1 Introduction

By choosing locality for the logistic centre it’s necessary to take into account that the logistic centre will economically operate from this point for all the time of its existence. So it will be useful to make this choice, where the logistic centre should be placed, systematically. This decision can’t be changed in the future and the wrong choice could lead to huge financial losses, eventually to total end of the logistic centre.

Nowadays the task of optimal localisation of the logistic centres is solved on the mathematical models base, where are taken into account especially the factors from the industry and transport environment. By seeking an optimal place for the logistic centre, it should be taken into account also the external environment in which will be the logistic centre placed and which will effect on it.

2 SLEPT analysis

For gaining information about the external environment, where the company is placed, is used so called SLEPT analysis, which is in some resources named as PEST analysis. Thanks this it is possible to evaluate the potential impact of changes to the project. In this analysis, there are observed such factors, which come from following areas [1]:

- social – social factors,
- legal – legal and legislative factors,
- economic – economic factors,
- policy – political factors,
- technology – technological factors.

The logistic centre is placed in particular environment of state, region, county or municipality, which is not stable and it’s changing. So this analysis represents complex view on these environments. In the SLEPT analysis there is not elaborated and mapped only current situation, but there are also solved questions, how this environment may develop in the future and which changes of surroundings can be expected. According
to needs and purpose of usage can be added or removed other analysed areas (for example it’s possible to monitor the ecological factors etc.).

3 SLEPT analysis circuits

In the following table [2] there are mentioned those factors, which are examined most frequently in this analysis.

![Fig. 1 Overview of factors](image)

| Social factors | Demographic characteristics | • population size  
|                |                              | • age structure  
|                |                              | • labour preferences  
|                |                              | • geographic distribution  
|                | Macroeconomic characteristics of the labour market | • income distribution  
|                | Social-cultural aspects | • life standards  
|                | Availability of manpower, working habits | • gender equity  
|                |                               | • population policy  
|                | Existence and functioning of the essential legal norms | • availability of potential employees with required skills and abilities  
|                |                               | • existence of educational institutions able to provide the necessary education  
|                | Unfinished legislation | • diversity of the manpower  
|                | Other factors | • functioning of the courts  
|                | Economic factors | • interest rate  
|                | Basic evaluation of the macroeconomic situation | • trade deficit or surplus  
|                |                              | • budget deficit or surplus  
|                |                              | • the amount of GDP, GDP/inhabitant and its |
### Social factors

The problem generally in the European Union is that population become elder and the same problem is also in Czech Republic. The average age of inhabitants was 36.1 years in 1989, while this average age was 40.5 years for the year 2008. Higher share of people in retirement age has several negative social consequences, but on the other hand it has also a positive influence on the labour market. It was found out that the age structure is different in particular counties. According to the research of Czech Statistical Office higher unemployment rate correlates with regions with younger age structure. The tension on the labour market and the competitiveness among employees are in such regions where live relatively more people in the productive age.

### Table: Factors Influencing Economic Development

<table>
<thead>
<tr>
<th>Category</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to financial resources</td>
<td>development, monetary stability, status of exchange rate</td>
</tr>
<tr>
<td></td>
<td>costs of local loans, banking system, accessibility and form of loans</td>
</tr>
<tr>
<td>Tax factors</td>
<td>tax rates, development of tax rates, customs and tax burdens</td>
</tr>
<tr>
<td>Evaluation of political stability</td>
<td>forma and stability of government, key institutions and offices, the existence and influence of political personalities, political party in power</td>
</tr>
<tr>
<td>Political factors</td>
<td>attitude towards private and foreign investments, relationship to the state industry, attitude towards private sector</td>
</tr>
<tr>
<td>Evaluation of external relationships</td>
<td>foreign conflicts, regional instability</td>
</tr>
<tr>
<td>Technological factors</td>
<td>government support for research, the amount of spending on research (basic, applied), new inventions and discoveries, speed of implementation of new technologies, speed of moral obsolescence, new technological activities, general technical level</td>
</tr>
</tbody>
</table>

Source: Author
The unemployment rate is also different in different regions. The reason is that a different industry was operating in particular counties in the past. The unemployment rate is a negative social phenomenon. On the other hand it also indicates the level of idle potential labour in these regions and it show the opportunity in the future, when new logistic centre can have this potential as a source of its new employees.

The level of inhabitants’ education represents the quality of supplied labour work at the labour market. It was found out that in rural area there are more people with lower education while in the cities there live people with the highest level of education.

3.2 Legal factors

Each company and its operating are influenced by several legal norms. Law nr. 100/2001 Collection of Law about Assessment of environmental impact and amending certain related Acts and the Law nr. 183/2006 Collection of Law about Regional Planning and Building Code (Building Act) etc. must be taken into account during the project to build a logistic centre.

The business itself is regulated above all by the Law nr. 513/1991 the Commercial Code, relationships with employees are set by currently valid Labour Code (Law nr. 65/1965 Collection of Laws). The tax laws must be abided by any economic activity.

The activities of the logistic centre are influenced by other legal regulations according to the type of goods which are stored in the centre.

3.3 Economic factors

The Czech economics has to force to negative impact of the economic recession. Because of this recession the GDP has decreased. In the past it was found out that increase/ decrease of GDP and road transportation correlates together. In comparison with 2008 the Gross domestic product in 2009, adjusted for price, seasonal and calendar effects, decreased by 4.3%. The GDP was lower in the comparison between years by 4.2% in the 4th quarter and by 0.6 % in the third quarter. [4]. According to ICF estimations it is expected the growth of Czech economics by 1.5% in year 2010, but it was calculated with lower GDP increase by preparing state budget. Any higher incomes should be used for decreasing the deficit, which is 163 billion CZK for the year 2010.

3.4 Political factors

The default strategic document for the transport sector is the Transport Policy for Czech Republic for years 2005-2013. In the Transport policy, there is one global goal, which is developed in five vertical and four sectional priorities. Logistics is solved
especially in the first priority, which is called Achieving the division of labour between the transport modes by providing the same conditions on the transport market.

There are approximately 60 logistic centres in EU, which are connected to more means of transport. These logistic centres originated with support from public resources. It’s tendency to create the similar network also in Czech Republic. The support of logistics from public resources is regulated by the Government decree from 21.12. 2009 nr. 1571 about the Strategy of support of logistics from external resources, which is considered as an initial system approach for the sphere of logistics. This strategy was prepared at the Ministry of Transport and above all it includes concrete proceeding for support of establishment public logistic centres (PLC). In this decree there is also set to the Minister of Transport to prepare concrete tool for financing development of PLC till the end of 2010, to ensure territorial protection of their future locations including other proceedings and evaluate their efficiency.

3.5 Technological factors

In the logistic sphere there is significant involvement of information technology into the company's operation in the recent years. The effort is to use Warehouse Management Systems for managing warehouse operations in the real time, achievement of higher accuracy, elimination of errors and ensuring 100% level of customer service.

Another technology which is often used is RFID technology for automatic and contactless identification and RTLS systems which use technology of active RFID WiFi tags. RFID technology and bar code technology offer to companies the new possibilities of automatic identification and mobility of data mining. These systems are used in small companies as well as in huge companies, manufacturing and service organisations more frequently. Increase of processes automation, control improvement, improving accuracy of done operations and increasing the level of services for customers belong among the main reasons of implementation [7].

4 Conclusion

The external environment is changing and developing simultaneously and the logistic centre operates from particular geographical point. It’s useful to use the SLEPT analysis for mapping the current situation. This analysis deals with exploring social, legal, economical, political and technological factors, which effects on the logistic centre. Single factors should be examined complexly and it should be estimated its future development. However all the factors effect on the logistic centre simultaneously and that’s why their impact can’t be assessed in isolation.
References


Resume

In this paper there are summarised the steps of so called SLEPT analysis, which is used for examination of logistic centers’ external environment. This external environment is constantly changing and evolving. The SLEPT analysis deals with and analyse social, legal, economical, political and technological factors, which effect on the logistic centre. There are briefly outlined these factors in this paper.

Key words

Factors, logistic centers, SLEPT analysis, RFID

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