

The importance of life cycle on the future development of tourist destination

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Abstract

The development of national economies is related to environmental pressures which have negative consequences on the environment. The phase of the life cycle indicates the need to change access to the development of the destination, thus being a useful marketing tool, as well as, an instrument in the environmental protection policy. The work analyses the theoretical phases of the life cycle of touristic destinations and presents the results of the research Case study: Nature Park Zlatibor - the most visited touristic destination. The research aims to identify the phase of the life cycle in which the destination is currently located, according to the Butler model, and to measure the achievement of ecological and economic sustainability. Additionally, it explains the opposing relations between the economic interest and preserving the protected area.

Keywords: life cycle, touristic destination, sustainable development

Introduction

Tourism is a global industry which involves hundreds of millions of people on international and domestic travels every year. However, the development of mass tourism and increasing population in cities also raise pressure on environment. The development of a touristic destination, especially in terms of its sustainability, is becoming the subject of numerous quantitative analysis. One of them is the analysis of the life cycle of the destination, according to which environmental development increases the pressures on the environment. According to the Butler's model of the life cycle of the tourist destination (1980), the destination follows more stages during its development: exploring, involvement, development, consolidation and stagnation, and rejuvenation or decline. Identifying the phase of the life cycle in which the destination is findings can help destination managers in undertaking activities related to the further development of the destination.

In the protected areas as nature parks, national parks, nature reservations and other forms, tourism and related activities should be developed in accordance with the degree of protection of the

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area. In the areas characterised by a high diversity of plant and animal species, anticipating the possible environmental impacts is required, as well as, adequate protection measures.

1. Theoretical approaches on the life cycle analysis

The life cycle concept derives from the product life cycle which refers to the mortality of products and the need for planning replacement before the products begin to show signs of weakening or decay. The life cycle is based on the comparison with living being which life is characterized by two extreme occurrences: birth and disappearance (death).

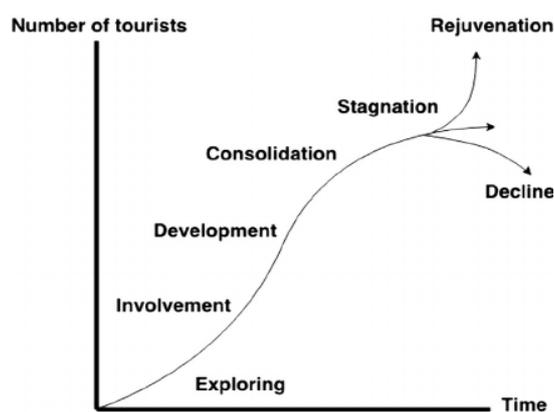
The life cycle in theory was initially considered as a life cycle of products in works of Young (1962), Kotler (1967), Topritzhofer (1972), and other authors. Kotler emphasized that the products have a limited life. According to this author understanding of business, profit is not possible in the phase of introduction, but is gradually increasing in the growing phase, then slows down to stabilize in the maturity and saturation phase and almost completely disappeared in the downturn phase (i.e. product deduction). Bearing in mind all the product life cycle features, this theoretician proposes a different marketing program at each stage, both in terms of production and finance. On the other hand, Topritzhofer expressed the relationship between total sales, time and profit, where the product life cycle can be explained by a function at any time period $t \geq 0$ (with 0 denoting the time of product launch to the market), that reflects the achieved intensity of product sales on the market, expressed in quantitative or value indicators (Topritzhofer, 1972). Theorists sought to define the phases of the product's lifecycle: the growth, the maturity, the saturation and the degradation of the product (Berg and Shuchman, 1963). According to this approach, after the maturity phase, the saturation phase is decisive for the possibility of the product to fall or degenerate. Young has introduced a more advanced product life cycle which contains the following phases: anonymity, introduction, growth, turning point, maturity and degeneration (Young, 1962). The characteristics of this model are: in the anonymity phase, the product doesn't generate any income, because it is only supported by investments; the turning point phase refers to short time interval when they are needed important strategic decisions to increase the volume of sales.

To sum up, the essence of the life cycle concept is the existence of different distinctive phases as an introduction, strong growth, maturity and, finally, decline. In addition to the analysis of individual phases of the life cycle, it's important to design marketing measures in which correspond to each of the different phases, as well as, in the case of a tourist destination, measures for increasing tourist demand and sustainability of the destination.

1.1. Phases of the life cycle of a tourist destination

In 1980, Butler, based on previous research, presented a cyclic model in the form of the S or the Butler model, according to which tourist destinations go through five different phases of development: exploring, involvement, development, consolidation, and stagnation.

Figure 1. Tourism destination life-cycle



Source: Butler (1980)

The exploring phase is characterized by a small number of tourists who stay for a longer period of time in a tourist destination. A small number of tourists causes the lack of specialized tourist facilities and services. Tourists are adventurers, all-centric and visit the destination regardless of seasons. The attitude of locals and visitors towards them is warm.

The involvement phase is characterized by growing number of tourists which also makes the tourism industry to start developing. Tourists are medium-centric and, on one hand, they are still adventurers and come by foot, car or local transport. On the other, there are also tourists who come by mini-vans provided by tour guides. There are modest tourism contributions to the economy of the tourist destination during this phase, while the attitude of locals and tourists is euphoric.

The development phase is characterized by rapid growth in the number of tourists and by their integration into a formal tourism system. An important point for this phase can be the construction of the first mega-resort whereby international companies start to control the destination. Tourists are medium-centric and psycho-centric and trips are organized through package arrangements of travel agencies. The attitude of the locals and tourists is at an early stage indifference, but in time, apathy turns into irritation. The number of tourists are increasing, as well as, their pressure on available local capacities.

The consolidation phase is characterized by a drop in tourist arrivals and other tourism-related activities. The level of tourism development starts to exceed the spatial, social and economically available capacities of the destination which is why the tourism product becomes worse. The destination is fully integrated into large, global tourism systems. Tourists are psycho-centric and they visit a destination on the basis of a package of travel agency arrangements and large hotel chains. Tourism is dominated by the economy of that area.

The stagnation phase is characterized by a surplus of accommodation capacities with high fixed costs. Accommodation type hotel needs to be converted into catering apartments or permanently populated houses for pensioners and students. The number of tourists is stable with psycho-centric oriented visitors.

The decline phase is characterized by hotels and other tourist facilities that have been abandoned or converted into flats, health centres or other facilities suitable for retirees. The new tourists can't be attracted and the excited ones are not satisfied with the touristic products. The dominance of tourism over the destination decreases because other service activities (health, state administration) are also developing.

The rejuvenation phase of the tourist destination, according to the Butler's model follows the stagnation phase. However, rejuvenation may occur after a period of decline. The rejuvenation phase is characterized by the introduction of brand-new tourism products or the radical redesign of the existing products.

Table 1. Key characteristics of the life cycle phases of the tourist destination

Phases of the life cycle	Number of visitors	Tourist industry	Psychography of tourists	Relation between locals and tourists	Attractions	Accent to the environment
Exploring	Small	No	Adventurers, Alocentric	Cordial	Natural	Very low
Involvement	Increased	Beginning development	Medium-centric	Euphoric	Cordial natural	Mostly natural low, but on the rise
Development	Rapid growth of visitors	Significant	Middle-centric and psychocentric	Apathetic, irritation	Mostly specialized tourist orientation	High
Consolidation	Reducing	Global tourism systems	Psychocentric	Irritation	Specialized and fictitious tourist orientation; generic	Very high
Stagnation	Stable	Stagnation, Converting	Psychocentric	Indifference	Specialized and fictitious tourist orientation; generic	Very high
Decline	Reduction	Development of other service activities	Dissatisfaction	Antagonism	/	/
Rejuvenation	New visitors	New tourism products	Various	Antagonism	/	/

Source: Author, based on the Butler model

Butler's model was empirically tested 50 times only in the literature published in English. As a tourist destination passes through various phases of development over time, attempts are made to generalize the phases by creating a conceptual development model (Weaver, 1988; Cooper, 1995; Cooper and Lockwood, 1995; Prosser, 1995; Harison, 1995; Wilkinskon, 1996, Kamat, 2010). The model is useful as a theoretical and practical mean for describing and predicting the evolution of a touristic destination (Prosser, 1995), while it is widely accepted that their life cycle goes through different stages (Cooper, 1995).

1.2. Sustainability of the tourism destination

The development of tourism has also led to certain ecological, cultural and social consequences. The basic forms of sustainability are (Bruntland Report, 1987):

- Environmental sustainability, which ensures that development is compatible with the maintenance of basic ecological processes, biodiversity and biological resources (Lin and Yang, 2006; Mellino and Ulgiati, 2015),
- Social and cultural sustainability, which ensures that development increases the control of people over their own lives, the compatibility with culture and the values of people under the influence of development, maintenance, the strengthening of community identity;
- Economic sustainability ensures that development is economically viable and that resources are managed so that they can support future generations (Kopfmüller *et al.*, 2001; Bleicher and Gross, 2010; Bhattacharya *et al.*, 2015).

Sustainable tourism development is the subject of numerous studies (Ali *et al.*, 2008; Côté *et al.*, 2008; Fotiadis *et al.*, 2013). One of the first authors who researched the impact of tourism on the domestic population was Krippendorf (1986). The purpose and incentives to integrate environmental practices in business decisions have become one of the most debated issues among different industries and, especially, the tourism industry during the last two decades (Hoffman, 2000).

The environmental problems of urban areas are caused by city sprawl and spatial segregation (Chiu, 2012). Consequently, according to Butler's model, tourism is developing until these thresholds are exceeded (horizontal line above the development stage). However, the destination with pro-active measures can influence tourism not act negatively in the environment in the following cases:

a) the carrying capacities remain at the achieved level, but the level of tourism development is reduced through restrictions or quotas per allowed number of visitors, the introduction of restrictions on the size and number of accommodation facilities, the designation of tourism development zones, prohibition of the expansion of infrastructure and destination tax to reduce demand;

b) the load threshold is raised in accordance with the increased number of visitors and the destination is in the initiation or development phase. This scenario involves increasing supply to meet demand. In the field of environmental protection, the destination can improve sewage and wastewater treatment plants. Software technology can be used to determine optimal locations for different types of tourism and non-tourist activities, or geographic information system (GIS) to channel tourism development along the desired route, envisaging the possible impacts of different types of tourist behaviour on different physical environments (Bishop and Gimblett, 2000). Destination Management Systems (DMS) were applied to tourism destinations and involved the coordination of the activities of all actors involved in the production and delivery of the destination tourism product (Cooper *et al.*, 1998).

The Geographic Information System (GIS) was applied to Broken Arrow Canyon, a tourist site in the Arizona Desert, USA (Butler, 2010). The model assists destination managers by combining information about the physical characteristics of the area (inclination, height, objects) with the postulated behaviour of different types of tourist factors. Also, the model helps destination managers to anticipate the environmental impacts of users in different environments which allows planning of sustainable development. In New Zealand, GIS has been used in connection with the Resource Management Act in 1991 (RMA) (Watkins *et al.*, 1997). MacAdam (1999) analysed the use of GIS by consultants in tourism in the United Kingdom, GIS is useful for tourism planning and management role in terms of the production of environmental statements; the use of system analysis techniques/audit trails; wildlife data given by English nature for the management of ecology in local areas and other facts.

2. Case study: Nature Park Zlatibor - the most visited touristic destination

Zlatibor is the most visited mountain destination in the Republic of Serbia. It contributes to about 30% to total attendance, being placed in front of Kopaonik which contributes to around 16% and Tara with 12%. The mountain is located in South-Western Serbia, between 43°31' and 43°51' North Latitude and between 19°28' and 19°56' South Longitude. It belongs to the Zlatibor district and occupies 11% of the total territory of Serbia.

The organized development of tourism on Zlatibor began in 1893, when King Alexander Obrenovic stayed on this mountain and supported the request of the local population to develop an air spa and to construct the hotel "Kraljeve vode" and the villa "Čigota". Sarajevo merchant Nikola Selak built the first cottage below Tornik. The largest number of buildings was built between the two world wars in the locations of Kraljeve Vode and Palisad, next to Ribnica and Oko. The development

of tourism contributed to the crossing of the road from Užice to Čajetina, as well as, the road from Čajetina to Kokin Brod and railroads from Belgrade to Bar with Zlatibor station. In the sixties of the twentieth century, the hotel "Palisad" was built along with a Specialized hyper-steroid treatment facility. The healing factors of Zlatibor include clean and dry air (a high percentage of oxygen and ozone) which has influence on the blood cells, the treatment of acute and chronic respiratory diseases and thyroid gland. A detailed record of the number of tourists and their overnight stays on Zlatibor dates back to the fifties of the twentieth century. In 1953 were registered 1.393 tourists with 41.550 overnight stays. These were mainly long stay, due to the predominance of visitors who were treated at Zlatibor. Foreign tourists visited Zlatibor in 1956 and these were foreign transit passengers who spend their night in Zlatibor, but also businessmen who stay in Uzice and the surrounding towns and spend their spare time on Zlatibor. In the period between 1955 and 1965, the number of visitors and overnight stays were variable and did not exceed 5.000 visitors and 50.000 overnight stays per year. During the period 1966-1975, the turnover of tourists and their overnight stays on Zlatibor shows a significant increase compared to the previous period and was the result of an increase in the living standard of the population.

Starting from the period 1978 to 1990, the number of tourists on Zlatibor is constantly greater than 100.000. The time after 1990 was characterized by the breakdown of the Socialist Federal Republic of Yugoslavia, the state of war, the great economic crisis and the decline in living standards which had a negative impact on the turnover of tourists. Most facilities operated with reduced capacity and due to poor occupancy at a minimum profitability level or even losses.

In the period from 1990 to 2013, the total number of tourists did not exceed 100.000 visitors. Only in 2007, the number of tourists reached the 1990 level. In 2008, a high tourist interest was achieved mainly due to the opening of the renovated ski center Tornik with a cable car. Domestic tourist demand was the prevailing segment of tourists and accounted for more than 90% in the total number of tourists during the observed period. Domestic tourists flows accounted for around 93% of arrivals and 98% of nights.

Table 2. Tourist visits in the mountain Zlatibor

Year	Arrivals		Nights	
	Domestic	Total	Domestic	Total
1955.	1.520	1.520	45.860	45.860
1965.	4.350	4.609	40.377	40.652
1975.	71.102	74.485	330.949	335.203
1978.	103.789	106.394	464.532	468.646
1985.	116.208	119.050	686.451	691.276
1995.	75.196	76.033	456.077	458.498
2005.	73.294	80.518	324.252	345.671

2006.	79.385	88.002	348.057	376.612
2007.	89.117	101.613	394.753	433.687
2008.	90.008	103.854	390.135	436.474
2009.	79.809	93.093	345.352	388.977
2010.	88.039	104.824	352.583	404.224
2011.	93.776	116.302	410.833	475.300
2012.	92.749	110.934	401.703	463.363
2013.	93.858	114.976	388.344	455.759

Source: Republican Bureau of Statistics

Based on the above data and the analysis of the trends in tourist visits, the period from 1955 to 1965 would correspond to the exploring phase, from 1965 to 1978 to the involvement phase and from 1978 to 1990 to the development phase; the consolidation phase started in the 1990s, the stagnation by 2010, and since 2010 was the rejuvenation due to the growing number of high-class accommodation capacities, the increase in the number of foreign tourists and the attractiveness of Ski Center and Gondola.

The average relative growth rate of tourist visits on Zlatibor during the 1955 - 2013 period was about 4.38%. Over the period from 1955 to 1966 the growth rate was negative and amounted to -7.8%; the highest positive growth rate was reached over the 1967-1985 period 21.72%. After 1985, tourist attendance declined, which translated into a negative growth rate of -1.25%. Given the data on the evolution of the tourist growth rate on Zlatibor, it can be considered that Zlatibor is currently in the stage of stagnation.

Figure 1. Movement of tourist attraction and phase of life cycle



Source: author's representation

However, there are some evolutions which undermines such a hypothesis:

- The reduction of the negative growth rate of the tourist visit in 2013 compared to 2010;
- In addition to stabilizing economic flows, the beginning of the twenty-first century also led to the construction of new and modernization of the existing accommodation capacities, primarily in private ownership, which increased tourist visibility;
- The largest number of accommodation capacities in Zlatibor are rated with 3* and 4* (78%). In the last few years were built of mini tourist complexes which function as a resort.

The tourism in Zlatibor is characterized by relatively short stays and this tendency was obvious over the 2003 - 2013 period. This may be explained by a reduced number of persons who come for treatment and the increase number of persons who come to congresses and conferences. The latter visitors are just retained in transit or just spend the weekend and thus led to a change in the structure of visitors and the motives for a stay. The problem which occurs along with the tourist development of this destination relates the possible devastation of the environment by overbuilding and overcrowding the tourist facilities in the central part of the destination.

2.1. Measures for achieve ecological and economic sustainability in the mountain Zlatibor

Bearing in mind the growing attendance of tourists after 2010 which has an impact on the realization of economic benefits, the question of sustainability is being raised. There are several different ways on which the destination may enhance sustainability:

1) Development of the tourism policy will allow for a more even spatial distribution of tourists within the area, whereby tourism movements will focus on peripheral parts. This will reduce the pressure on critical areas in which key tourist motives are located and will stimulate tourism spending in new zones and localities. In this way, new business opportunities will be opened, which will support the economic development of the peripheral parts of the destination and increases the employment of the resident population.

Further development of ecologically forms of tourism based on the principles of sustainability may also be a solution: sports-recreational, rural, excursion, health, ethno and eco-tourism.

2) Tourism management activity (destination management) through the Tourist Organization Zlatibor, as well as, the Tourist Organizations of the Region of Western Serbia and the Regional Development Agency of Uzice. About 40% of the annual budget is allocated for promoting and marketing of the destination.

3) Projects that affect the sustainable development in the destination. There is a job position for managing projects in the field of tourism in the Tourist organization Zlatibor. Projects involving local

self-government include: renovation of the ski center, construction of a wastewater treatment plant, municipal service center and a unique information system. "Tourist signalization of Zlatibor and its surroundings" is a project submitted by the Tourism Organization Zlatibor. "Zlatibor Ozone Trails" is a project implemented by the Tourist organization Zlatibor in cooperation with the International Organization for Development Assistance (IRD).

4) Use of the concept of spatial diffusion as an alternative to the development of mass tourism in the central part of Zlatibor where development on peripheral parts can contribute to more balanced development in the area. As for the area of spatial diffusion, there are several possibilities: development of tourism in peripheral parts or other village near the Zlatibor (Mačkat). Mačkat is located 16 km from the centre of Zlatibor and has always been a place where travellers travelled for good food in famous taverns. There are about 800 inhabitants in the village who are mainly engaged in agriculture and production of smoked meat products. Every January "Prosciutto" is organised.

5) The concept of sustainable agriculture would be realized with the stimulation of specialized agricultural production (production of food of defined geographical origin). Zlatibor villages are known for the production of dry-smoked products, primarily beef, pork and sheep's prosciutto. The technology of prosciutto production has remained unchanged for years.

2.2. The mountain Zlatibor as a protected area and centre of a high diversity

Nature Park "Zlatibor" (part covered by the NP "Tara") is a significant natural morphological site of about 300 km². The largest part of Zlatibor (89.75% or 2,692.49 hectares) is in the third degree of the protection regime for agriculture (primarily animal husbandry), forestry and tourism. This degree implies selective and limited use of natural resources, as well as, controlled interventions and activities in the area. Nevertelss, they need to be in line with the functions of a protected natural asset or to be related to the traditional forms of performing economic activities (agriculture and forestry) and housing, including the tourist construction of the function of recreation and sport, water management, clean energy, renewable energy and transport (Spatial Plan of Special Purpose NP Tara, Official Gazette of RS No. 100/10). Bearing in mind that the Zlatibor Nature Park, as well as, Tara protected area (National park), measuring the load capacity can be important from the aspect of future sustainable development (Todorović, 2014).

The protected area of the Nature Park "Zlatibor" is one of the high diversity centers. The characteristics of the ecosystem, its sustainability, ecosystem and genetic diversity define this part of Serbia in a region of international significance for the protection of plants. There are two Emerald areas: International Significant Plant Areas (IPA) and Areas for daily butterflies (RBA) (List of

Internationally Important Areas, 2011). Emerald is a European ecological network for the conservation of wild flora and fauna and their natural habitats in non-EU countries. It was launched in 1998 by the Council of Europe as part of the Convention on the Conservation of European Wild Fauna and Flora and Natural Habitats.

In the protected area of the mountain Zlatibor, the collection of medicinal herbs and forest fruits can only be allowed in accordance with the conditions of the Nature Protection Institute of Serbia in terms of species and quantities. In addition, the eventual construction of a new and expansion of existing tourist infrastructure and facilities should be carefully planned, primarily in terms of location and envisaged capacities. The construction of accommodation capacities should be avoided in completely new locations because it also requires the construction of a completely new transport and logistics infrastructure that would endanger biodiversity. Therefore, possible negative effects on the environment need to be avoided, while adequate protection measures are required.

During the nineteenth century most of Zlatibor was covered with forests dominated by three types of pine: white, black and mullet. Golden pine is a variant of white or black pine. This pine has a part of the yellow and yellow-green needles. At the optimal distance between the trees (10 to 15 m), the pine properly develops the crown which from a touristic aspect gives the aesthetic value to the landscape. The components of white pine have been developed on the northern slopes of Tornik to a height of about 1.300 m. The therapeutic properties of these forests are also very important. However, despite the great importance of the pine forests, they are often exploited due to their economic value. Urban planning should ensure their preservation of such values and prevent illegal construction.

Conclusions

The analysis in the work was based on the theoretical concept of the life cycle of a tourist destination that was applied to Zlatibor as the most visited tourist destination in Serbia. The phases of the life cycle of the destination have been identified with an explanation of growth or a decrease in tourist attendance at each phase. The intensive increase in tourist attendance and the construction of tourist capacities and infrastructure point to the need to preserve the natural predisposition of Zlatibor as a region of high diversity. By developing tourism on the peripheral parts and respecting the degree of protection of the area and the development of the allowed activities, the economic benefit from tourism will be achieved, as well as, a sustainable development of this destination.

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