

# Innovation cooperation between Universities and Hungarian Automotive Industry

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## Introduction

My research reveals, fitting them in scientific frame of pedagogy, the practice and methods of adult education used by the examined organizations as one of the determining tools of human resources development. Beside organizational development methods which are the subject of the research, the paper also analyses the ability and the practice of using knowledge originating from open systems, with special regard on the cooperation between enterprises and universities.



## Survey about Hungarian automotive companies

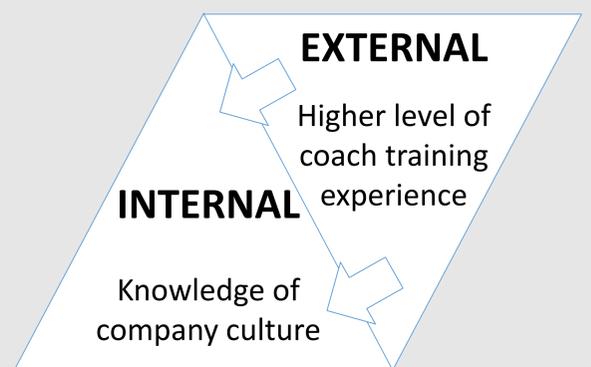
In my paper I undertook to survey and introduce how the Hungarian automotive companies – primarily large companies – are able to use the theories of literature as evidence for human resources development. My aim is to prove that the conscious use of adult education methods the knowledge coming from external relations improve the innovative ability of the organization, and the efficiency, as an additional benefit.

My primary objective is to survey how seriously the majority of the companies on the Hungarian labour market take the innovative potential in human resources, and, how open they are to involve the so-called external knowledge.

## Topics

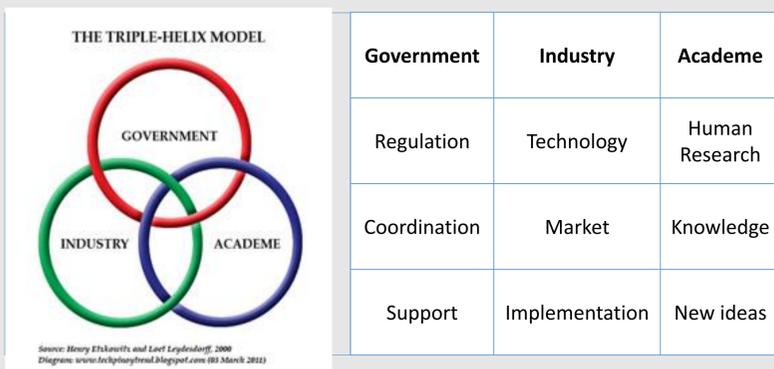
My paper is basically divided into two main topics. The first topic focuses on the internal ability of the companies to create knowledge; the other one examines the open knowledge systems.

In the first phase of the research, key concepts are clarified and introduced from a theoretical and methodical point of view. The examined key concepts are not handled as equal ones because there are theories taking priority with respect to the paper. The central concepts of the paper are knowledge and competence which are going to be examined from a pedagogical – primarily adult educational and economical aspects – as well as from the viewpoint of creating organizational knowledge, as the ground of economical development. Knowledge capital, knowledge management and training as adult education tool in the human resources development of the organizations are also important concepts. In the first theoretical part of the paper I am going to detail the human capital theory.

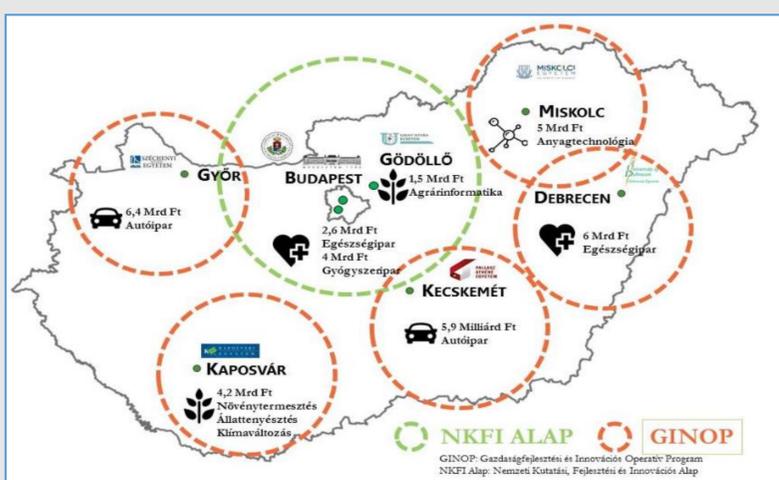


## Human Capital Theory

The Triple Helix Model, – as the basis of innovative cooperation – gives the second part of the paper. The Triple Helix Model basically introduces an interrelationship of three elements, which elements – in an ideal case – are present in the cooperation to an equal extent.



Based on the results so far, I have stated that in the recent years, research and development or innovative industrial and university cooperation have been the most frequent forms of cooperation. Competitiveness and gaining market benefits are standing behind this. Therefore, in this part of the research, I am also going to explain the concept of innovation.



Organizations cannot possess all the up-to-date knowledge, so they need to introduce the open systems involving research institutes of universities as well. Dual education system and cooperative training preferred by automotive companies are also going to be introduced in details. The interpretation of innovation belongs to the key concepts in regard to the paper; I used wide international literature to analyse it. The cooperation which makes up a complex innovation theory through the triple relationship of university, economic and governmental organizations is also called Triple-Helix Model in literature. The main statement of the Triple Helix Model is that the “continuous interaction” of university-industry-government “enables the development of the three sectors.”

On the basis of the Triple-Helix Model, in a knowledge-based society, innovation potential and economic development play an even more significant role in the appearance of new institutional and social frameworks with bringing together the creation, the circulation and the use of knowledge with the universities, and the elements of university, industry and government.

The applied Triple-Helix Model (Etzkowitz, 1997; Leydesdorff, 2006) entails the diverse interconnections of innovation activity of academy, industry and government, where each party respects the other's role, at the same time, they look for the opportunities of cooperation that create value.

## Empirical part of the Survey

My paper features the criterion of special sampling, its empirical part focuses on Hungarian automotive companies, based on the database of the Association of the Hungarian Automotive Industry bringing together the greatest Hungarian automotive companies.

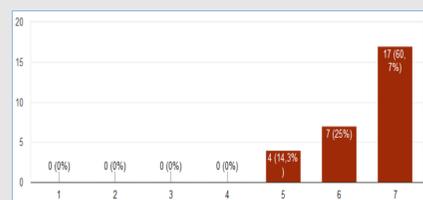
Automotive industry is Hungary's determining economic industry, besides, it is particularly important to note from the perspective of my paper that the nearly seven hundred Hungarian automotive companies – mainly small and medium-sized companies – employ more than a hundred and fifteen people.

Deductive or analytic approach is applied when analysing sources, documents and literature. I place the main emphasis on the application of research strategies during my exploratory research, because my objective is to collect data on the basis of organizational/company practice, and, to arrive to the theory through analysing the data.

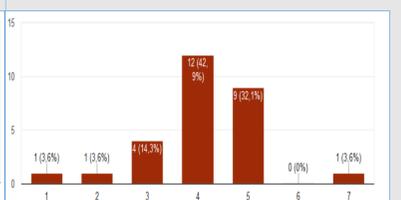
In the empirical part of the paper, I am going to introduce both theoretic parts from the point of view of a company. The first examination stage strives to introduce the training, and career management system of companies, and to answer questions related to other, organizational knowledge management, and personal competence of the members of an organization.

One of the research components of the paper is the survey conducted through half-structured deep interviews. Interviewees are mainly the managers of the company or its HR, education, training experts, innovation managers, or the experts of a field.

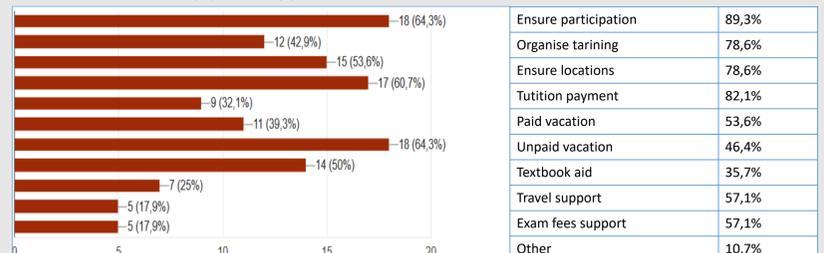
## The significance of the employees knowledge of the company's competitiveness



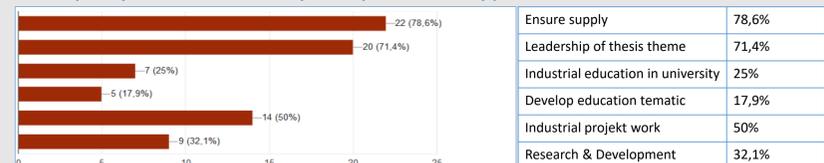
## Adequacy of knowledge the beginners



## Educational support types



## Company and University cooperation types



## Expect graduates kompetencies

