

SELECTING A STRATEGY FOR INITIATING ECO INN THROUGH SWOT AND AHP METHODS

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Abstract

Eco inn is type of accommodation in ecotourism where philosophy and principles of ecotourism are included which means that in addition to accommodation and quality tourism experience eco inn had to ensure adequate protection of the environment. One of the most important activities in order to successfully implement strategy for initiating eco inn is to determine current and future opportunities and threats in the business environment of the company wherefore is necessary to use methods and techniques of strategic management. Strategic management involves identification and definition of objectives, strategy determination, process of realization of defined strategy, control of realization and obtained results. The paper describes possibility of applying SWOT analysis and Analytical Hierarchy Process (AHP method) in order to select a strategy for initiating eco inn. SWOT analysis provides a basis for decision-making by defining the internal (strengths and weaknesses) and external factors (opportunities and threats) from which derive certain strategies while the AHP method helps in prioritization of defined strategies.

Keywords: *Eco inn, Strategic management, SWOT analysis, AHP method*

1. INTRODUCTION

Concept of ecotourism includes educational and experiential perspective combined with the philosophy of environmental protection. This concept seeks to develop the principles of environmental experience, learning about the natural and cultural values, as well as the care of the local environment.

One of accommodation type in ecotourism is eco inn - this is the place where the principles of sustainable tourism meet. In addition to accommodation and quality tourism experience, which refers to the experience of tourists, eco inn must provide adequate care for the environment. Therefore, the natural beauty is a key factor of good business.

Eco inn is modest building that meets the basic needs of tourist. It must meet ethical principles, which relate to minimize the impact of visitors on the environment. That influence relates to the roads leading to eco inn, the architecture of which must be in the style of the local cultural heritage, as well as through the organization of business. If

possible, eco inn should strive to use renewable energy, wastewater treatment and recycling of waste. Another frequently mentioned criteria states that eco inn should not belong to the known hotel chains, but it is owned by the local community, which is particularly important in the development of the region and raising the standard of living. [1]

2. METHODOLOGY

The methodological procedure execute situational analysis concerning the SWOT where there are included both internal and external factors. From SWOT analysis derives TOWS matrix which gives emphasis to threats and opportunities as external factors which determine the future within the strengths and weaknesses as internal factors. TOWS matrix allows to look at alternative strategies that are the result of a combination of internal and external factors. Strategies that have emerged from the abovementioned analysis are compared with each other and determined by their relevance for initiating eco inn, using AHP method. AHP method is processed using the software tool Expert Choice.

2.1. SWOT analysis

In order to define and select strategies for eco inn, there was a situation analysis which includes analysis of internal and external analysis, Figure 1.

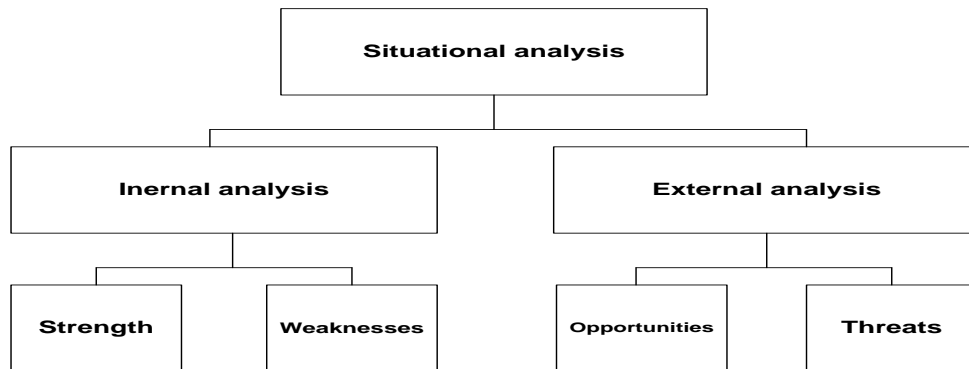


Figure 1. Situation analysis [2]

In the SWOT analysis of these factors are grouped into four parts: strengths, weaknesses, opportunities and threats. The goal of applying SWOT analysis in the strategic planning process is to develop and adopt a strategy that provides a good balance between internal and external factors. SWOT analysis can be used when an alternative strategy suddenly appears and when a decision on it must be analyzed. SWOT does not include means for the analytical determination of the significance of factors and evaluation of alternative decision with respect to factors. The result of SWOT analysis is often just a list or incomplete qualitative examination of internal and external factors. [3] Table 1 presents the most significant factors of SWOT analysis that influence on business of eco inn.

Table 1. SWOT analysis of eco inn

Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Awareness of the positive impact of ecotourism on local, economic and environmental development ➤ Openness and hospitality of the local population ➤ Culture, tradition and history of the area 	<ul style="list-style-type: none"> ➤ The lack of professional workers (staff) in ecotourism ➤ The limited financial power of citizens to launch significant activities for the development of entrepreneurship ➤ The state of general infrastructure ➤ Insufficient involvement of communal services
Opportunities	Threats
<ul style="list-style-type: none"> ➤ Increasing employment at local level ➤ The constant increase of foreign and domestic tourists in Serbia ➤ Establishment of cooperation with higher education institutions in the municipality in order to implement training of workers ➤ The possibility of many summer and winter activities on the mountain and at the base of the mountain 	<ul style="list-style-type: none"> ➤ The continued depopulation ➤ Insufficient affirmed destination ➤ Insufficient allocation of budgetary resources of local communities

2.2. Creation of the strategies (TOWS matrix)

TOWS (threats, opportunities, weaknesses, strengths) analysis is a method for strategic analysis, which includes a systematic and comprehensive assessment of the external and internal factors that determine the current competitive position and growth potential of the company. TOWS analysis is closely related to the more popular SWOT, but according to Michael Watkins, sequence of the words in the acronym SWOT represents incorrect sequencing process in serious strategic analysis. Starting from the analysis of strengths is wrong, because managers should first identify all the threats from the business environment to do the planning and preparations for protection against identified threats. [4]

There are four basic alternative strategies depending on the analyzed factors:

- SO (Strengths-Opportunities): maxi-maxi strategies - How to use the strengths to maximize and take advantage of opportunities;
- WO (Weaknesses-Opportunities): mini-maxi strategies - How to minimize weaknesses to take advantage of chances;
- ST (Strengths-Threats): maxi-mini strategies - How to use the weaknesses to minimize actual and potential threats;
- WT (Weaknesses-Threats): mini-mini strategies - How to minimize the weaknesses in order to avoid threats.

On the basis of the analyzed factors listed in Table 1, the following strategies are created, which are presented in Table 2.

Table 2. TOWS matrix on the application of external and internal factors of eco inn

	Strengths	Weaknesses
	<p>S1. Awareness of the positive impact of ecotourism on local, economic and environmental development</p> <p>S2. Openness and hospitality of the local population</p> <p>S3. Culture, tradition and history of the area</p>	<p>W1. The lack of professional workers (staff) in ecotourism</p> <p>W2. The limited financial power of citizens to launch significant activities for the development of entrepreneurship</p> <p>W3. The state of general infrastructure</p> <p>W4. Insufficient involvement of communal services</p>
Opportunities	<p>SO1. The strategy of promoting destinations for ecotourism development</p> <p>SO2. The strategy of harmonization with external entities</p>	<p>WO1. The strategy of increasing employment</p> <p>WO2. The strategy of providing quality conditions</p>
<p>O1. Increasing employment at local level</p> <p>O2. The constant increase of foreign and domestic tourists in Serbia</p> <p>O3. Establishment of cooperation with higher education institutions in the municipality in order to implement training of workers</p> <p>O4. The possibility of many summer and winter activities on the mountain and at the base of the mountain</p>		
Threats	<p>ST1. The strategy of preserving the cultural heritage and tradition</p> <p>ST2. The strategy of allocation of funds intended for the development of ecotourism</p>	<p>WT1. The strategy of low costs</p> <p>WT2. The strategy of investing in infrastructure</p>
<p>T1. The continued depopulation</p> <p>T2. Insufficient affirmed destination</p> <p>T3. Insufficient allocation of budgetary resources of local communities</p>		

2.3. Analytical Hierarchy Process (AHP)

Analytical Hierarchy Process helps with decision-making. It was developed by Thomas Saaty. Its main use is to offer solutions for problems with multiple-criteria decision-making in business environment in which several alternatives are obtaining the given goals compared with various criteria. AHP method is establishing weights of alternatives for organizing objectives, criteria and sub-criteria in a hierarchical structure. Weights and priorities obtained by the decision makers, the assessment of each item of the problem that is compared to some other items on the same hierarchical level. [5]

Figure 2 shows the hierarchical structure of multi-criterial levels, based on four levels:

- Choosing the best strategy;
- Criteria - SWOT group;
- Sub-criteria - SWOT factors;
- Strategies.

Figure 2. The structure of the hierarchical model for prioritizing a strategy based on the TOWS matrix (Table 2) [2]

Determination of the importance of the criteria and sub-criteria is performed by comparing them using Saaty's scale (from 1 to 9). 1 represents a value equal to the value of the examined criteria/sub-criteria, while a value of 9 represent a particular preference for one criterion/sub-criterion compared to the second criterion/sub-criterion. In evaluating, it is necessary to take into account the level inconsistency, which should be less or equal to 0.1. In this way are filled the following tables: Table 3, Table 4, Table 5, Table 6, Table 7.

Table 2. Comparison of SWOT groups

SWOT	Strengths	Weaknesses	Opportunities	Threats	
Strengths	1	1/4	1/6	1/3	
Weaknesses	4	1	1/4	3	
Opportunities	6	4	1	5	
Threats	3	1/3	1/5	1	Incon.0,08

The results of comparing SWOT groups (Table 3) provide information about the relevance of certain SWOT criteria as shown in Table 8.

Table 3. Comparison of SWOT factors (Strengths)

SWOT	S1	S2	S3	
S1	1	7	6	
S2	1/7	1	1/3	
S3	1/6	3	1	Incon.0,03

Table 4. Comparison of SWOT factors (Weaknesses)

SWOT	W1	W2	W3	W4	
W1	1	5	5	6	
W2	1/5	1	1/2	4	
W3	1/5	2	1	4	
W4	1/6	1/4	1/4	1	0,09

Table 5. Comparison of SWOT factors (Opportunities)

SWOT	O1	O2	O3	O4
O1	1	4	7	6

O2	1/4	1	4	4	
O3	1/7	1/4	1	1/2	
O4	1/6	1/4	2	1	0,06

Table 6. Comparison of SWOT factors (Threats)

SWOT	T1	T2	T3	
T1	1	1/3	4	
T2	3	1	7	
T3	1/4	1/7	1	0,03

The results of the comparison of SWOT factors (Table 4, 5, 6, 7) provide information about the relevance of certain SWOT sub-criteria as shown in Table 8.

By multiplying the weighting factors obtained from the preceding steps, is obtained by the global importance of SWOT sub- criteria, it is presented in Table 8.

Table 7. Relevance of criteria and sub-criteria of SWOT analysis

SWOT factors	Relevance of SWOT criteria	SWOT sub-criteria	Local significance of SWOT analysis	Global significance of SWOT analysis
Strengths	0,093	S1	0.758	0.070
		S2	0.091	0.008
		S3	0.151	0.014
Weaknesses	0,248	W1	0.613	0.152
		W2	0.137	0.034
		W3	0.192	0.048
		W4	0.057	0.014
Opportunities	0,589	O1	0.610	0.359
		O2	0.239	0.141
		O3	0.061	0.036
		O4	0.090	0.053
Threats	0,070	T1	0.263	0.018
		T2	0.659	0.046
		T3	0.079	0.006

Figure 3 graphically shows the situation analysis SWOT results based on data from Table 8.

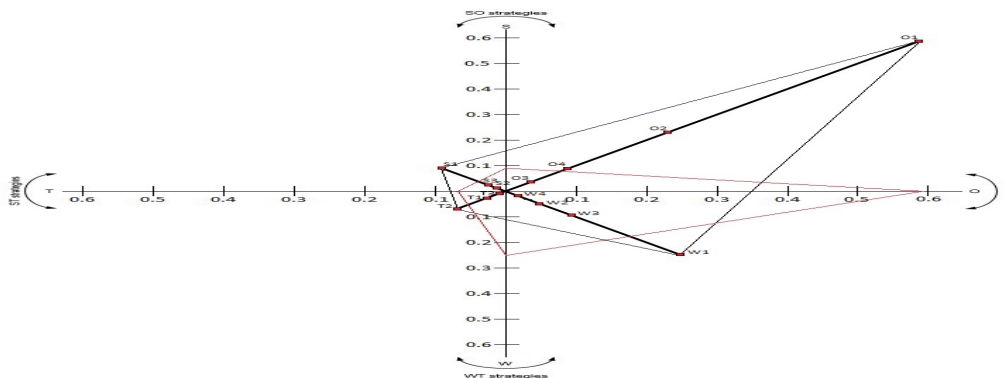


Figure 3. Situational Analysis of weight ratio of SWOT criteria and overall significance of SWOT sub-criteria

The results indicate the size of the impact of SWOT criteria in descending order $O \rightarrow W \rightarrow S \rightarrow T$. The values of the overall significance of SWOT sub-criterion to the greatest significance in the context of a single factor, also indicate same decreasing order $O1 \rightarrow W1 \rightarrow S1 \rightarrow T2$.

In the next step of this analysis, evaluating the weight of influence SWOT sub-criteria with the strategies defined in TOWS matrix (Table 2), determines the prioritization of proposed strategies in the context of all the individual mutual relations "SWOT" criteria, including different strategic solution.

In the last step, is calculated the overall priority of the considered strategies, such as:

$$W_{\text{alternatives}} = \begin{bmatrix} SO1 \\ WT2 \\ WO1 \\ WO2 \\ ST2 \\ ST1 \\ WT1 \\ SO2 \end{bmatrix} = W_3 \times W_{\text{SWOT sub-factors (global)}} = \begin{bmatrix} 0.249 \\ 0.195 \\ 0.162 \\ 0.111 \\ 0.083 \\ 0.082 \\ 0.064 \\ 0.054 \end{bmatrix}$$

The results define prioritization of proposed alternative strategies in the following descending order: $SO_1 \rightarrow WT_2 \rightarrow WO_1 \rightarrow WO_2 \rightarrow ST_2 \rightarrow ST_1 \rightarrow WT_1 \rightarrow SO_2$

SO₁ The strategy of promoting destinations for ecotourism development;

WT₂ The strategy of investing in infrastructure;

WO₁ The strategy of increasing employment;

WO₂ The strategy of providing quality conditions;

ST₂ The strategy of allocation of funds intended for the development of ecotourism;

ST₁ The strategy of preserving the cultural heritage and tradition;

WT₁ The strategy of low costs;

SO₂ The strategy of harmonization with external entities.

Based on the size of the obtained normalized weights is possible to define set of implementation strategies, provided that strategies with the same or approximately the same weight factors should be applied simultaneously, as shown in figure 4 and figure 5.

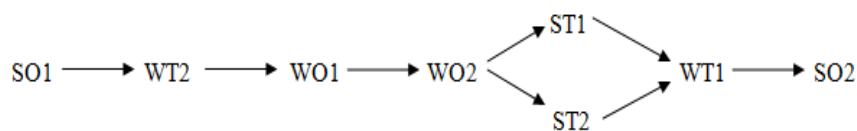


Figure 4. The order of implementation of strategies

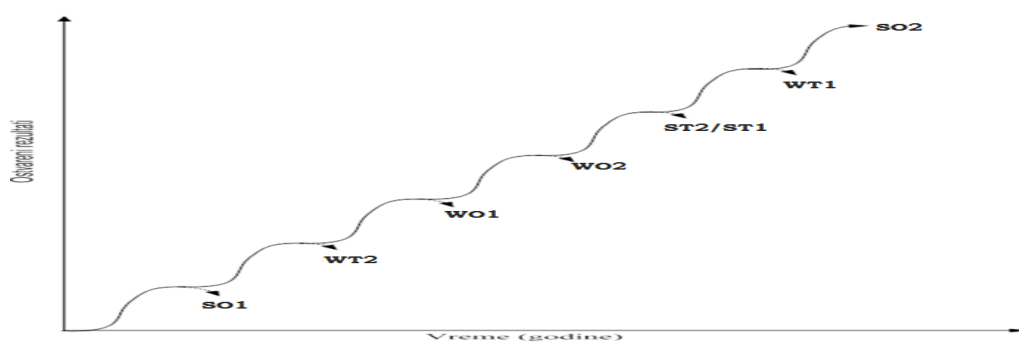


Figure 5. Lifecycle of the strategies

According to the established model for prioritizing proposed alternative strategies, the priority in application have SO1 strategy (The strategy of promoting destinations for ecotourism development).

3. CONCLUSION

The main feature of the business environment is that it constantly changing, which represent a danger, but also opportunities that can bring advantages over the competition. The basis for a successful business requires constant and long-term monitoring of changes in the environment, as well as the implementation of appropriate changes within its operations. A unique method and model for finding solutions to the changing conditions does not exist, but finding the right solutions represents a major challenge and a difficult task for any system. This paper presents the situation analysis, respectively SWOT which shows the basic external and internal factors, which combination deriving certain strategies. Also, the SWOT analysis is a useful tool which facilitates our understanding of the market, and based on that gives us the basis for a better understanding of the company's current position and potential directions in which the company can develop. SWOT analysis does not include means for determining the significance of strategies, and is therefore combined with the AHP method for improving the information base in the strategic planning. In addition, this method not only provides a solid support in the decision-making process, but provides a good framework for the training of managers in strategic management tasks.

Finally it should be noted that the example shown in this paper illustrates the possibility of using a combination of SWOT and AHP methods in the field of tourism, and the choice of strategies to launch eco inn.

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