

TOURISM PERFORMANCE OF DESTINATIONS BASED ON SETTLEMENT APPROACH (How to set up regional database focused on tourism in Hungary)

Csilla Szalók, Ágnes Holczerné Szentirmai, Ákos Probáld & Ilona Kovácsné Székely

Budapest Business School

Abstract: Recently in the regional development researches the attention draw to the way of measuring destination's development and competitiveness. The further development of the Hungarian Tourism depends on the regions, destinations' developments, their success in competitiveness and the ongoing innovation in tourism. The research of the Budapest Business School Institute of Tourism Department intends to elaborate a complex tourism destination indicator based on former researches and experiences.

Keywords: Tourism destination management, Destination development, competitiveness, Tourism Complex Indicator, cluster analysis, principal component analysis

Introduction: the evaluation of the problem

Although the development of tourism industry is continuous, the crisis and the impact of the environmental changes on the greater competition market led to the fact that the market players act more effectively at more difficult market conditions. Although economy shall gradually recover, instability accompanying this development is constant. The rapidly changing trends highly need the adaption of evolving market circumstances. New consumers appear in the developing countries (BRIC countries), in our digitalized world travellers adopt more flexible consumer decisions. The world is more and more insecure around us, the environment is constantly changing, thus economy needs to be more flexible in order to secure the stability of the country for the long term.

The most important aim of our tourism policy is to increase the level of domestic tourism and to revitalize regional tourism. However, the increase of tourism demand may not be continued without paying attention to the exploitation of the natural environment, ecological, economical – social barriers. Special balance arises in these circumstances and on the basis of paying attention of more changing indicators. Our tourism policy can only be successful if it follows the changes rapidly and flexibly and can face them and be able to use more delicate methods for its development. This can only be possible if all interested parties in tourism know the most effective factors for the best possible efficiency and which are those obstacles we have to face in order to be able to increase our efficiency.

A significant proportion of Hungarian settlements believe – almost regardless of which territory we speak about – that they have a place on the country's touristic palette. This notion

should be tackled and shall be treated as a break point. In the future, with the improvement of the quality of life, the further spreading of culture and the stabilization of the economy, the need for travel shall resume, the domestic and international demand for tourism shall increase. We shall be prepared both for the increase of demand, and – in the same time – for the long term changes in the tourism field. Those villages and regions would profit which just in time recognise the potential related to changes and would prepare in advance.

The key for the future development of the country's tourism is the development of regions, and the support of establishment and subsistence of the lasting tourism competitiveness. Most of the European countries recognized the potential in tourism and make efforts for the increase of the competitiveness and capacity of tourism. The building elements of the tourism regions are mainly similar, the natural attraction, the cultural heritage and the well functioning touristic infrastructure. The key factor that makes them different is the place, the local community, the local business, all together who make up the region unique for the visitors. The base of this is the cooperation of all interested parties in tourism. Therefore published researches related to the concept of destination and destination management (17, 2011, Pike, Page 2014 *et al.*) and the attention draw to the concept of destination as “a geographically embedded meeting points of supply and demand face the challenge of bundling a fragmented supply into a consistent tourism product” (6, Dregde 1999 cited by Volgger, Pechlaner 2014;). Its significance reinforced due to the fact that tourism is taken place at destinations which are “the fundamental unit of analysis in tourism” (WTO, 2002). The destination is not simply “an amalgam of a diverse services

and eclectic range of businesses and people who might have a vested interest in the prosperity of the destination” (17, Pike, Page 2014). However the success of individual tourism enterprises and businesses and their cooperation will influence the success of the destination, and vice versa depend to some extent on the competitiveness of their destination (17, Pike, Page 2014).

Until now, in national and international touristic bibliography the emphasis was put on the analysis of competitiveness. Typically complex comparison on competitiveness was performed on different kind, but large scale destinations; for example: either country or city (see. Armenski 2011, Enricht-Newton 2005, WEF3 touristic competitiveness index). The examination of sub-regions has faded away, as formulated methods and models were either partly or totally unsuitable for examining these. In the same time more models exist, which analyse the general regional economic competitiveness and even though these make the analysing possible in smaller areas, for touristic approach they are not suitable. (Lengyel: Pyramid model 2003)

Research background and methodology

The first touristic society (Hungarian TDM) was established in 2002 in Gyenesdiás based on South-Tirol's example. After that, this kind of touristic guidance entered into the national strategy for the programming period of 2007 and 2013. (NTS). On that basis, several tenders were announced supporting the establishment of local and regional societies, altogether with the support of 4.3 billion Hungarian Forints. Due to this kind of support, until the end of March 2014, 90 organizations have registered at the Ministry of National Economy's Tourism department. 25-35 registrations were further expected. Some of those have already started the process, and there are some that were not intended to join.

The evaluation of the TDM tender in case of the indicators of maintenance period takes into account the figures usually based on the realized number of overnight stays, the arrivals and the period of residence.

In the new budget period of 2014-2020 for the TDM societies – based on present information – there would be more support. As a result, among the already existing TDM societies and in the effected settlements, a long-term strategic thinking has started about tourism and its development. Needless to say, it has paid attention to the development resulted effects, but at the same time, without proper methodology and indicators the imagined vision was not definitely supported by the right technical arguments.

In 2013 February, with the support of the European Commission, a new indicator system was set up to represent and to show the functioning and sustainability of the touristic destinations – the so-called European Tourism Indicator System (ETIS). Two domestic TDM societies have joined the recent test-period on April 1 with the cooperation of the

Budapest Business School, College of Commerce, Catering and Tourism, Tourism Department. The aim of the European Commission with the newly established indicator system is to strengthen the competitiveness of our continent through local level monitoring, and in order to achieve it, it provides coherent tools for the member states. Without doubt, it is the interest of Hungary to apply all the quality systems established on the continent, and to convince domestic tourism enterprises and TDM societies to become partners.

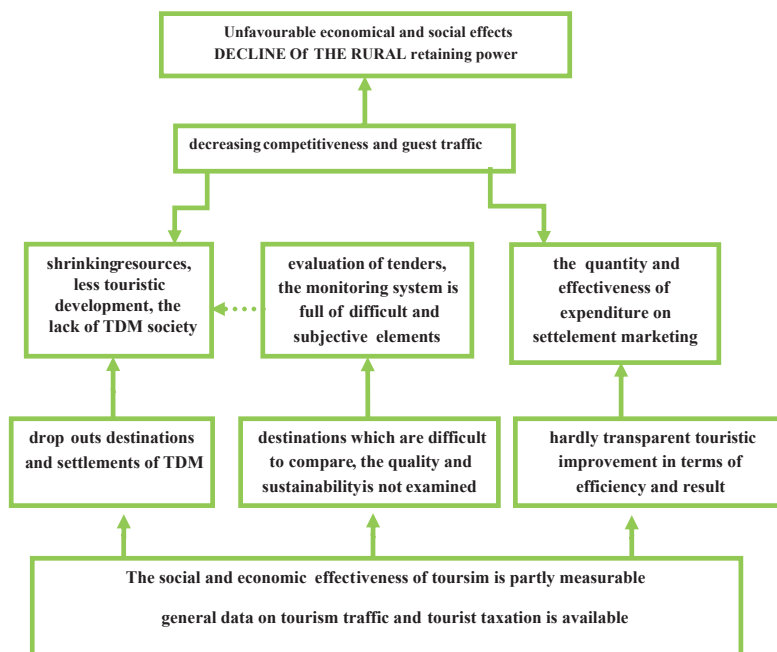
The aim of ETIS is to establish a coherent European indicator system. The system to be set up here is in a loose connection with ETIS. The aim is to introduce the most efficient model for our domestic system.

Research model

The reason for setting up the model:

- There are settlements, where national attractions exist, thus they have high number of visitors, but in the same time its numbers do not necessarily influence “the nights spent”, since these visitors do not spend a night at the settlement. The spending of the mentioned one day visitors appears at catering places, retail shops and at the attraction itself, which is a significant income of local people. For these settlements, tourism provides an important contribution to the sustainable economical and social development, retains the population of the settlement. In the same time, the local TDM society cannot receive registration due to the low number of visitor nights spent, therefore it cannot participate in the tender procedure. The marketing activities of these villages could become incidental, thus the local marketing activity becomes less effective compared to the situation where professional bodies engage with it cooperating with local people and enterprises.
- Another hardship is the limited financial resources, the objective judgement of tenders, since the touristic development of various settlements is hard to be exactly compared to another, so the system can not provide a well-defined objective for the applicants.
- The economic aim would be to create sustainable development for tourism, using the scarce resources
- In those settlements, or regions where the local government or its representatives decide on touristic questions, the professional criteria often encounters difficulties without objective and complex indicators. This problem has become relevant during the past years due to the abolition of touristic boards.
- It is not disputed in professional circles that visitor's flow data is only partially able to measure the effects of tourism, so the need for more specific indicators – which can present tourism as a complex phenomenon – arises.
- Besides the economical importance of tourism, the social impact is also indisputable

Problem-tree



or from the other regions and to determine the importance of tourism in the life of the given settlement.

Subtargets

To better learn the factors effect the touristic characteristics of a settlement and the factors leading to the development of tourism, moreover, to study the role of tourism in the life of settlements.

Helping to set up and develop TDM-organization. To explore the operational effectiveness of TDM-organizations.

To give a complex evaluation for the less measured factors on tourism from the perspective of long-term sustainability.

Methodology

Results and discussion should be clearly described

Research aim

Although participation in tourism related activities mostly depend on economic consideration, at the present and future planning and development of tourism, the socio-cultural and environmental impact analysis is increasingly being pushed into the forefront besides economic considerations.

Assessment of the situation is essential for developing our tourism industry. This has to based on besides the advantages of competitiveness, the measuring of touristic power of the given settlement and taking into account the long-term sustainability.

Basic aim

To develop a special database and a complex indicator for settlements, which expresses the role of tourism in the everyday life of the settlement, takes into account the economic, social and environmental effects for long-term sustainability.

The aim of the present research is to determine indicators that fit the pursued objective, futhermore to create a database that includes all those data that can be associated with the development of the settlement.

Following, a global index shall be developed (Tourism Complex Indicator- TCI), which can be used for the statement of efficiency, and for ranking the local inhabitants from a touristic point of view. As a result of the calculations an index, an index group and the ranking of settlements could be set up. The results would be enable settlements, settlement groups delimited by TDM groups to position themselves and to classify the destination, its difference from other settlements

Primary research:

Its largest part is determining and creating the indicators (variables). During the research, the collection of potencial indicators which are suitable for the measurement of performance, comes from various resources. Most of the data used is gained from the Central Statistical Office's (CSO) database, moreover, from council records, from thousands of personal interviews with, and from local inhabitants, international and domestic visitors' questionnaires.

The planned research shall be conducted by advanced mathematical-statistical method and analisis. The method itself – create typified by development deciles – is relatively simple. The majority of the workshops (see: Bibliography 1; 2; 5; 7; 11; 26) dealing with defining and monitoring local tourist destination's state of development use this or very similar procedures. In essence, the about 60 indicators (see annex no.1) connecting to tourism shall be categorized into ranked by 6, descriptive component-groups (CG like: economic, infrastructure, employment, society, attraction, special tourism indicators). Following that, settlements in the case of each of the indicators will be from 1 to 10. The settlements in first (best) decile will given 10 scores, settlements in second decile will given 9 scores and so on, the settlements 10. decile 1 scores. Following it, the scores value of the indicators would be aggregated and the simple arithmetic mean (average) would be calculated on components's level, as sub-average and in general, as the main average.

$$S_i = \sum S_{ij} / \sum S_j$$

where

S_i = TCI value of the i settlement

S_{ij} = decile value(score) of i settlemen's j indicator

S = number of indicators

The sub-averages of the CG's will be the economic (ETCI), infrastructure (ITCI), employment (ETCI), society (STCI), attraction (ATCI), special tourism (TTCI) sub-complex index's. The average of the sub-average will give the main average, namely the Tourism Complex Indicator, the TCI itself. Settlements receive 6 components's value based on these values, settlements could be ranked again and the development values and scores could be determined. Finally, the average of scores gained on the component level will determine the main average the value of the Complex Turistic Indicator.(TCI) In accordance with these values, the settlements within the region or countryside can be ranked and positioned again.

The components and the indicators related to the components – since these suppose to describe the factors influencing tourism – are such important elements of the whole system, that researchers shall consult TDM organizations before finalization, data gathering and data compilation into database.

Of course, all material will be made public and available for all database-user in order to show the indicators, components and all together the real value of the region and the level of development of the settlement.

The absolute value of individual indicators will only be made public to the settlement itself, and it will have the discretionary right to share the data with its own, regional, national TDM society.

We plan to apply a special modelling system (like cluster analyzis) that shows that by using the 60 settlement indicators of the database which settlements could form a homogenous group, which could lead to forming a TDM organization.

It could be interesting to learn whether the already existing TDM organizations' establishment followed a similar pattern.

Further result of the procedure is that factors effecting the creation of groups are predictable. Additional important research-result would show that the grouping procedure could be set up for continuous and private data as well, thus it will become comparable and as a consequence, it will be comparable how to obtain similar or different groups from continuous or derived data.

Another procedure would be able to demonstrate – based on main component analysis – how the starting indicators (independent indicators) factors contribute to the value of the complex indicator (dependent indicator).

Secondary research

Specific examination of the relevant bibliography. The pilot works of European Commission related to 'For Sustainable Management at Destination Level' should be emphasized. At the same time, focus should be put on the analysis of the research of Hungarian lecturers (touristic core areas (Aubert Antal-Szabó Géza) and /or the destination effects model (Xellum Tanácsadó és Szolgáltató Kft.)

The expected result of research

The result of the research is to create a 'set of indicator', namely to define an operationalization frame. We will be able to present the effect of the various indicators on the level of settlement, region or settlement group. Available information for the two dates (2007-2012) will be able to show the development (or decline) of touristic direction and its extent and the effect of important factors playing role in it.

With the help of geographic information system, maps able to draw up significant or less significant settlement groups inside the region could be created. Complementing hypothesis, we shall constantly test the practice with experts who deal with the development of settlement or region.

The analysed group of the choosen settlement and region, was narrowed, taking into account regions with TDM organizations, although we know that there are more settlements with significant tourism without registered TDM but existing clusters able to exploit local possibilities. The created model is demonstrated through a relatively developed touristic region (Balaton), which has already achieved significant results in the field of institutional development. Although the situation of TDM organizations is still uncertain, but the already existing more than 100 registered bottom-up, civil based organizations prove that they help in developing the regions

In 2010, the Xellum Consultant and Services Ltd. has created its own destination effect-model (DEM), which was later used in the case of Héviz as well. The modell – besides applying the usual touristic data – investigates the social, economic tasks of tourism on the basis of favourable and unfavourable conditions of the given settlement.

The DEM mostly provides answer for what sort of further economical process – eg. further production and services – would be generated by the typical economic process of tourism after a determined period.

Moreover, it scrutinizes the created direct and indirect budgetary revenues and its effects on employment data.

The touristic complex indicator would fit into the DEM modell, which would allow a greater scope for analysis, research and the determination of future effects.

The expected results, the target and priorities can simply be determined on the basis of the above presented problem-tree. In case of its large-scale application, the importance of tourism and touristic development, the role of tourism in the region's economic and social life can be simply expressed. This results in the creation of an indicator that clearly presents the situation and circumstances of the sector and makes the given settlements comparable.

Moreover, it encourages participants of tourism and the decision-makers – besides cooperation – to pay attention to the long-term sustainability of the destination. Last but not least, we also believe that if stakeholders receive more exact market information, than they will receive valuable input from the TKM organization, and this factor shall increase the faith in the credibility of the statistic system which would result that supply of statistic data would no longer be a burden.

Appendix

1. List of indicators, components and resources

Indicators	Components	Resources	Indicators	Components	Resources
Number of active corporations and unincorporated enterprises per 1000 inhabitants	Economy		Average daily rate in commercial accommodation units	Tourism	
Number of active corporations and unincorporated enterprises in industries accommodation and food service, per 1000 inhabitants	Economy		Number of guest-nights in commercial accommodation units, per 1000 inhabitants	Tourism	
Number of active corporations and unincorporated enterprises in service's industries, per 1000 inhabitants	Economy		Average length of stay in commercial accommodation units	Tourism	
Percentage of active corporations and unincorporated enterprises in service's industries	Economy		Number of other accommodation establishments, per 1000 inhabitants	Tourism	
Percentage of water conduit dwellings	Infrastructure		Number of beds in other accommodation establishments, per 1000 inhabitants	Tourism	
Percentage of public sewerage conduit dwellings	Infrastructure		Guest-nights in other accommodation establishments, per 1000 inhabitants	Tourism	
Length of closed public sewerage, per one kilometer water conduit network	Infrastructure		Number of shops and stores, per 1000 inhabitants	Economy	
Consumption of electricity per household consumer	Economy		Number of restaurants, per 1000 inhabitants	Economy	
Tax revenues of local governments, per 1000 inhabitants	Economy		Vendéglátóhelyek 1000 lakosra		
Industrial production tax, per 1000 inhabitants	Economy		Average length of stay in commercial and other accommodation units	Tourism	
Local tourism tax per 1000 inhabitants	Tourism		Number of non profit accommodation establishments, per 1000 inhabitants	Tourism	
Personal income tax revenues, per taxpayer	Economy		Number of beds in non profit accommodation establishments, per 1000 inhabitants	Tourism	
Access to the nearest motorway	Infrastructure		Number of guest-nights in non profit accommodation establishments, per 1000 inhabitants	Tourism	
Access to the nearest frontier crossing point	Infrastructure		Average number of open days of commercial accommodation establishments	Tourism	
Distance from the capital	Infrastructure		Tourism Confidence Index of local population	Tourism	
Percentage of the local public roads with solid surface	Infrastructure		Number of daily visitors, per 1000 inhabitants	Tourism	
Length of local bicycle road	Infrastructure		Number of tourist visitors, per 1000 inhabitants	Tourism	
Distance from "Sármellék" airport	Infrastructure		Percentage of returning visitors	Tourism	
Number of employees, per 1000 inhabitants	Employment		Spending of visitors, per inhabitants	Tourism	Interviews
Number of employees, per 1000 inhabitants in service industries per 1000 inhabitants	Employment	Central Statistical Office	Spending of daily visitors, per inhabitants	Tourism	
Number of employees, per 1000 inhabitants in accommodation service industry	Employment		Spending of tourists, per inhabitants	Tourism	
Number of employees, per 1000 inhabitants in food service industry	Employment		Average length of tourists	Tourism	
Percentage of household without any employees	Employment		Percentage of satisfied international visitors	Tourism	
Percentage of employees of inhabitants	Employment		Percentage of satisfied national visitors	Tourism	
Daily incoming commuters of employees	Employment		Number of ports for ships with time table	Tourism	
Difference of incoming and leaving commuters, per 1000 inhabitants	Demography		Number of ports for sailing	Tourism	
Distance between home and place of work of commuters	Demography		Number of seasonal working places, per 1000 inhabitants	Employment	
Number of inhabitants	Demography		Percentage of second homes	Tourism	Local government
Change of the number of inhabitants 2000-2013	Demography		Visitors of bath and beaches, per 1000 inhabitants	Tourism	
Percentage of economically active population	Demography		Number of visitors of visitor's centers, per 1000 inhabitants	Tourism	
Migration differences, per 1000 inhabitants, 2005-2013	Demography		Open days of cultural- and gastronomy events	Tourism	TDM
Visitors in museums	Attraction		Open days of scientific and sport events	Tourism	organizations
Area of protected (conservation) nature parks	Attraction		Percentage of business in TDM organization	Tourism	
Number of commercial accommodation units	Tourism		Open days of Tourinform bureaus	Tourism	
Room- occupancy rate in commercial accommodation units	Tourism		Length of season, days	Tourism	
			Number of qualified spas	Tourism	Local governments
			Spending of local government on tourism	Tourism	
			TCI		

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