
HUMAN ASPECTS OF CHOOSING PREMISES

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Our research interprets the success of the enterprise's thesis as an example of an international multi-site company. It identifies the success of the corporate site selection's criteria, based on the traditional theories, but using the new practical methods of the international and regional abundance of success. We recommend a coordinated method - setting up our own model -, which allows detailed information to company management and their use can precisely define the methodology of strategically and cost-effective appropriate site selection. We analyzed countries and regions by institutional and social changes, in order to explain the differences of success. Our dissertation highlights the fact, that for the decision-making, which competitiveness indicators would be desirable to be used. Furthermore it shows how the quality of social environment and social capital influences the decision-making. Of course we do not dispute, that there can be direct economic reasons of the success of the location choices, but in our model we complemented (refined) this aspect with a detailed correlation analysis and assessment of the variables representing the regional competitiveness. Our inference, which can be deducted from the regions' analysis is, that the results of the current methods, which are used for the selection of premises, do not imply enough information for the companies' management for optimal decision-making.

1. Introduction

With the strengthening of market competition between companies on the international and global markets, in the squeeze of the economic crisis, every micro- and macro environmental factor comes into the foreground, which may assist the market players having and keeping the competitive advantage. The competitive advantage and the ability of keeping the competitive advantage define companies' market strength fundamentally.

In our research we looked for an answer, that those companies who take part in the international trade, which national and regional environmental factors are important for them during forming their business network? With what kind of weight does the social environment figure in the decisions? How much the regional environmental factors influence the corporate function – the sophisticated strategy and the quality of microeconomic business environment? How much do the local competitive advantages help to reach the success of the national- and global markets? To prove our statements, we made a comparative analysis of the national- and regional competitiveness indicators and we revealed the data deficiencies. We analysed in detail the competitiveness positions of the countries affected in the company's logistic spectrum and we proved with a correlation analysis the decision paths following from the differentiation of the regional inequalities.

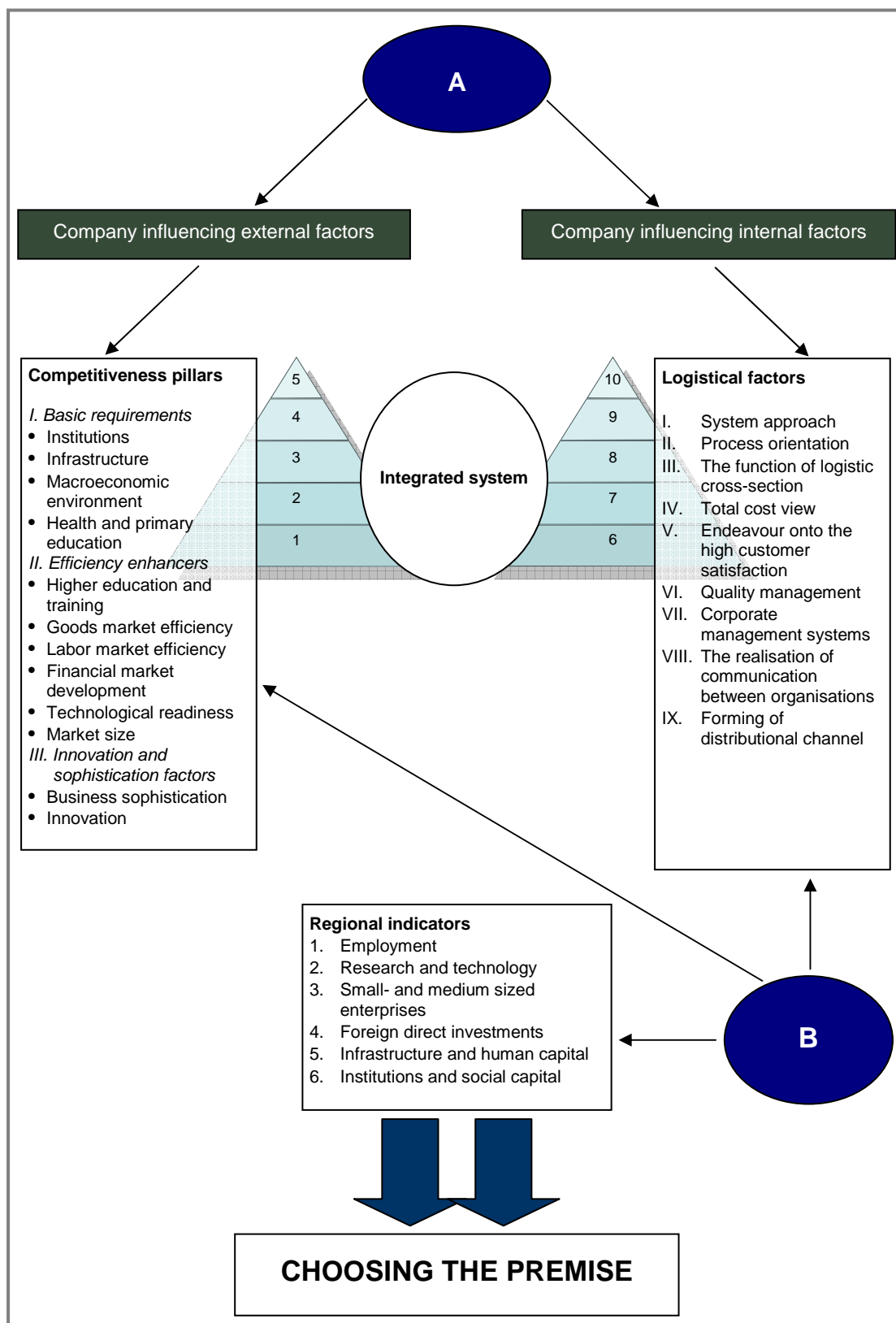
2. Goals and hypotheses

In our essay, we made analyses through a company, that in its own industrial branch a European market-leading company and it owns premises in many countries. We looked for an answer that the countries and regions of depots – based on the indicators known currently – how competitive are and how much it was taken into consideration factors defining competitiveness.

We presupposed that the influence of the national- and regional competitiveness and the company's decisions facilitating statistical datas do not stand for its provision in all cases. In many cases it is not suitable for comparative analysis; because they do not manage identical data content and their standing for the provision are not homogeneous in space, neither in time. The companies prefer the metropolitan regions, also then when so the decision making is subjective, furthermore the international and regional competitiveness consist in a tight context with each other. Moving away from the centre places the insecurity is proportional to the regional differentiation and inequalities. All this creates new and multiplied regional inequalities. In the course of the premise choice the corporate decisions are based on logistic expense and the companies do not take the competitiveness indicators into consideration. At the same time it is provable, that the human development and the value judgement of confidence become increasingly more important.

3. Dynamic premise choice model

In the dynamic premise choice model we try to sum all that, what we would like to examine and we set the way, how we prove our hypotheses.



1. figure: Dynamic premise choice model, authors' own figure

Source: Based on (The Global Competitiveness Report, [2010]), (The Sixth Periodic Report [1999]), (Prezenszki [2004]), (Lengyel [2003])

The 'A' point is the start status, an opportunity, that consist the grounds of the Porter's model. We imagined the opportunity of the selection in two dimensions, at which we examine the competitiveness and logistic elements in parallel. The companies influencing external factors are elements, which are based on the international competitiveness pillars, examining these in detail, the basic requirements, the efficiency, the infrastructure and education are taken into consideration. With this parallel the companies influencing internal factors examine the logistics and the elements being attached to it. Moving out from the opportunity through the two dimensions, we can make an integrated system, which – in attention to the earlier mentioned indicators – pursuing a consideration between the human factors and the corporate aim system.

If the integrated system and the results of the two dimension' examination stand for a provision, then with the help of the scoring method (weights assigning to different factors) it can be definable, which country or region could be ideal for a new premise. If the country was selected, then with the help of the partnerships of that place – taking it as a starting point – we can select with the central gravitational method exactly where would be ideal to locate a premise. But with the help of the concerted method it can be analyzed, what would be the position of the premise. The shifts depend on the results of the concerted method and the regional indicators, furthermore on the B point, for example governmental decisions or confidence index.

These arrows manage a determining role, because the law limitations, the fiscal system opportunities and limitations and other governmental criteria, for example the confidence index - which today can already be distributed well – influence the managerial decisions significantly. We can select the optimal premise, if all analyses stand for our provision. We have to intervene in a thing carefully, if we do not weight the single factors well, we may not receive relevant data as a result. We have to pay attention those managerial and competitiveness factors, that in terms of the activity are important. **The selection should be made for each firm and leader indeed.** Selected elements dispose with bigger weight. *If we compare our calculations with the final results, we will see that the optimal choice is subjective in a great majority on decisions. The objective decisions are sidelined.*

3.1. The analysis levels of competitiveness

It is difficult to define the concept of competitiveness (Tímár [2004]), (Török [2003]), practically it means the tendency and readiness of the contension, the ability of acquiring and keeping the position in the competition, that indicate primarily the (measured by some kind of manner) successfulness, the size of the market share and the enhancement profitability. (Lengyel, [2010])

The intensification of globalization processes extended the levels of traditional market competition between companies to an industrial-, regional-, international and global level. It is typical for an industrial competition, that today the companies do not compete with each other as a single character, but the company groups establish a variegated connection system in the production processes. (Krugman [1994]), (Krugman-Obstfeld [2003]).

Today the traditional resources and the market relations not only influence the keeping of the companies' permanent competitive advantage, but the efficiency of size, the corporate self-reliance and the dependence of national factors, the continuous innovation and well-timed technological change, the national- and multinational corporate benefits. The qualitative competitiveness is significant (Oblath-Pénzes, [2003] p. 40.), that means the R&D, the educational level, the institutional infrastructure and the human capital.

Porter recommended to improve the comparative advantages, which is based on national benefits, structural, inherited and an existing theory, from that consideration, that the competition between countries are not only defined by the relations of existing factors of production, but the competitive factors as well, for example the new market entrances, the substitution threatens, the customers and suppliers' and the industrial branch competitors' bargain position. (Porter [1990, 1998])

3.2. The competitiveness of the nations

Experts of the IMD (International Institute for Management Development) defined the countries' competitiveness so: The competitiveness of the nations is a part of the economics, which defines a nation's ability, the companies' bigger value creation and the citizens' bigger prosperity establishing and preserving onto the maintenance of environment. (Garelli [2003] pp. 702—713.)

The OECD on all of the levels of the economy, uniformly considers the first-rate of importance - in case of the competitiveness – for the high incomes and employment: „...the companies', industrial branches', regions', nations and regions above nations' ability is forming relatively high incomes and high employment level, while they are exposed to an external economical and international (global) competition.” (The Sixth Periodic Report [1999]); (Hatzichronoglou [1996] p. 61.); (Wienert [1997] p. 55.); (Lengyel [2000] p. 974.) A nations' competitiveness is defined by those politics, which influence the companies' international or global competitiveness. (Bakács, [2003])

The Global Competitiveness Report 2009-2010 by The World Economic Forum formulate the nations competitiveness in 3 groups and 12 pillars:

- Basic requirements (1—4. pillars)
- Efficiency enhancers (5—10. pillars)
- Innovation and sophistication factors (11—12. pillars)

The first pillar – Institutions

The quality of the institutional system has an effect on the competitiveness indicators. The legal regulation influences the investment decisions, the production and it plays a deciding role in it, that which countries share the profit of the investments, which is the basis of the additional strategic development. The effect of the governmental behaviour and the provisions onto the markets and the market freedom are especially important: the bureaucracy, the rule, the corruption may affect the economic development negatively. Indicators related to public institutions, for example the protection of the proprietary rights, publicity related to ethics and a corruption, the public confidence, the efficiency of the dishonest market influence, the judicial independence, the governments and the public safety manage to weight with three times more, than the companies' ethic behaviour and the responsibility.

The second pillar – Infrastructure

The comprehensive and efficient infrastructure is an indispensable element of the competitiveness, because it defines the place of the economic activity. The well developing infrastructure may reduce the distances between the regions, it connects the different countries' and regions' markets, the international markets on low costs and joins the communities with lower development. The advanced telecommunication networks help the fast and free flow of the market and business informations. By the examination of infrastructure we examined the quality of the primary, that means the overall infrastructure and the specific one, that means the roads, railway system, the harbours, air traffic and transport, the informatic and telecommunication networks.

The third pillar – Macroeconomic environment

The stability of the macroeconomics environment is important to the business's and the country's overall competitiveness, although it is not able to increase a country's productivity merely, but the insecurities of the macroeconomics environment hurt the economy. The intractability of the borders of the financial deficit influences the governments' future business and national politics, the incrise of the inflation rate though the efficiency of the companies' function. The balance of the public finance, the national saving rate, the size of the inflation, the measure of the interest rate are compared with actual raw datas.

The forth pillar – Health and primary education

In terms of the competitiveness and productivity, the workforce's efficiency gives the importance of healthy lifestyle and health. Among the hygienic indicators the most important ones are the life expectancy, the infant mortality, the HIV-, the TBC and the incidence rate and business effects of malaria. The improvement of the quality of basic education may increase the work efficiency, taking into consideration, that workers with lower qualification are more suitable for plainer manual jobs and they are a lot less suitable for more complicated technical processes.

The fifth pillar – Higher education and training

The higher educational standard and quality is essential for countries, which would like to switch onto an economic structure with higher added value production. The globalized economy should form a so high qualified workforce, who can adapt to the changing environmental conditions quickly. The workplace trainings and professional developments are important as well.

The sixth pillar – Goods market efficiency

The healthy market competition is an important factor of the market efficiency and the business productivity. The governments create the optimal environment for the clear market barter then, if they minimize the governmental influence on the markets. For example the competitiveness may be hampered by disfigured and exaggerated taxes and by discriminative rules limiting foreigners' investment, what leads to the decrease of the foreign country partners. The market efficiency depends on the demand conditions, the customer orientations and on the refined customer claims. Examining the *efficiency of domestic competition* we have to take the following things into consideration: the strength of the local competition, the share of determining market players, the efficiency of anti-monopoly politics, the structure of tax system, the tax rate and the numbers of processes and days, which are needed to start a business. The *efficiency of foreign country competition* depends on the frequency of the market limits, the customs, the frequency of the foreign country property, the business effect of FDI rules and on the import (in the percentage of GDP). At the determining the *quality of the demand* the extent of customer information and customer refinement are examined as well.

The seventh pillar – Labor market efficiency

The workforce's market distribution is particularly important at the examination of the labour market's efficiency and elasticity. The labour markets have to be so elastic, that the employees could be redirected fast and with small expense from an economic activity to an other one and the wages can be balanced without bigger social disturbances. At the *elasticity*, as an indicator, the following things are examined: cooperation between employers, inflexibility of the employment, the full taxational rate and the expenses of dismissal.

The eighth pillar – Financial market development

The efficient financial sector shares the sources, that the market players have saved, and transfers, that arrive from foreign countries into the economy. The economies request sophisticated financial markets, which are able to give a free run of capital flexibly to the investments, namely from sources like credits of reliable bank sector, well-regulated stock exchanges, venture capital and other financial products. The bank sector has to be reliable, transparent and the financial markets has to regulate the investors' protection and other characters of the economy appropriately. The examination of the financial sector *efficiency* expands to the stockmarket, the conditions of the borrowing, the venture capital is at service, the limitation of capital flow and to the strength of investors' protection. The size of reliability and confidence is defined by the reliability of banks, the regulation of stock exchange and by the „legal rights index” (LRI), namely by the protection of creditors' and credit recorders' rights.

The ninth pillar – Technological readiness

This pillar measures, how fast does an economy receive new technologies. Whether the used technology was developed inside the country's borders or not, it is independent from the technology's competitiveness effects. Among the foreign technologies' most important sources, the direct foreign investments (FDI) plays an important role. It is also necessary to distinguish the companies' technology levels from the country's innovational ability and technological preparedness.

The tenth pillar – Market size

The market size has an effect on productivity, because the big markets make companies possible to utilise the economy size. Traditionally for the companies disposal markets have been restricted between national borders, but in the age of globalisation, the international markets substitute the national ones, especially in smaller countries. *Indicators which define the market size:* The index of

domestic market size, the index of foreign country market size, the GDP on purchasing power parity, import in the percentage of GDP, export in the percentage of GDP.

The eleventh pillar – Business sophistication

The business sophistication concerns not only to the quality of the country's full business network, but to the quality of business processes and strategy, it has an effect on the efficiency of the production and so it leads to bigger productivity and furthers a nation's competitiveness. The local suppliers' qualitative and quantitative indicators and the extension of the connection system influence a country's business network quality and the supporting industrial branches as well. When the companies and the suppliers rally round into groups (clusters) geographical near to each other in a branch, it leads to an increase of efficiency, it opens bigger space for innovation and reduces the market entry limits for the new companies.

The indicators of business experience:

- *the substitutional industrial branches and networks:* the quality and quantity of local suppliers and the development status of clusters
- *the quality of the companies' business activity and strategy:* the type of competitive advantage, the size of value chain, the checking of international distribution, the refinement of production processes, the type of marketing, the size of official influence and confidence towards the professional leadership.

The twelfth pillar – Innovation

Although significant gains could be achieved by improving institutions, infrastructural investments, decreasing the macroeconomic instability, developing human capital, but it seems like these factors' profit reduce after a while. In a long term, an increase of living standards can be only with innovation possible. Companies are expected to maintain a continuous development to keep their competitive advantages. The presence of scientific research institutes, the extensive operation between university research and industrial development and the protection of intellectual capital is particularly important.

Indicators of the innovation:

Innovation capacity, the quality of scientific research institutions, cooperation between universities and industry, governmental purchase of advanced technology, the availability of scientists and engineers, the usefulness of patents, protection of intellectual capital.

3.3. The competitiveness of the regions

At a region's competitiveness we do not study a homogeneous region, but the conditions in the region, such as labour market, development resources, information and communication technologies, which define the markets and part markets for companies, which being active in that region. These positive and negative factors will determine the companies' demand of regions. In the competition between regions, the conditions of the regions are on the supply side, because they try to make more attractive conditions for the companies. (Lengyel [2000]) In the competition between regions on the demand side, there is a competition for those companies, which are efficient, having a high employment and productivity, wide range of market and could give a good reputation for the region.

We can study the regions competitiveness on two levels:

1. Approach from macroeconomic level: We can compare the regions as geographical entities to each other for example on the basis of economic development and the dominance in international competition. In this connection, a *part of the competitiveness examining indicators will be equal to the pillars of international competitiveness.*
2. Approach from microeconomic level: Competition of companies and their competitiveness affecting regional and local factors have come to the front. (Horváth [1998]) Examining these local factors, nowadays they are getting more significance, because in some regions there are different social and political processes, cultural and social differences and the concurrence fights between companies got intensified, so this could influence the region's competitiveness more, than a macroeconomic indicator.

The Sixth Periodic Report on the social and economic situation and development of regions in the EU (European Commission, [1999]) and Professor Imre Lengyel (Lengyel [2010]) studied the competitiveness of the regions and the most important indicators with high priority.

In connection with **the employment** the report examines the *employment rate, the size of the labour market* and the *number of employees in the percentage of GDP per capita*. It analyses also the number of employees in the primary, secondary and tertiary sectors. In the economic growth, the GDP per capita and in productivity level, there is a significant difference between the countries and regions of the European Union. Experts could get in connection the regional differences of the GDP per capita with the following economic indicators:

- The structure of economic activity, the distribution of employment in agriculture, processing industry, building industry and in market and non-market services. The employment of market services have been ascertainable in a relatively high concentration in regions with the highest GDP per capita.
- In regions with higher level of innovative activity, number of patent announcements and higher productivity, were bigger sources available for innovation aims;
- Of regional availability, which implicitly includes the effect of the amendment of transport infrastructure. Particularity in regions, where the GDP per capita exceeds the average rate, the accessibility and availability of peripheral areas is expected;
- The quality of workforce was tested in the age-group of 25-59 and experts examined people with high, medium and low qualifications. In the best performing regions the highly skilled workforce was above the average.

In the EU regions 65% of the change of GDP per capita is connected with the differences of the factors above.

Research and technological development: Competitiveness is strongly influenced by the development of companies, the introduction of new products to the market and the new techniques of production processes. The innovation could come into existence with the help of know-how and technological transfer outside the region, and with the aim of the companies' own research and technological development programmes inside the region.

The indicators of research and development:

- The **Gross Expenditure** on Research and Technological Development (GERD) includes the linear model of innovation, which signifies the marketable innovations and the expenditures of basic research or governmental laboratories;
- At the **Business Expenditure** on Research and Technological Development (BERD) we can see the most of the technological differences. To concretize the measurements, the business expenditures should be focused on;
- Within the region scientists, engineers, researchers in universities and in higher education institutions are important. The **higher education sector** (HES) is also analyzed by the HERD (Research and Development Expenditure in the HES), which is also defined as the percentage of GDP;
- The **Research and Development Expenditure in the Government Sector** (GOVERD) is also a basic indicator.

The research and development, mostly in the public sector, is considered to be capital-intensive in regions, where the GDP per capita has reached a higher level. The above listed indicators measure inputs, but the main goal is to obtain the results of the research and development, namely the outputs.

The small-and medium-sized enterprises (SMEs) play a key role in increasing the number of employees. SMEs are more flexible and their ability to adapt themselves to the market conditions are clearly better, than bigger companies. In terms of creating workplace, these enterprises play an important role in regional development. Financing the SMEs is more difficult, especially during their establishment cause this problems for the management, besides the government's strict regulations and taxes mean a greater load for them, than for larger companies.

Indicators of the small-and medium-sized enterprises:

- By measuring the development of the regions, *the density of enterprises* is an important data for analysis and through this, the regional infrastructure can be determined. The technological ability and the readiness of the workforce does not guarantee the immediate economic success, because the small and medium-sized enterprises are present on the market in a very large number. In many less developed regions, the presence of high density of SMEs is the proof for a relatively weak and obsolete economic structure in that area.
- The *size of structural business* between the regions of a country is relatively similar, although due to the larger companies, higher employment is typical of the capital cities and its surroundings. The regional datas of the companies' number and size are limited in the European Union, only a small number of data is available, which is rather related to the production units, than to the enterprises.

Foreign direct investment (FDI): Beside trade, the foreign direct investment is also an important indicator for the integration of the international markets. Trade and FDI flows can substitute and integrate each other. A region's economic development is tightly related to those abilities of the region, which demonstrate, with what kind of materials is it trying to attract and keep the producer's activity. This encourages the affected areas to be more attractive to foreign capital investors with the help of infrastructure development, the development of the skills of workforce and with investment promotion and support projects. As the FDI datas are usually available at national level, the comparative analysis of the investments' regional presence is at the regional level is less possible.

Infrastructure and human capital: In economically more advanced regions of the EU, where the GDP per capita is higher than the usual, generally the infrastructure, human capital (Mészáros [1996]), and the connection to the business partners (Hoványi [1999]) is also on a higher level of development, than in developing regions.

In the competition of the regions a new human resources has appeared. The enterprise independent workforce is called *nomads* and they build a new *creative intellectual class*. Today cities and regions compete with each other increasingly, because the nomads would like to have more appeal at settling down an enterprise, that means the cultural spending of leisure time, the various cultured recreation techniques and technologies and the cultural and educational opportunities have to be available at a high level, with good public security in a calm and livable environment. If more creative specialists, nomads settling down in the region, it means, that that area is having greater human capital and innovation opportunities.

The settle down of some companies is having less importance during the employment of nomads, because at work they only need a high leveled informatical and communication technology, but the residence conditions have become a huge importance. Therefore, the indicators, which show the priority preferences for homes, are called "soft" indices and on the proposal of Florida, the model is known as the 3T model (Florida [2002]).

1. table: Florida's 3T model

Talent	People with high qualification (at least BSc, BA) in the percentage of the population, which shows the concentration of human capital in the region.
Techology	Innovation (Innovation Index): This shows the innovation power of the population on the basis of the number of registered patents.
	High-Tech Index: This shows the precence of the high-tech industry-related companies (software, biotechnology, engineering services).
Tolerance, Composite Diver-sity Index	Gay Index: The index of the rate of homosexuals, which – according to Florida – refers to the region's openness, acceptance and tolerance.
	Bohemian Index: Examination of the cultural medium.
	Melting Pot Index: The number of foreign citizens (emigrants) in the percentage of the population, which is one of the engine of economic development, according to Florida.

Source: On the basis of (Florida [2002]), (Hornyák [2010]), own editing

Regional indicators which define infrastructure: In the measurement of **road networks**, some regions use the length of roads and motorways as an indicator. At the characterization of the **rail networks**, the length of railway lines, the percentage of railways which are at least double track and the percentage of railways which are electrified are used. **The development of the energy consumption** is in comparison with the GDP and it is measured by the import of energy, the amount of energy consumption and by the level of carbon dioxide emission. At the defining the **telecommunication** development, the following indicators are relevant: number of phones per 100 inhabitants, the development of the digital systems, lines, the international electronic and internet-communication and the internet access rates per 100 inhabitants. The analysis of the **environmental options, water supply, wastewater deposit, sewerage and municipal waste** has got a more important role at the regional level in the European Union, than in the international level. The renewable freshwater reserves per capita in the percentage of the EU average, the rate of sewerage in relation to the total population and the municipal waste per capita (kg/person/year) are particularly important.

The regional differences of **human capital** are measured by the population participation in education and by the skillness and qualification level of some age-group. The indicators make a difference between basic, secondary and higher education participation.

Institutions and social capital: The regional institution system includes the region's social and economic systems as well, which make the decisions in the regional institutional structure. During the operation of market, the institutions ensure the protection of the right of ownership, the supported social norms of legislation and identify the institutional framework of the economy.

In regions where the social norms and legal sanctions of property protection are weak, the *weakness of institutional system obstacle to economic development*.

4. Conclusions, Summary

Our research interprets the success of the enterprise's thesis as an example of an international multi-site company. It identifies the success of the corporate site selection's criteria, based on the traditional theories, but using the new practical methods of the international and regional abundance of success. We analyzed countries and regions by institutional and social changes, in order to explain the differences of success. Our dissertation highlights the fact, that for the decision-making, which competitiveness indicators would be desirable to be used. Furthermore it shows how the quality of social environment and social capital influences the decision-making. Of course we do not dispute, that there can be direct economic reasons of the success of the location choices, but in our model we complemented (refined) this aspect with a detailed correlation analysis and assessment of the variables representing the regional competitiveness.

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