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ANALYSIS OF LOGISTIC CENTERS' EXTERNAL ENVIROMENT IN CR

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Introduction

Each productive and non-productive company should be physically and permanently placed in such site to achieve optimally its main tasks and this site will help to achieve the strategic, tactical and operation goals of the company in the best way. Among other things, this principle should be kept in mind when the logistic centre site and its building up is chosen. So the logistic centre is placed in particular geographical point where economically operates.

It's necessary to proceed systematically by choosing the locality, because this decision can't be changed in the future and the wrong decision should lead to huge economic losses, eventually total end of the logistic centre

The topic location of logistic centres is solved on the mathematical models basis in presence, taking into account especially factors from transport and industry. By seeking an optimal location it should be taken into account also the external environment, in which the future logistic centre will operate.

1. SLEPT analysis

SLEPT analysis is a tool for analysis of general external factors which affects on the company (logistic centre). So it's possible to evaluate eventual impacts of changes on the project, which are from these areas [1]:

- social,
- legal,
- economic,
- policy,
- technology.

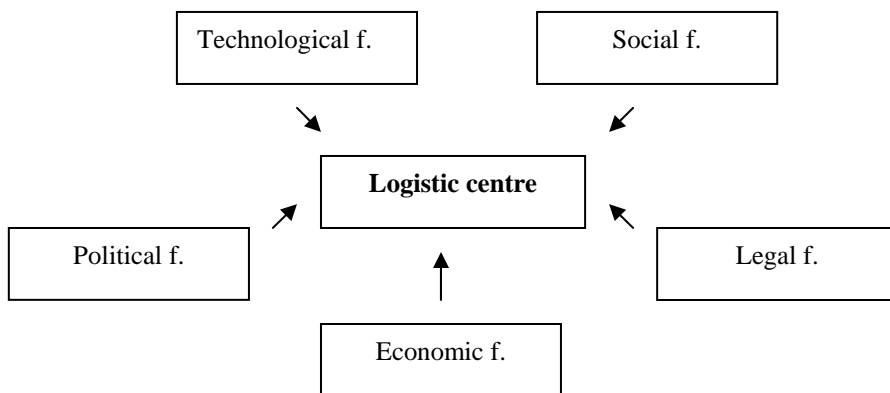


Fig. 1 SLEPT Analysis

Source: Author

This analysis represents the complex point of view on the state, region, county or municipality environment, which is not steady and it's changing. It's not only mapping and elaboration of current situation, but there are solved also the questions in this analysis, how the environment can evolve in the future and which changes of the external environment can be expected. As well as for other analysis (for example internal analysis 7S, marketing mix 4P) can be added or taken off other analysed circuits (e.g. E-ecological) according to the necessity.

2. Circuits of the SLEPT analysis

The factors, which are the most frequent within this analysis, are mentioned in the following table [2].

Tab. 1 Overview of factors

Social factors	Demographic characteristics	<ul style="list-style-type: none"> • population size • age structure • labour preferences • geographic distribution
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		<ul style="list-style-type: none"> • ethnic distribution
	Macroeconomic characteristics of the labour market	<ul style="list-style-type: none"> • income distribution • employment – unemployment rate
	Social-cultural aspects	<ul style="list-style-type: none"> • life standards • gender equity • population policy
	Availability of manpower, working habits	<ul style="list-style-type: none"> • availability of potential employees with required skills and abilities • existence of educational institutions able to provide the necessary education • diversity of the manpower
Legal factors	existence and functioning of the essential legal norms	<ul style="list-style-type: none"> • business law • tax laws • deregulatory proceedings • legislative restrictions (distribution, ecological proceedings...) • regulation of working conditions
	unfinished legislation	
	Other factors	<ul style="list-style-type: none"> • functioning of the courts • law enforcement • copyrights
Economic factors	Basic evaluation of the macroeconomic situation	<ul style="list-style-type: none"> • inflation rate • interest rate • trade deficit or surplus • budget deficit or surplus • the amount of GDP, GDP/inhabitant and its development • monetary stability • status of exchange rate
	Access to financial resources	<ul style="list-style-type: none"> • costs of local loans • banking system • accessibility and form of loans
	Tax factors	<ul style="list-style-type: none"> • tax rates • development of tax rates • customs and tax burdens
Political factors	Evaluation of political stability	<ul style="list-style-type: none"> • forma and stability of government

		<ul style="list-style-type: none"> • key institutions and offices • the existence and influence of political personalities • political party in power
	Political-economical factors	<ul style="list-style-type: none"> • attitude towards private and foreign investments • relationship to the state industry • attitude towards private sector
	Evaluation of external relationships	<ul style="list-style-type: none"> • foreign conflicts • regional instability
	Political influence of different groups	
Technological factors		<ul style="list-style-type: none"> • 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

Source: Author

Social factors

In Czech Republic, there is the problem that population becomes elder and this is general problem in the whole EU. The average age of inhabitants was 36.1 years in 1989, but average age was 40.5 in 2008. Comparison from single regions shows that age structure of inhabitants is in each region different. A higher share of persons, who have reached retirement age, has many negative social consequences, but on the other hand it has also a positive influence on the labour market. Also in these regions, there are relatively more people at working age and there is higher tension in the labour market and is also higher competition among employees. Based on the research of the Czech Statistical Office, higher unemployment rates correlate with the regions with the younger age structure.

The unemployment rate and differences in it among single regions are the negative social phenomenon in the first step. On the other hand they also indicate the level of idle potential manpower in particular region. So it indicates the opportunity in the future, where the logistic centre can use this potential manpower as the source of its new employees.

The quality of offered manpower in the labour market is represented by educational structure of inhabitants in the region. Details about the structure of education of the population, which are arranged by the size groups of municipalities, clearly show that in the rural settlement completely outweighs people with lower education, and vice versa the population with the highest level of education is concentrated in the urban areas.

Legal factors

Operating of the logistic centre is 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.

Economic factors

The Czech Republic as well as the other European countries fumbles with adverse effect of economic recession. This recession caused decrease of GDP, in the past it was found out that increase/ decrease of GDP and road transportation correlates together. The Gross domestic product in 2009, adjusted for price, seasonal and calendar effects, decreased by 4.3%.in comparison with 2008. 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.

Political factors

The Transport policy for Czech Republic for years 2005-2013 is the default strategic document for the transport sector. The Transport policy involves one global aim, which is next 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.

Approximately 60 logistic centres operate in the countries of European Union and they are connected to more means of transport. The origin of these logistic centres was supported from public resources. The aim is that similar network will be in Czech

Republic. The support of logistic from public sources is regulated by Government decree from 21.12. 2009 nr. 1571 about the Strategy of support of logistic 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.

Technological factors

As well as in other branches also 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. The next and often used technology 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].

Conclusion

The logistic centre operates economically in the specific geographical point. The external environment, which is constantly changing and evolving, should be taken into an account by selecting this point. The SLEPT analysis can be used for mapping the current situation of the external environment. This analysis deals with social, legal, economical, political and technological factors, which effect on the logistic centre. The single factors should be fully explored and estimated their future development during this analysis. However all the factors effect on the logistic centre simultaneously and that's why their impact can't be assessed in isolation. There are briefly outlined these factors in this paper.

This paper is one of the outputs within first period of solution project MD CR 1F83A/014/520 The concept of index benchmarking for logistic centres

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Resumé

ANALÝZA VNĚJŠÍHO PROSTŘEDÍ LOGISTICKÝCH CENTER V ČR

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Tento příspěvek se zabývá problematikou vnějšího prostředí logistických center v České republice. Pro zkoumání vnějšího prostředí podniku se často využívá tzv. SLEPT analýza, která zahrnuje zkoumání faktorů z oblasti sociální, legislativní, politické a ekonomické. V tomto příspěvku jsou tyto jednotlivé faktory stručně nastíněny.

Summary

ANALYSIS OF LOGISTIC CENTRES' EXTERNAL ENVIRONMENT IN CR

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The logistic centre operates economically in the specific geographical point. The external environment, which is constantly changing and evolving, should be taken into an account by selecting this point. The SLEPT analysis can be used for mapping the current situation of the external environment. This analysis deals with social, legal, economical, political and technological factors, which effect on the logistic centre. The single factors should be fully explored and estimated their future development during this analysis. However all the factors effect on the logistic centre simultaneously and that's why their impact can't be assessed in isolation. There are briefly outlined these factors in this paper.

Zusammenfassung

ANALYSE DER AUßENWIRTSCHAFTLICHEN UMWELT DES LOGISTIKZENTRUMS IN CR

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Dieser Beitrag befasst sich mit der äußeren Umgebung von Logistik-Zentren in der Tschechischen Republik. SLEPT-Analyse wird oft für die Prüfung der äußeren Umwelt Unternehmen eingesetzt werden. Dazu gehören die Erkundung der Faktoren im sozialen, rechtlichen, politischen und wirtschaftlichen. In diesem Papier von verschiedenen Faktoren werden im Folgenden kurz skizziert.