

# APPLICATION OF THE DESTINATION LIFE CYCLE CONCEPT IN MANAGING URBAN TOURISM: CASE OF POZNAN, POLAND

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## Abstract

The paper discusses the operational potential of the destination life cycle (DLC) concept with reference to tourism planning and management in urban destinations under conditions of risk resulted from the shortage of extensive and reliable information and data on a destination's appearance. The DLC of the city of Poznan (Poland) is examined. The aim of the investigation is to identify symptoms of decline, in the framework of the life-cycle concepts proposed by Butler (1980); van der Borg (1991) and Russo (2002). The analysis of secondary data sources and a questionnaire survey among local tourism experts were conducted to assess the threat of Poznan's tourism decline. Results show that Poznan's tourism is currently in the development stage, nonetheless the risk of a decline is moderate. The main and most detrimental symptoms of a possible crisis are the result of an insufficiently developed tourist offer and problems relating to managing tourism on a municipal level.

## 1. Introduction

In the new global tourism environment, destinations have to adopt strategies, methods and tools already used by firms to market, attract tourists, manage their products, and to keep competitive positions. Despite the fact that they must act as formal organisations, in reality their functional structure is much more complicated. Cities especially are

mostly diversified economic structures in which tourism is not the only component or prime activity or industry (Haywood, 2006: 60; Law, 2002; van der Borg, 1991: 30). Moreover, tourism in cities itself has a diversified, heterogenic character, whose condition is influenced by many social, economic, political and environmental factors. All these constraints deem city tourism planning and management a very complicated process, burdened even more so by a high uncertainty and risk level. An additional hindrance is the fact that many aspects of tourism economy elude official monitoring, which results in the tourism managers' very narrow knowledge. It could bring dangerous consequences when a city's tourism falls down a developmental crisis. As Manente and Pechlaner (2006: 251) notice, some destination managers perceive a decline more as a theoretical concept than a threat and do not establish any warning system.

In the opinion of many researchers (i.e. Butler, 2000; Cooper and Jackson, 1989; Getz, 1990; Martin and Uysal, 1990; Manente and Pechlaner, 2006; Russo, 2002), the concept of the destination life cycle (DLC) in general may aid the management and planning process of city tourism. Getz (1992: 752) claims that "the concept of a destination life cycle has apparent potential to advance the theory and practice of tourism planning, particularly as a conceptual framework within which long-term changes can be forecast and strategies for land use, economic development, and marketing can be harmonized". In this paper, the DLC concept is used to assess the threat of a decline of tourism industry in a city, when there is a shortage of extensive and reliable information and data considering that problem. As the case study, the city of Poznan (Poland) is examined. The aim of the paper is to detect emergent symptoms of a decline of tourism in the city.

The study is two-fold. The first step is to determine the current stage of the life cycle at which the city's tourism is, using secondary data sources. The second step is an attempt to research the risk level of an impending decline stage, using a primary survey among local tourism managers, business professionals and experts.

## **2. DLC Concepts and Decline Indicators in Urban Tourism**

Of all the models describing the development of tourism within a spatial scope, the most commonly described in literature are 3 concepts: the tourism area life cycle by Butler (1980), the revised life cycle of the

city as a urban tourist attraction by van der Borg (1991) and Russo's (2002) "vicious circle" of tourism development in heritage cities.

The tourism area life cycle (TALC) concept, proposed by Butler in 1980, can be considered a classical model of tourism evolution. A tourism area is regarded as a product which constitutes a complete entity (Tooman, 1997), and it evolves, going through successive phases named exploration, involvement, development, consolidation, stagnation and post-stagnation (alternatively the decline, rejuvenation or stabilization), creating a logistical curve in the shape of an "S" (Butler, 1980). The variable most often used to determine the stage of development is the number of visitors or visitations. The TALC model has been afforded many descriptions and creative adaptations, supplementations and verification (Lagiewski, 2006), so an in-depth characteristic of developmental stages is not called for here. The main factor determining the incidence of a stagnation stage and the following decline of a destination is the critical threshold of tourist capacity, defined by physical, psychosociological, and sociological criteria (Martin and Uysal, 1990).

Van der Borg (1991) uses the TALC concept as a starting point for an in-depth qualitative analysis of spatial-economic costs and benefits and the changing composition of visitor flows in a city. The life cycle of an urban tourist attraction consists of four stages (van der Borg, 1990: 60-65): launching (characterised by underdeveloped tourist accommodation and infrastructure, and negligible local benefits of tourism), take-off (in which the volume of tourists grows and the proportion of day trippers declines, investments increase, and local direct and indirect benefits of tourism are massive), stagnation (the number of tourists stagnates and the proportion of day trippers grows, the spatial concentration of tourist traffic in the centre grows dramatically and exceeds the carrying capacity, the supply of accommodation facilities in the peripheral area expands), and decline (characterised by decreasing demand, diminishing local tourist industry, high prices, loss of a city's identity and growing local costs of tourism).

Russo's (2002) "vicious circle" of tourism development concept complements van der Borg's concept in terms of its explanation of the mechanics of stagnation and decline. The direction and intensity of tourism evolution is determined through the concentration of attractions and tourist demand and the simultaneous de-concentration of tourist supply on the one hand, and a diminishing emotional involvement of recipients combined with declining lengths of stay on the other.

On the basis of the stage descriptions supplied by these models and with a knowledge of other destinations' experience it is possible to assert

how many of the features characterizing a given stage - in this case a decline - are already present in the given city and how prevalent they are. On the basis of the TALC model as well as the research and studies referring directly to it (Butler, 1980; Buhalis, 2000; Menente and Pechlaner, 2006; European Commission, 2002), it is possible to identify 20 indicators pointing to a decline stage: decrease in number of visitors, number of tourist overnights and the average stay, seasonal concentration of visitor flows, decrease in the quality of the tourist coming to the city, declining proportion of first-time visitors, varying composition of visitor flows, reduction of city's main market segments, decrease in tourist expenditures, physical problems (congestion, traffic, deterioration of cultural attractions etc.), lack of adequate infrastructure and supply, decrease in the quality of tourism product, decline in profits of the major tourist businesses, decline in city's advertising elasticity, social problems, decrease in occupancy rates, competitors threat, negative political conditions (local and external), and threat of other exogenous factors.

On the other hand, using the van der Borg (1991) and the Russo (2002) models we can additionally identify 12 indicators: increasing proportion of day trippers in total number of visitors, significant daily changes of visitor flows, overcrowding effect around main tourist attractions, high accommodation prices in the city centre, decrease in city's tourist appeal, declining profits of major tourist businesses located in the city, exceeded carrying capacity-occupancy rates, rapid growth of accommodation facilities in surrounding zone, decrease in jobs in tourism, physical restrictions of tourist facilities' growth, standardisation of tourist product, and the loss of city's cultural/heritage identity.

All the enumerated indicators can be treated as symptoms of a decline of a city's tourism. Their significance and incidence varies, however just by determining their number we may gain a measurable idea of a crisis risk. As noticed by Manente and Pechlaner (2005), many indicators essential to the full understanding of a destination's trend, apart from the basic ones denoting tourist numbers, are not collected on a regular basis or even monitored at all. Therefore, when studying the symptoms of a stagnation it is necessary to look past using secondary resources of a statistical and marketing nature and to employ the knowledge and opinions of experts who deal with the development of tourism.

### **3. Method and Data**

The symptoms of a decline are derived from the analysis of a city's tourism life cycle. For this reason the study has been divided into two

phases: (1) ascertaining Poznan's tourism life cycle and identifying the stage at which the city is; (2) testing the symptoms of a decline.

The application of DLC model becomes an operational challenge in almost every instance, due to temporal discontinuity, a lack of standardization and limited reliability of statistical information for tourism (e.g. Agarwal, 1997; Butler, 1980; Getz, 1992). In Poznan's case, secondary analytical sources and methods have been employed, i.e. an analysis of available sources and simplified statistical methods. Statistical data, historic and contemporary written and non-written sources, and scientific publications have been analysed. Poznan's DLC has been carried out on the grounds of TALC model (Butler, 1980), using two leading units of measurement: the number of overnight stays in hotels, and the number of hotel beds, available for the 1950-2008 period. Only these indicators appeared to be the most reliable, comparable and continuous. Unfortunately, both van der Borg's (1991) and Russo's (2002) concepts cannot be fully adapted due to the lack of appropriate statistical information.

In the second phase the indicative method was employed, based on 32 indicators listed above. Testing was carried out in two stages. First, the existence of statistical data was studied. Data for testing other symptoms were collected through a self-administrated Internet questionnaire distributed among local tourism experts and professionals, similar to Getz's (1992) investigation. The respondents (total: 67) had been chosen from three groups: city tourism managers (municipal politicians, civic employees, DMO managers)-19 people, tourism business professionals (operators or owners or representatives of industry-related organisations)-28 people, and academics (local universities' experts)-20 people. Similar to Getz's (1991) survey, the sample was chosen on the assumption that identified key people are tourism-related knowledgeable and/or can influence the tourism planning and management in the city.

The questionnaires were sent out in March 2011. The research project was based on the Tailored Design Method (Dillman, 2000), therefore an email reminder was used and followed by a telephone reminder. Initially, 10 completed questionnaires were received. The reminders increased the number of participating people to 48, yielding to a 71.6% response rate (city tourism managers - 78.9%, business professionals - 46.4%, and academics - 100%).

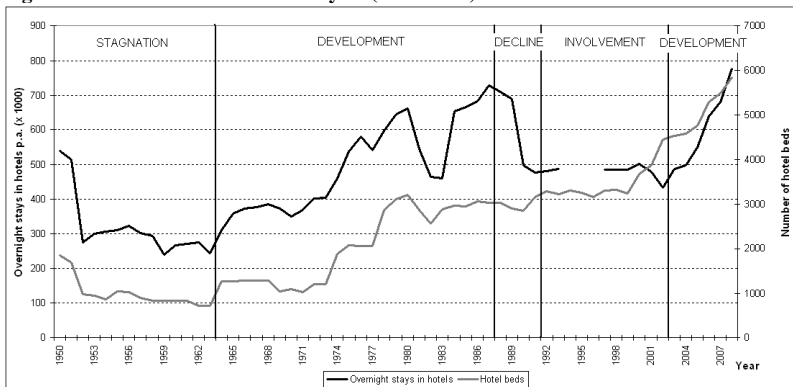
The respondents were asked to determine on an ordinal scale the intensity at which particular potential symptoms of decline of the tourism industry are present in Poznan (with the options 'not present', 'present in

small/medium/large intensity’ and ‘I do not know’). Furthermore, they were asked to indicate which indicators are most detrimental. The questions drew on the opinions of the respondents made on the basis of their personal knowledge and experience. Data analysis was also concentrated on ascertaining whether significant differences in the opinions of particular groups of experts were present. Due to an insufficient amount of empirical measurements covering individual cells of the tables which represented indicator results, it was impossible to use the chi square test. A simple logic test was used instead.

#### 4. Results: Poznan’s Tourism Life Cycle and Symptoms of Decline

Poznań is the capital of Greater Poland, the historical region and administrative province in west-central Poland (565 thousand inhabitants). The city is readily accessible and that is why it has been developed as a trade, services, industrial, and academic centre. In 2009 over 496 thousand visitors and 892 thousand overnight stays were recorded. According to City Council, two thirds of the purposes of stay are business and professional, and one third are personal. There are more than 8000 beds in 70 accommodation establishments, two thirds of which are hotels. The hotel bed density is 37/10.000 inhabitants (USP, 2009).

Figure 1: Poznan’s destination life cycle (1950-2008)



Poznan’s DLC differs considerably from the classic Butler model. Quite apart from the fact that the early stages took place before the period covered by the study, there are two major features of the city’s life cycle:

sequence alteration and a twice-repeated development stage (Figure 1). The Poznań's DLC curve shows a double cycle sequence, which Rink and Swan (1979) call a cycle-recycle pattern:

- the first cycle taking place in a centrally planned economy (1950-1989) includes the stages of stagnation (1950-1963), development (1964-1987) and an early part of the decline stage (1987-1989);
- the second - free market cycle (1990-2008), which includes the end of the decline stage carried over from the first cycle (1990-1991), and the stages of involvement (1992-2002) and repeated development (2003 till now).

Tourism in Poznan has been in its development stage since 2003. There has been a dynamic and perpetual increase in the number of hotel beds (12% growth) and overnight stays (Figure 2). This growth however was slowed down in 2009 by the worldwide economic crisis, although it cannot be said that this decline will be of a more permanent nature. The city is at the threshold of tourist maturity. It is therefore important to prolong the current stage of development as much as possible. That is why, despite positive indicators, attention needs to be paid to certain problems arising from the characteristics or the tourism industry in Poznan.

In the second stage of the research, upon analysing secondary statistical data it was conceded that only one of 6 indicators shows negative changes (Figure 2): the average tourist stay is below two days. The number of day trippers is not measured. For the remainder there are no reliable data allowing for us to ascertain the symptoms of a decline.

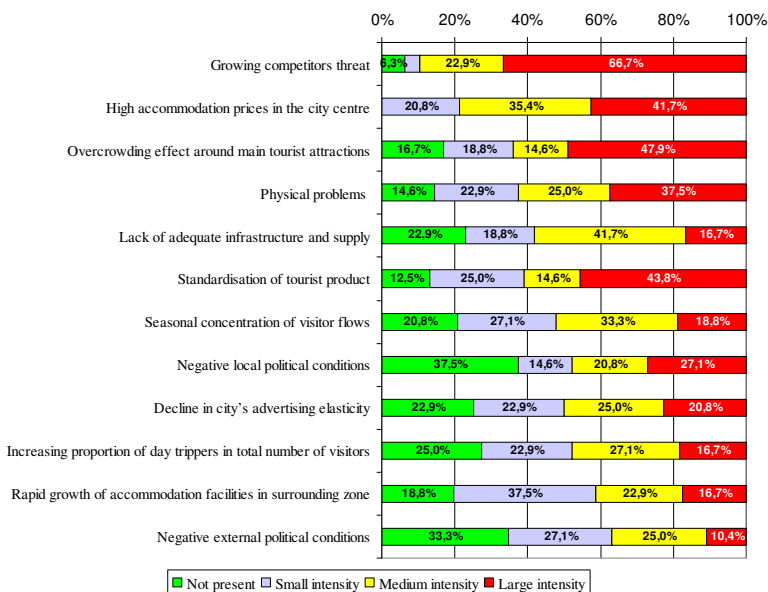
**Figure 2: Testing for the decline stage using secondary statistical data.**

Indicator	Compliance	Comments
Decrease in number of tourists	NO	The mean annual rate stands at 8.7% since 2003
Decrease in number of tourist overnights	NO	The mean annual rate stands at 10.4% since 2003
Decrease in the average stay	YES	The average tourist stay is 1.8 day
Decrease in occupancy rates	NO	49.4% (2009), and growing (40.1% in 2004)
Exceeded carrying capacity-occupancy rates	NO	See above
Physical restrictions of tourist facilities' growth	NO	16 facilities growth since 2003

The results of the executed questionnaire survey allowed for an identification of the most strongly present, in the opinions of the experts,

symptoms of decline. Due to the volume limitations of this paper Figure 3 is used to present the indicators whose presence was noted by at least 2/3 of the respondents, with over 33% of them claiming the level of intensity to be at least medium. Thus were identified the following 12 symptoms of a decline of tourism in the city, 3 of which are of a supply character, 5-demand, 4-general character.

**Figure 3: Symptoms of a tourism function’s decline in Poznan - questionnaire survey’s results.**



The two most commonly chosen indicators (over 90% indications, with a minimum of 77% denoting a medium to strong level of intensity) are the competitors threat and high accommodation prices in the city centre. 4/5 of respondents indicated problems with the tourist product being far too standardised, problems with the periodical fluctuations of tourist flow (peeking on work days as well as in Spring and Autumn), and the physical problems (mainly traffic jams and congestion). Over half of these respondents claimed the intensity of prevalence was at least medium. No significant variations in the expert groups’ replies were noted, the only discrepancies that can be detected are those pertaining to the problem of excessive seasonality- not noted by 40% of academics (compared to just



7% of the experts from the remaining groups) which can be put down to a dissimilar understanding of this matter. The distinguished problems originate from the business nature of Poznan's tourist product which has been shaped as such since the nineteen-twenties, mainly as a result of international trade fairs organised in the city. The business nature of the product made it difficult to utilize the developmental potential of other markets, mainly cultural tourism. These problems have accompanied the development of Poznan's tourism economy regardless of the city's life cycle stage. It is however necessary to emphasize that even if these symptoms are not considered typical of a crisis in these circumstances, they will most definitely exacerbate the effects of a possible stagnation and decline.

Other logical correlated factors - lack of adequate infrastructure and supply, growth of accommodation facilities in surrounding zone, and overcrowding effect around main tourist attractions-all unequivocally constitute the negative manifestations of a city's tourism crisis as described by v. der Borg and Russo and refer not only to business tourism, but also to cultural tourism. 40% of experts interviewed indicated a somewhat intensive incidence at least. The differences in expert opinions show up with reference to the question of the city's limited tourist offer. Only 53% of city tourism managers agreed this was an indicator currently present (irrespective of its intensity), 85% of whom were academic experts and 92% - business tourism professionals.

The indicated share of day-trippers in the visitor structure deserve a separate discussion. In the opinion of 2/3 of experts a large number of visitors to the city stay for a couple of hours, which is a result of the insubstantial development of the tourist product focused on culture and heritage tourists. The city has failed to develop a unique or even distinctive offer aimed at this market.

The four consecutive indicators do not refer directly to the conditioning of the tourist function's development. Around 2/3 of respondents indicated developmental problems in the form of negative local political circumstances and a decrease in elasticity in promotional efforts of the city with respect to tourists, with 46% regarding this a medium- or highly intense problem. City tourism managers directly responsible for this field of work were slightly less strict in their assessment of these problems. The negative external political conditions and growing competitors threat (the first and last indicator in Figure 1 respectively) are representative symptoms of Poznan's crisis, but are also brought about by global uncertainty and risk, as well as other Polish cities

catching up developmentally, and may therefore be independent of the development stage of tourism. However, it must be emphasized that there is great competition on the city tourism market between cities of a similar rank and size.

Apart from verifying the intensity of incidences of certain symptoms of stagnation and decline, the respondents also indicated which were most detrimental to further development of tourism in the city. The largest number of indications (30 in total, constituting 63% of all respondent answers) concerned the growing competition of other cities. Moreover, the following indicators reached the 15% threshold: over standardization of the tourist offer (27%), drop in elasticity of promotional efforts and a lack of adequate infrastructure and supply (19% each), physical problems and a negative local political situation (17% each), as well as high accommodation prices in the city centre (15%).

## 5. Conclusion

The executed study shows that Poznan's tourist function is currently in the development stage, nonetheless the risk of decline is moderate. The biggest current developmental problem of the city's tourist industry lies in its depleting competitiveness of its resources. The main and most detrimental symptoms of a possible crisis denoted by experts are the result of an insufficiently developed tourist offer and problems relating to managing tourism on a municipal level in an environment of growing competition. On the other hand, and especially in the context of ascertaining the current rate of development, many of the symptoms identified during the course of this study may just as well confirm the immaturity of Poznan's tourism function, i.e. its continuing developmental stage. But paradoxically, their existence may suggest the risk of the tourist life cycle's shifting from its developmental stage directly to the decline stage.

It is therefore necessary to briefly outline the main weaknesses of the presented study. Firstly, most of the educed indicators were tested subjectively - there are no objective numerical data allowing otherwise. Secondly, the respondents, influenced by the subject of the analysis, may have demonstrated an overly strict approach to the studied elements and changes. Thirdly, for the purpose of objectivity advanced methods of statistical study could not be employed to test the relations between the opinions themselves and between the respondent's character features. It is in this context that we may talk of limiting, but not significantly ruling out

the risks and uncertainties involved with planning the development of tourism in Poznań.

Poznan's example shows that symptoms of a decline can be detected early on in the development stage. Given this context, a city's competitive growth can be achieved by prolonging its development stage. According to Martin and Uysal (1990), during growth and maturity, management of change is the priority, in order to prevent deterioration or decline. Therefore, it is at this stage that all aspects of a city's development should undergo monitoring to ascertain risk size as well as identify areas at risk of the inevitable advent of the decline stage.

Despite its descriptive character and numerous difficulties with interpretation the DLC concept can be put to practice in tourism management of a city, even in conditions deemed uncertain through lack of sufficient data from current monitoring of the state of tourism economy. By utilizing existing statistical data and expert knowledge it is possible to decipher the current position on the evolution curve and study the likelihood of future decline stages. Such consistent monitoring directly contributes to elevating or maintaining the competitive position of a city.

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