDP to higher education (Eurostat, 2014). The funding system of the Finnish higher education sector has considerably changed in the last 15 years within the framework of the above process. Before the reform, institutional revenue derived almost exclusively from community sources. As part of the reform, state support has become a source which can be freely used and the institutions can make autonomous decisions regarding their spending. Direct state supports make up about 65% of the institutional budget, and are available in the following forms:

- basic support (on the basis of activities done in the fields of education, research, on a quantitative basis, e.g. number of students, number of degrees issued, etc.)
- performance-based support (quality-based, e.g.: programmes accredited successfully, number of foreign students, publication, research income, etc.)

Among the main aims of the reform was to strengthen the financial and legal autonomy and independence of universities in order to enable them to conform to social requirements and to better validate their own interests.

Széchenyi István University

Széchenyi István University is the higher education institution of the city of Győr. The geographical location of Győr is favourable one, although it is not centrally situated within Hungary. The Austrian capital, Vienna and the country's capital city of Budapest both lie 120 kilometres from Győr; moreover, the Slovakian capital, Bratislava is a mere 80 kilometres away. Owing to Győr's favourable geographical conditions and diversified economic structure, the city was able to quickly respond to the changes induced by the change of the regime in the 1990s, thus it achieved a favourable position by which it has become the popular destination of foreign capital at the same time (Rechnitzer, 2014).

Széchenyi István University is a determinant higher education institution of the Transdanubian region (Western Hungary). The immediate predecessor of the institution, the Technical College of Transportation and Telecommunications was founded in 1968. On 1st January 2002 the institution achieved the ranking of a university with the support of economic operators, and since that time it has operated as Széchenyi István University. In the late 1980s the number of students barely exceeded 1000 whereas at present the university has around 15 000 students, and it covers nearly all disciplines with its degree courses.

AUDI Hungaria Motor Kft., the 100% Hungarian subsidiary of the German AUDI AG, the world's largest engine factory, has a close relationship with the university. The first cooperation agreement between the university and the automobile factory came

into being in 1999, which has since become ever closer and further reaching. In 2007 the Internal Combustion Engines Department was established where cooperation has been further developed in a common organisational framework. Until 2015 further departments were founded, then in that year the nearly 20-year-long cooperation reached another milestone when the Audi Hungaria Faculty of Vehicle Engineering was established. The faculty provides institutional frameworks for the educational and professional-academic cooperation of teachers and the corporate professionals of AUDI Hungaria (Filep et al, 2012a).

The organic relationship established between Széchenyi István University and AUDI Hungária Motor Kft. (now Audi Hungária Zrt.) is an exemplary cooperation between higher education and the economy. Consequently, significant industrial, economic and intellectual capacities have been accumulated, especially in the field of the vehicle industry. The strength and quality of the relationship among society, economy and higher education is the basis of the further development of the region (Filep et al, 2012b). Széchenyi István University has recognized this fact and has started to lead the development, and until 2020 has planned development programmes which

- have been made in accordance with Audi Hungaria Motor Kft. and the local government of Győr, in continuous agreement with partner enterprises;
- build on its real industrial relationships established in the last decades;
- sustainably develops the motor vehicle industry of Western Transdanubia, especially the innovation culture of technical-technological standards of SMEs;
- enable the provision of intellectual support and services contributing to R&D&I activities which represent added value for the industry.

An outstanding strategic aim for Széchenyi István University is to occupy some kind of leading role in the economic environment of the region; to contribute to development of local enterprises with a strong research-development, service portfolio, and to establish, maintain and strengthen live, functioning agreements with the economic operators of the region to achieve this. The higher education model by which the state-run institution is operated has a considerable impact on the quality of agreement. Széchenyi István University would be supported in achieving its aims by a higher education model shift which provides a legislative framework guaranteeing equal conditions with the operators of the market in the functioning of the market.

Széchenyi István University may be able to smoothly manage the changes emerging from a possible higher education model shift because:

- it is a young institution – flexible, dynamic
- it is centralised – effective decision-making and execution
- it has real industrial relationships – strong basis
- it has institutionalised Audi cooperation – good practice
- the opportunity to specialisation is given – breaking points
- there is strong city cohesion – cooperation, power of lobby

During its possible transition, the change of the university to a learning organisation as a part of a conscious development can support the effective and successful change management activities and later the ability to persist in new circumstances.

Possibility of becoming a learning organisation in Hungarian higher education

The characteristics, opportunities of national higher education institutions and of Széchenyi István University are presented in the Table 1 alongside the specific criteria of learning organizations.

Table 1

Criteria of Learning Organisations Related to Hungarian Higher Education Institutions

Criteria	In detail	Related to Hungarian higher education institutions	Necessary change(s)
the ability of self-management	individuals are able to learn independently, their vision helps when performing a task	lack of common vision because of long-term planning, self management impaired because of limited asset management opportunities	ability to plan for a 5-year period, agreement for 5 years in case of state orders of teaching and research, extension of the sphere of asset management
system approach	the ability to reveal cause-effect relations lying in the background of problems instead of "here and now" solutions	significant administrative load; due to being a budgetary entity, most of the everyday work is made up of these operative tasks ("here and now") because of reporting obligation with little time and energy remaining for strategic work (reveal cause-effect)	the limitation of the validity of the Public Finance Act/change of legal status in order to be able to decrease the constant reporting, administrative work load
thinking patterns	organisational culture – common attitudes, prejudices, the recognition of which helps to prepare for the change	higher education institutions are usually not ready to change	strengthening of internal communication processes in parallel with the legislative changes
common vision	includes individual concepts, thus individuals can also identify themselves with it	because of the annual budget financial planning it is difficult to plan in the long run, and planning is not based	it will become possible to set up a common vision with the ability to plan for 5 years/the change of legislation; a common vision with strengthening internal communication processes
group learning	the members of the organisation line up in order to achieve the aims	there are good opportunities in the community, at the level of departments/faculties/organisational units there is also strong cohesion	this function can work well with the above changes, based on the current opportunities (cohesion)

Source: Senge (1998)

The learning organisation is an organisational form, which is able to persist and adapt on a quickly changing market. In case of a possible change of the higher education model, national institutions have to set a goal to become a learning organisation in favour of effective change management and operation.

The learning organisation is an organisation, which increases its creativity and talent by augmenting its knowledge in favour of continuous development. It means a working community where individuals make efforts to continuously broaden their abilities introduce new ways of thinking supported by the management and provide large space for collective ideas, and where people are motivated in the acquisition

of the ability of common learning (Senge, 1998). Senge connected the existence of a learning organisation to the fulfilment of the following criteria: the ability of self-management, system approach, thinking patterns, common vision and group learning.

The learning organisation is continuously increasing, strengthening its creativity and talent, where the players (participants, managers and subordinates) can see themselves and their environment in a renewable form (Senge, 1998). According to this, learning organisations can be characterized by the following competencies:

1. an ability to see processes in the world as one system and act accordingly;
2. an ability to create, to be renewed, to innovate and to be organised;
3. is characterized by an organisational structure control primarily by emotional competences (Szabó, 2016).

Finally, organisational learning is the process itself where organisations can reveal, analyse and revise possible difficulties and failures. The primary determinant of organisational learning is the nature of organisational culture (Szabó, 2013).

Based on the experience of Széchenyi István University there is a need for radical change in the operation of institutions and in the organisational culture, while the individual level does not significantly hinder becoming a learning organisation.

Conclusion

In a knowledge-based society it is more likely that those organisations and institutions will be effective which are significantly knowledge-based and have the capacity to quickly adapt. As a result of this, conscious organisational learning is becoming strategically important. If universities (similarly to the practice of the private sector) wish to function successfully and effectively in an age of continuously evolving economic and social actions, they must be able to adapt. The effect of continuously changing macroeconomic factors makes organisational stability more difficult, and in many cases this is an obstacle for development. If higher education institutions wish to play their role in the Triple Helix model of development, the operating principles established in the previous decades must change in an organisational and cultural way. In order to be able to manage changes, it is necessary to start the process of becoming a learning organisation.

In Hungary, as a preliminary point, higher education institutions must be brought closer to the market, and in order to achieve this there is a need for change. The successful implementation of this change can be supported by the development of universities into learning organisations.

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About the authors

Réka Barabás has been a PhD student at the Doctoral School of Regional and Economic Sciences since 2015, and since 2018 she has been an assistant lecturer at the Department of Leadership and Organizational Communication. She graduated from Corvinus University as an economist in 2004, then in 2007 she completed her thesis at the Doctoral School of Political Sciences (in the topic of political psychology – collective memory). She completed her studies as a psychologist at Eötvös Lóránd University. As a psychologist-economist she has worked in more institutions in the field of strategic planning (at universities, local governments, government offices), currently at the Secretariat of the Rector-Chancellor. Her main fields of research are higher education management, higher education models. The author can be contacted at barabas@sze.hu.

Zsuzsanna Pupp graduated from Széchenyi István University in 2006 in International Relations, then in Economy and Business Administration in 2008. She is about to begin her studies at the Doctoral School of Regional and Economic Sciences. For some years after her degree she worked in the private sector in the field of marketing, then since 2012 she has been planning projects for higher education which are realised with the support of different national and European Union subsidies. The scope of developments includes research and teaching activities, as well as several fields concerning institutional services. She has taken part in several development projects as project manager to implement projects. The author can be contacted at puppzsuzsa@hotmail.com.