

# GLOBAL CHALLENGES OF CORPORATE EMPLOYMENT POLICY AND INNOVATIVE LOCAL RESPONSES IN KECSKEMÉT

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## Abstract

*One of our aims in this article is to show what employment policy challenges – persistent unemployment, inactivity, digitalisation, automation (Siskáné Szilasi B.-Halász L., 2017) – influence the development of the town and its region in Kecskemét County and what kind of innovative responses the town gives by developing different forms of co-operation among various economic actors (the town, businesses and the University) (Etzkowitz-Leydesdorff, 2000; Pertuzé, 2010; Molnar, 2014; Rechnitzer - Kecskés –Reisinger, 2016). The regional embeddedness of higher education institutions contributes to the success of partnerships (Berkeens, 2004), where the contribution made by education, research and the community to higher education and the processes embedded in the region's skills, innovativeness and community culture create added value (Goddard – Chatterton, 1999).*

*We show how the regional embeddedness (Gál, 2016; Lőrincz, 2016) of John von Neumann University as a fourth-generation higher education institution (Lukovics – Zuti, 2014), contributes to the development of the local economy (European Union, 2014; Horváth, 2013). We discuss the latest results of the dual training model (Palkovics, 2016) and present our latest innovation, the profession-specific competence assessment model (Tuning project, 2007; Schomburg, 2007; Teichler, 2007), which we were the first to develop in Hungary (similarly to the dual training model developed by Neumann János University). Over the years, we have relied on the work of several expert working groups (company executives, municipal leaders, university teachers and experts) and on in-depth interviews with experts conducting secondary research. The methodology of our latest competence-based management model is based on primary research (Karcics, 2012). Our results are summarised in the enhanced Triple-Helix model (Carayannis-Campbell, 2012), the elements of which can be adapted to different regional characteristics and can be successfully used to increase economic and regional competitiveness.*

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## 1 Introduction

After the changing the political and economic system in Hungary, the competitiveness convergence model was based on economic sectors with low wage costs and we tried to attract foreign capital with low labor costs. As a consequence, some of the qualified workforce in Hungary began to migrate to Western Europe, a process that was further strengthened by joining the European Union. Today it is not only difficult to get motivated, trained workforce, but also to pay more attention to retention.

As a result of the post-crisis employment policy measures, long-term unemployed and inactive appeared in the labor market who, due to their lower efficiency in work, had a slowing effect on productivity. Their reintegration into the labor market is still a serious task today.

The spread of digitization and automation will put further pressure on the economy. The changes will have an impact on the functioning of the economy, with particular regard to their technological and labor market needs and, more broadly, to the environment and society. The McKinsey consulting firm has calculated that 49% of occupations can be automated with current technologies. Of course, the degree of automation is different.

In the future, those economies that have a flexible vocational training system, are able to meet the newly emerging labor needs and are able to retrain quickly those who work in robotic jobs can succeed in the competition.

The range of challenges is being exacerbated by the changing needs of labor market players. The transformation of the nature and nature of work requires more and more competencies. In addition, expectations on the other side of the world of work are changing: new generation workers (Y, Z generation) are looking forward to their future jobs.

Adequate responses to these labor market challenges (trends) are indispensable for corporate competitiveness.

It is a strongly emphasized thesis in the special literature even in Hungary that the main factor of competitiveness which determines the success of future companies is the quality and management of human resources (Chikn, 2000; Fekete, 2007; Gykr, 2007; Kiss Pl; Kvri, 1999).

The relationship between human resources and organizational competitiveness was first based on the fact that the better management of organizations necessarily results in an increase in organizational performance. According to one group of theories postulating such a relationship (Wright–Dunford–Snell, 2001), human resources themselves have a potential competitive advantage. Another view (Lado–Wilson, 1994) holds that the source of long-term competitive advantage lies in the practice used for the management of human resources.

Contingency theory focuses on the match between business strategy and the management of human resources. Several representatives of this view (Armstrong, 1999; Caulkin, 2001; Karoliny, 2004; Pfeffer, 1995; Ulrich–Lake, 1991; Zoltayn, 1997) have demonstrated the role of human resources in organizational competitiveness. The importance of match is also supported by recent research, highlighting the decisive role of managers and entrepreneurs (Molnr–Vancsik, 2016; Kaszs–Keller–Kovcs, 2016).

## 2 Quadruple Helix model

The ‘Triple Helix’ model of knowledge, developed by Etzkowitz and Leydesdorff (2000, pp.111, 112), stresses three ‘helices’ that intertwine and by this generate a national innovation system: academia/universities, industry, and state/government. Etzkowitz and Leydesdorff are inclined of speaking of “university-industry-government relations” and networks, also placing a particular emphasis on “tri-lateral networks and hybrid organisations”, where those helices overlap. In extension of the Triple Helix model we suggest a ‘Quadruple Helix’ model. Quadruple Helix, in this context, means to add to the above stated helices a ‘fourth helix’ that we identify as the “media-based and culture-based public”. This fourth helix associates with ‘media’, ‘creative industries’, ‘culture’, ‘values’, ‘life styles’, ‘art’, and perhaps also the notion of the ‘creative class’ (a term, coined by Florida, 2004).

### 3 Kecskemét region

The aim of the unique program of Kecskemét 4.0 is to enable the city of Kecskemét to manage separated strategic areas interconnected by economic development under the aegis of a program.

Through the program as a management tool the city is able to respond quickly and effectively to the challenges of economic recovery in order to provide long-term attractive life prospects for residents, long-term settlers and the business community.

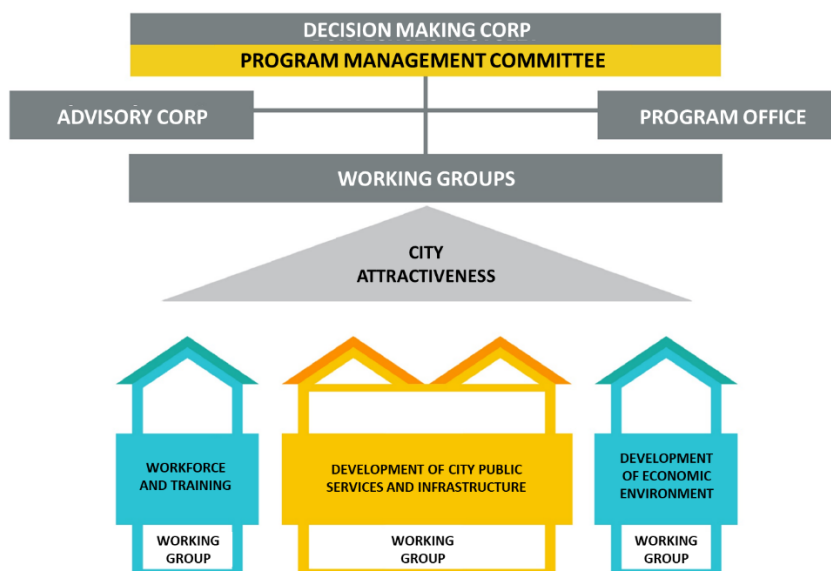
The coordination of the tasks of Kecskemét 4.0 project is carried out by four working groups, which play an active role in the issues of workforce supply and training, development of urban infrastructure, public services and business environment, as well as answers to the issues of urban attractiveness.

The program is based on the cooperation and teamwork of the actors of the public sector and private sector. The program manages the tasks, demands and expectations that arise in different areas in a project-based approach. Within a well-structured organizational framework, the different actors work together to find solutions.

The strategic directions of the program are determined by the Program Management Committee consisting of the leaders of the city, the university and major companies of Kecskemét. This panel monitors the realization of the goals as well.

The AIPA Nonprofit Ltd. manages the program and organizes the annual Kecskemét Economic Development Forum. During the Forum, the representatives of the program will present the developments implemented in the given year to the determining economic and institutional actors of Kecskemét.

In 2019-2020, the Kecskemét 4.0 program, with its brand reflecting its spirituality will enter the public consciousness under the name "PRESTEP - Joy of Success". At the same time, Kecskemét, as one of the most dynamically developing cities in the country, has gained the encouraging, understanding love of its inhabitants and is thinking together to create a happy, livable, modern city. This is the "JOY OF SUCCESS" that takes you step by step to a well-defined direction.



In this model, the university plays a prominent role. For decades, technical higher education and industry have always been closely linked in Kecskemét. Over the years, this cooperation has become more extensive and diverse. We were the first in the country to introduce dual training, which has since been a proven practice everywhere. In 2016, we launched the economics training course, which also introduced a new feature in Hungarian higher education with "profession-specific competence measurement". The elements of the embeddedness of our university are summarized in the following table.

## 4 Embeddedness of universities

Table 1.: *Embeddedness of universities*

	Dimension of relationships	Possible relationships	John von Neumann University
Economics/industry	Between individuals	Ad hoc meetings	x
		Corporate staff lecture at the university	x
		Academic Mobility: teacher lectures at companies	x
		Student mobility: dual training, professional practice	x
		Meeting and discussing the two partners at conferences and professional meetings	x
		Common publications	x
	Between individuals and institutions	Employment of university instructors as an expert in companies	x
		Employing university professors for a limited period of time at companies	x
		Training of company staff by trainers and researchers	x
		Employing company staff as head of department, as a manager	x
		Common publications	x
		Common PhD courses	
		Common intellectual property	x
		Diploma awards for students	
		Scholarships, other awards for talented students	x
		Evaluation of theses, diploma papers	x
		Participation in final examination and TDK committees	x
		Preliminary selection and recommendation based on competence assessment	x
	Between institutions	Access to special university/corporate equipment	x
		Corporate investment in research sites	x
		Buying patents	
		Research contracts	x
		Joint research projects	x
		R & D	x
		Lifelong learning	
		Creation and financing of joint organizational units	
		Financing university programs, organizational units	x
		Common infrastructure development	x
		Support for student groups and organizations	x
		Cooperation agreements in a specific topic area	x
Creating a common web interface or a specific topic	x		
Curriculum development	x		
Municipality	Between individuals	Ad hoc meetings	x
		Lectures by municipal staff at the university	x
		Professional practice for students	x
		Meeting and discussing the two partners at conferences and professional meetings	x
		Common publications	x

	Between individuals and institutions	Employment of university lecturers at local governments as an expert	x	
		Advanced training courses of municipal staff by trainers, researchers	x	
		Employing local government staff as head of department, as a manager		
		Common publications	x	
		Common PhD courses		
		Diploma awards for students	x	
		Evaluation of theses, diploma papers.	x	
		Participation in final examination and TDK committees	x	
		Preliminary selection and recommendation based on competence assessment	x	
	Between institutions	Research contracts	x	
		Joint research projects	x	
		Lifelong learning		
		Financing university programs, organizational units	x	
		Common infrastructure development	x	
		Cooperation agreements in a specific topic area	x	
		Creating a common web interface for a specific topic		
	Society/NGOs	Between individuals	Ad hoc meetings	
			Meeting and discussing the two partners at conferences and professional meetings	x
			Common publications	x
			Volunteering by teachers and researchers	x
			Function of teachers and researchers in civil organizations	x
Between individuals and institutions (NGOs).		Visiting NGOs with students	x	
		Volunteering for non-governmental organizations with students	x	
		Common publications	x	
		Common PhD courses.		
		Evaluation of theses, diploma papers.	x	
		Participation in final examination and TDK committees	x	
		Joint research projects	x	
Between society, institutions (NGOs)		Lectures for the residents of the city	x	
		Contact with cultural and sports institutions	x	
		Regular survey of the economic and social situation of the city		
	Joint research projects			
	Cooperation agreements in a specific topic area			
Creating a common web interface for a specific topic				

Source: Own creation based on Inzelt (2004), EC (2011), LR (2014) and Rechnitzer-Kecskés-Reisinger (2016)

## 5 Competence-based management model in higher education

At John von Neumann University we introduced a subject-specific competence assessment (Karcsecs-Somosi, 2019), which we consider to be an important tool for accomplishing our strategic goals in terms of linking higher education competence development with market labor requirements of companies in the urban ecosystem.

After the college was promoted to the rank of a university, a new training program, a BA in business administration and management was launched in the autumn of 2016, where we introduced subject-specific competence assessment, which we see as an important tool for accomplishing our strategic goals. It promotes our diagnostic goal, the assessment of the inputs of a particular year and getting information on their level of knowledge; it helps us define where to start with in training in the most important subject areas. On the basis of our competence assessment, the difference between the input and output results will provide feedback on the direction and amount of added value. Our method makes a significant contribution to the accomplishment of our development goals: based on the results of the competence assessment, we can identify specific dimensions for bridging any possible gaps at both the group and the individual level. It provides a basis for working out a talent management program and a tutor system, assisting a conscious student career path and orientation. In addition, it supports other strategic goals of the institution, the shaping of the training program's future, curriculum development; the evolution and strengthening of student-teacher relationship relying on trust, feedback and mutual cooperation.

When defining the competences to be assessed, the starting points included the new training and output requirements, labor market surveys and international research referred to previously. Among the latter, we pay special attention to the results of the TUNING project. We examined the relevant competencies one after the other and then grouped them according to the possible assessment methods. Next, we identified the professional criteria for the assessment tools and then conducted comprehensive research on the applicable assessment tools by including renowned scholars working in several areas (psychology, human resources management, sociology, education, and information technology) and experts working in the corporate sector as well as, of course, the teachers involved in the relevant training programs. We devoted special attention to the proposals made by the HR experts of companies that are the potential employers of our graduates on their procedures for selecting their employees and the methods they use. On the basis of all this, after considering all the professional expectations, criteria and possibilities, we selected an advisory firm – which is a market leader not only on Hungary – that has been engaged in competence assessment for over 30 years and purchased 5 paper-based assessment tools along with their standard requirements. In addition, we were able to purchase a test developed by the leaders of the Testing Committee of the Hungarian Psychological Association that assesses personal efficiency and leadership capabilities. We organized a “Train the Trainers” program for administering and evaluating competence tests in a professional manner lead by the license owners. We managed to test all the students on their competence in the first semester of the 2016-17 academic year, when the degree program was first offered.

We expect to find positive deviation between the results of input and output assessment for the benefit of the output.

## 6 Conclusion

Based on the Quadruple Helix model we find that Kecskemét region contributes to the development of the original model in two main aspects. First, the dual training model at John von Neumann University is an example for collaboration between industry players, municipality and the university. Second, the competence-based assessment integrates the industry requirements of human resources management into higher education. Future research directions include exploring new potential forms of collaboration in terms of regional development opportunities.

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