

POSSIBLE DEVELOPMENT MODELS OF LATVIAN AMUSEMENT PARKS

Dr.hab.oec. Professor Baiba Rivza¹

Mag. Management Uldis Plumite²

^{1,2}Latvia University of Life Sciences and Technologies, Latvia

ABSTRACT

There are more than 14 amusement parks in Latvia, located in different areas. Latvia's amusement parks have been little studied and there is not much information about their importance in the regional economy, as well as the contribution to the tourism and business sector. These are places that are widely used by tourists, often related to the regional business environment, as there are shops and hotels nearby, as well as other types of service that visitors need. Latvian amusement parks can be divided into three groups: terrestrial, water and technical scientific amusement parks. Many of them are located near cities, for example, amusement park "Lemberga Hute" near Ventspils, city by the Baltic Sea with 38059 residents in 2019 (according to PMLP data), "Livu water amusement park" located in Jurmala, which is a city with 56696 thousand residents 2020 (according to PMLP data). One of the determining factors of the development of amusement parks is the growth of cities and their adjacent territories, which enables them to form both in terms of infrastructure and population growth. Regional economic indicators are an important factor for regional growth.

Keywords: *amusement parks, regional economy, development factors, factor analysis, development models*

INTRODUCTION

Latvian amusement parks are developing according to certain factors. Historically, they are near cities, waters or near major highways. Future factors influence theories of regional development and their adaptation to the specific infrastructure environment.

Environment Long-term regional development and the international economic situation, as well as tourism, will create new development models for the amusement park market.

The aim is to show the possible development opportunities of amusement parks.

The following tasks have been set - first of all to look at the development factors of existing parks and afterwards to determine the possible development models of future parks.

METHODS

The following study methods are used in this article: statistical data analysis method, questionnaire and data processing method, SWOT analysis and factor analysis according to SPSS computer matrices

Latvia has a population of 1.9 million, GDP at current prices last year was 30.5 billion euros. In the 4th quarter of 2019, compared to the 3rd quarter, GDP at constant prices increased by 0.1% according to seasonally and calendar adjusted data. In the fourth quarter of 2019, compared to the corresponding period of 2018, Latvia's GDP, according to seasonally and calendar unadjusted data, increased by 1%. An increase of 5.8% was observed in the arts, entertainment and recreation sector, which was most significantly affected by 7.9 % increase in gambling and betting industry. The amount of product taxes - value added tax, excise tax and customs duties - in 2019 has increased by 0.2%. In 2019, compared to the previous year, total household expenditures increased by 4.9%. Households' expenditure on transport (public transport, purchase and operation of vehicles) increased by 9.6% and 6.9% more households spent on recreational and cultural activities.[1]

Fig. 1. Changes in gross domestic product in the Baltic States in 2019.

At constant prices, seasonally and calendar unadjusted, as a percentage of the corresponding period of the previous year



Source: CST data

That way, the tourism industry has seen growth in recent years, which is influenced by the development of the Baltic and European economies. It should be added, that Latvia's economic and economic performance is weaker than that of the two neighbouring countries and we need to develop a stronger tourism strategy throughout the country and work more with marketing activities also in amusement parks. According to the author, it also depends on the fact that there is too little discussion and analysis at the national level about the amusement industry and its contribution to regional development.

The author has evaluated the opinions of Latvian administrative territorial units or local governments on the current tourism economic situation in the counties and priorities for tourism development, also evaluated the mentioned situation in the

context of existing AP parks, establishment of new AP parks and development of the AP industry. The paper provides an assessment of local governments on the tourism objects in the territories of the administrative counties belonging to them, tourism development factors and priorities, on co-operation with the entrepreneurs of the counties. Using statistical data processing methods, the evaluation of the indicators characterizing the tourism economy of administrative territorial regions in the evaluation of the local governments themselves have been determined.

Municipal survey methodology and characteristics of respondents. The author used the survey method to obtain the initial research information in order to find out the opinion of local governments on the development of tourism in their administrative districts, their characteristic indicators and future priorities. According to the survey, municipalities had to provide answers on the tourism economy of administrative counties, assessing the current state of tourism economy, existing tourism objects and potential of these objects, including AP, according to various indicators, prioritize factors and main directions of municipal investments for tourism economy development, tourism entrepreneurs. The survey was conducted electronically, sending questionnaires to the municipalities of all 110 administrative regions and 9 cities of the Republic, total of 119 administrative units.[9]

In order to find out the self-assessment of the tourism economy of Latvia's administrative regions, local governments were offered to provide a general assessment of the tourism economy of the county and an assessment according to 10 characteristic indicators (Figure 2). The evaluation was offered in points from 1 (poor) to 5 (very good), where the respective intermediate evaluations are 2 (poor), 3 (average) and 4 (good).

Fig. 2. Self-assessment of tourism economy of Latvian administrative regions



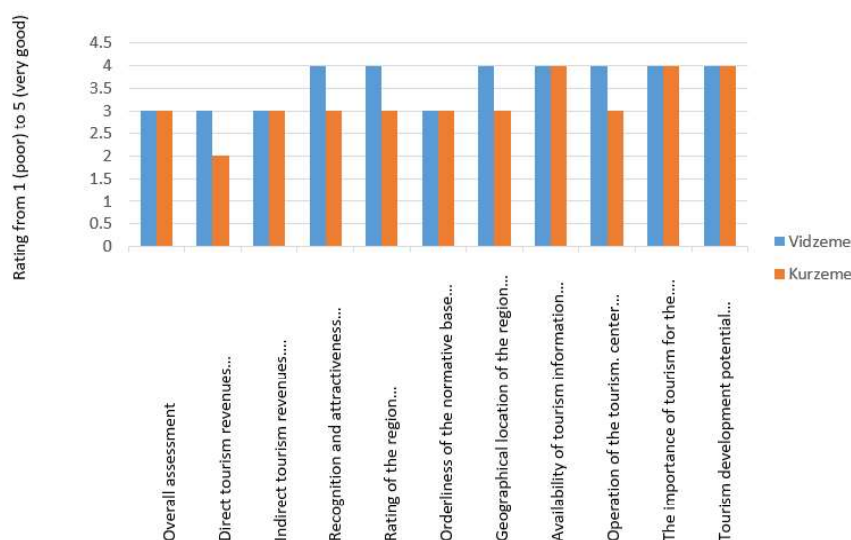
Source: the author's diagram based on the data of the survey of Latvian administrative regions

Based on the average indicators of the respondents' survey responses, the following are mentioned as the strongest sides of administrative regions with a rating of 4 (good): 1) recognizability and attractiveness of region for tourists, 2) orderliness of tourism normative base, 3) geographical location for tourism development, 4) availability of tourism information, 5) operation of region tourism

information centres in those regions where such centres have been established and 6) tourism development potential in the region.[3] High assessment of the tourism development potential in the region indicates the opportunities of tourism entrepreneurs and the positive position of local governments for tourism development. The average rating with 3 (average) is given in these positions: 1) indirect income for regions from tourism, 2) general assessment of the region, 3) rating within the region and 4) importance of tourism for the well-being of the inhabitants of the regions. The direct income of tourism of administrative regions is assessed as the lowest with a rating of 2 (poor). Such data suggest that the potential of tourism could be used to improve the indicators currently underestimated.[2]

The data of the ethnographic regions of Kurzeme and Vidzeme on the self-evaluation of the tourism economy of the local governments of these regions reflect the common and different self-evaluation of these ethnographic regions (see Figure 3).

Fig. 3. Evaluation of tourism economics of Kurzeme and Vidzeme ethnographic regions



Source: the author's diagram based on the data of the survey of Latvian administrative regions

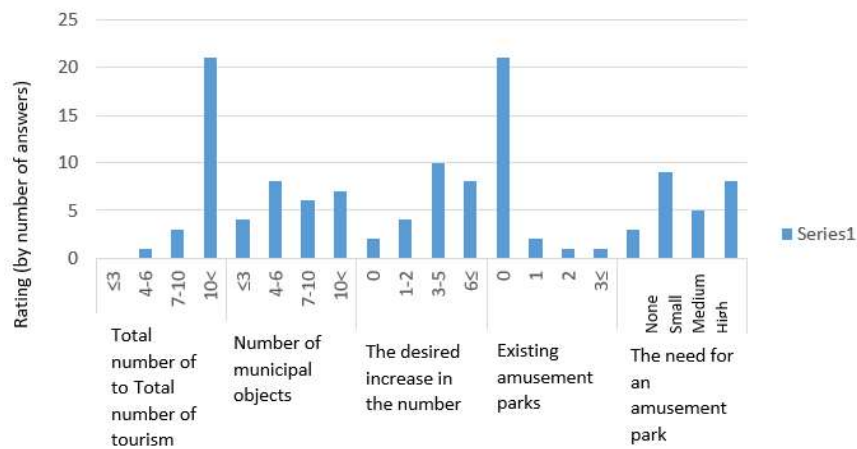
Looking at the evaluation of ethnographic regions of Kurzeme and Vidzeme, the self-evaluation indicators of Vidzeme region for five factors have an evaluation one point higher than for Kurzeme region.

These five factors are: 1) the region's direct income from tourism, 2) recognizability and attractiveness to tourists, 3) rating within the region, 4) geographical location for tourism development and 5) evaluation of the operation of tourism information centres. This allows us to conclude where the tourism economy of Vidzeme region is generally more positive than that of Kurzeme region.

In both regions, the importance of tourism for the well-being of the county's inhabitants is assessed higher than the average in Latvia.[4]

In order to determine the numerical characteristics of existing tourism objects and AP of Latvian administrative territorial units and AP development opportunities, municipalities were offered to fill in the questionnaire, marking with the “x” the most appropriate assessment of the following indicators: 1) total number of tourism objects, 2) number of municipal tourism objects, 3) the desired increase in the number of tourism objects, 4) the existing AP and 5) the need for AP (see Fig. 4).

Fig. 4. Average number of tourism objects in administrative regions of Latvia.



Source: the author's diagram based on the data of the survey of Latvian administrative regions

The total number of tourism objects in the administrative regions of Latvia basically exceeds 20 objects, of which the municipality agrees on average 4-10 objects, which is less than half. This indicates that tourist attractions are mainly a private business. According to the assessment of local governments, it would be desirable to increase the number of tourism objects in administrative counties by at least 1 to more than 6 tourism objects. 2 The data provided by administrative regions showed that in Latvia there is practically no AP, only in some places they are 1-2 AP. At the same time, AP are considered moderately necessary. It can be concluded that the establishment of a new AP in the territory of Latvia is desirable, thus increasing the number of tourism objects in the region.[4]

Taking into account this actual development in the region, the author of the article refers to some of the main regional theories that are the basis for the development of the territory of Latvia. In 1960s, theories representing economic determinism, based on the theory of regional development convergence, theories of regional divergence and theories of structuralism, have developed rapidly. Convergence theory is based on the belief, that each region, as it seeks to develop

and reap its benefits, over time becomes similar to other regions and their social, economic and political systems converge (convergence takes place). By intensifying production, specializing and organizing more advantageous trade with other regions, any region is gradually becoming industrialized, thus similar to other industrial regions. The origins of convergence theory can be traced to a functionalist approach, which assumes that there are certain requirements in society for it to develop and function effectively.

Theories of diversity, as opposed to convergence theories, are based on regional differences and the conditions that make up these differences. They are largely the result of a critique of convergence theories. Empirical studies in the 1960s showed growing economic disparities between industrialized and less developed countries. The main theories of divergence are the theory of cumulative causality and the theory of growth pole.[3]

These theories are based on the importance of factor analysis. This analysis is a statistical method that allows to find the factors that are the basis of the relationship of several variables, but also allows to find out the proximity of this relationship between the factor and the observed traits, respectively, to answer the question, how big is the proportion of the factor in each trait.

The creator of the factor analysis is Michael Porter, a professor at Harvard University. He has paid great attention in his research to the analysis of competitive and territorial factors. He names the key factors found in each country and industry:

- 1) economic - inflation, unemployment, purchasing power of the population, standard of living, growth or downturn of the national economy;
- 2) social, cultural and demographic - social affiliation of the population, level of culture, increase of the population, national structure of the population, level of culture and education, religious and moral norms of nations;
- 3) technological - development of new production and communication technologies, development of science and technology;
- 4) political - the country's foreign policy, relations with other countries, economic and political situation in the world;
- 5) legal - these factors include the interaction between the companies and the government or legislators; legislation, tax policy;
- 6) institutional and informative - non-productive institutions and organizations necessary for the normal course of business: banks, insurance companies, service and consulting services, advertising agencies, market research agencies, business support centres, etc. The external business environment must be such as to encourage, not discourage.[7]

The author of the article, summarizing the mentioned data and the indicators that crystallize according to the survey and statistical methods, has come to the SWOT analysis, which allows to determine the current position of the current parks and the existence of factors determining future development. SWOT analysis is a

popular method of situation analysis, which looks at the strengths and weaknesses of the analyzed case, as well as opportunities and threats.[8]

Fig. 5. SWOT analysis

Strengths	Weaknesses
Geographical location Ability to compete Potential Uniqueness High technical performance Resources, funds, people	Lack of experience Weak Legislation Lack of support from the banking sector Slow development Lack of systematicity and continuity
Opportunities	Threats
Mastering new markets Creation of new technologies System and process improvement Market segmentation and arrangement Improvement of national legislation Creating niche products	Political Economic International market fluctuations COVID Ecological and environmental Geo political

Source: Table created by the author

SWOT analysis reflects the indicators of internal and external factors. In the market, economic or larger geopolitical factors, these indicators may also change, as many of them are determined by the current market situation.[5]

When summarizing the indicators of the amusement park questionnaires, the following indicators and groups of basic factors stand out.

SWOT analysis gives us the opportunity to see strategic decisions and their progress, because many factors jointly shows the development of processes. The conditions, opportunities and data associated with it are easily transferable. SWOT analysis or SWOT matrix is a decision-making system to focus on strategically important elements at this intersection. SWOT represents **S**trengths, **W**eaknesses, **O**pportunities, **T**hreats. These four categories describe whether the aspect of the decision is negative or positive and whether it is an external or internal aspect of the organization.[6]

In the amusement park strategy from the SWOT analysis matrix, the author choose to put forward 4 determining factors based on the summarized results, to which apply the Factor Analysis computer software SPSS model. Twelve variable indicators were selected, which obtained the highest statistical data after summarizing the results of the survey. These variable indicators were summarized in the table and determined by 4 Factor analysis in the computer program SPSS by determining the matrix turning radius in numerical terms.[10]

Table 1. Four-factor factor analysis according to SPSS

Rotated Component Matrix^a				
	Compo- nent			
	1	2	3	4
Size of the company	650	-246	-329	249
Type of park	159	-326	757	-190
Seasonality effect	-099	-161	-659	125
Offer of new attractions	001	063	-155	939
Offer of new services	-453	032	708	313
Expert general assessment of the object	813	230	180	-119
Expert assessment of the development of the object	679	183	056	517
Expert assessment of the object's recognizability	796	332	-033	016
Expert assessment of recognition abroad	875	216	132	-019
Expert assessment of the quality of service offers	539	482	-158	-033
Foundation year of the AP	-336	-731	-119	-154
Region	015	901	-066	-132
Legal form of the company	263	728	031	188

Source: Table created by the author[11]

According to the results of the factor analysis, it can be concluded that such variables as the size of the company, the year of establishment, the offer of new services are among the factors influencing the development of amusement parks.[5] One of the determining factors is also the seasonality and the offer of new attractions and services. Variables such as expert assessment of the object and the legal form of parks have less impact on the development of these parks. Thus, the following development models were formed: 1) amusement parks near larger cities with a larger offer of attractions and an earlier year of establishment; 2) amusement parks that have been established recently and have a new amusement offer; 3) amusement parks that are able to provide their offer all year around and do not depend on seasonality.

CONCLUSION

Latvian amusement parks are relatively new and have little professional experience.

Amusement parks are closely linked to the regional economy, municipal and national common policies in the tourism industry.

Recognition of amusement parks, attractiveness and recognizability of a tourist attraction affect the operation of parks.

Amusement parks have several basic factors that allow for successful development.

Factor analysis with several variables puts forward the determining factors for the development of future park development models.

Factor analysis shows some data for one variable, but when other variables change, factor analysis may show other determinants.

There is little research on amusement parks in Latvia and the Baltic States and many scientists in this field would still have to do a lot of research.

ACKNOWLEDGMENTS

The research was supported by the National Research Programme project “Challenges for the Latvian State and Society and the Solutions in International Context (INTERFRAME-LV)”.

REFERENCES

- [1] Central Statistical Bureau of Latvia; 2019 <https://www.csb.gov.lv/en/statistics/statistics-by-theme/economy/gdp/search-in-theme/2538-gross-domestic-product-2019>
- [2] D. Edgar: “Tourism in the 21 century”; 2001; pp. 95-97
- [3] Edgar M. Hoover , Frank Giarratani; An Introduction to Regional Economics; University of Pittsburgh; 2020.
- [4] U. Plumite: Research significance of the development possibilities of Vidzeme and Kurzeme theme parks; LLU 2019; pp. 89;120
- [5] Podnieks K. Data mining algorithms: factor analysis, LU; © 2008-2020; 06.11.20.
- [6] <https://www.metodes.lv/metodes/svid-analize-swot-analysis>
- [7] <https://www.investopedia.com/terms/s/swot.asp>
- [8] [https://executive-summary-analysis-determinants-workplace-occupational-safety-and-health \(europa.eu\)](https://executive-summary-analysis-determinants-workplace-occupational-safety-and-health (europa.eu))
- [9] https://www.saeima.lv/petijumi/Turisma_attistibas_veicinasana_Latvijas_regionos-2018.pd
- [10] SWOT Analysis | SWOT Matric (storyboardthat.com)
- [11] UNCLA Institute for Digital Research& Education Factor analysis/SPSS annotated output ; <https://stats.idre.ucla.edu/spss/output factor-analysis>.