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SWOT – AHP Model for Prioritization of Strategies for Development of Viticulture in Jablanica District – Serbia

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Abstract
The paper presents the results of the SWOT - AHP model for prioritization of strategies for the development of viticulture in Jablanica District. On the basis of SWOT analysis, TOWS matrix was generated in which four possible strategies were defined based on the importance of sub-criteria under each SWOT criteria: SO1, WO1, ST1 and WT1 which enable the growth and development of viticulture in the region. Prioritization of the defined strategies was performed using multi-criteria Analytical Hierarchy Process (AHP) model based on the results of the SWOT analysis. The resulting prioritization WO1 → SO1 → WT1 → ST1 provides continuous performance improvement and growth of viticulture in the Jablanica District in the future.

Keywords
Viticulture, strategy, SWOT, AHP, prioritization.

Introduction

Under the conditions of economic crisis, which has been present in recent years in many regions, consumption is being reduced in comparison to normal conditions, which also includes food consumption (Casini, Contini, Romano, & Scozzafava, 2015). In this scenario, food sales are declining both in terms of quantity and quality, premium priced products are being increasingly discounted which leads to decline in food quality, and consequently quality standards of food.

In this framework, the wine sector presents a particularly interesting research focus which may facilitate understanding of the market dynamics in times of economic crisis. Due to the fact that wine is not an essential good, its demand in fact reacts to changes in price and income. Furthermore, it embraces a much wider range of products both in terms of quality and price (Casini, Marone, & Scozzafava, 2014).

In the wine sector, two opposite phenomena occur: quantity of produced wine increases and it is being directed toward the narrow segments of the market, while being characterized by high quality of products marked with the name and geographical origin (Hammervoll, Mora, & Tofften, 2014). These trends lead to an increase in exports, mostly from Spain and Italy, to the EU market, which primarily include high quality and premium priced products (Contini, Romano, Scozzafava, Boncinelli, & Casini, 2015), and finally with placement in supermarkets this creates

a better perception of wine (Szolnoki & Hoffman, 2014).

The production of high quality wines in recent times has included application of modern technologies in order to create high-quality products, protect human health, and expand the assortment of wines with different fruit flavors and dessert wines, especially in the Mediterranean area (Covarelli, Beccari, Marini, & Tosi, 2012). In addition, special attention is devoted to the protection of grapevines with the controlled use of insecticides (Covarelli et al., 2012), while increasingly organized organic production of high quality wines, which are very popular in the EU market, attracts special attention. In order to make better utilization of grapes in the wine industry, by-products such as grape seed oil are being produced, which increases the productivity of the wine industry (Zhan, Lin, Shen, Zhou, & Zhao, 2013; Shen et al., 2015).

In rural grapevine growing areas, as a rule, tourist sites can be found, thus organization of the so-called wine tours is very attractive in terms of increasing socio-economic status of the region, living standard in those areas, consumption of characteristic food from those areas, manufacturing of domestic products and promotion of the cultural values of the area. These activities are attractive for tourists and increase the value of viticulture through the wine tourism business (Plowden, Uhi, & Oliveira, 2003; Carra, Maraini, Radić, & Peri, 2016).

In Serbia, the conditions for the development of viticulture are very favorable, which is being reflected in the favorable climatic conditions, quality of soil, tradition, technology and human resources. Viticulture and wine production is developed over nearly the entire territory of Serbia, namely in Vojvodina (northern Serbia), while well-known vineyards are located in the central, eastern, as well as in southern Serbia.

In Serbia, the real total arable surface covered with vineyards is between 15 000 and 20 000 hectares, while the statistical area is approximately 60 000 hectares. Annual production, which is not even big enough to satisfy domestic needs, is approximately 200 000 liters of wine (Ivanišević & Jakšić, 2015). Serbia exports some of its wine mainly to the Russian market, while the market needs are mostly being covered with imported wines (Jakšić, 2016).

Jablanica District, with city of Leskovac as its administrative and cultural center, is a registered area with a large vineyard plantation of more than 400 hectares which is being renewed in recent years with new plantings. Grapes from this plantation are being processed in the winery Navip in Jagodina. Small private vineyards are being developed, which are primarily oriented towards satisfying their own consumption and on small market placements. Opportunities for viticulture development in the region, despite the numerous benefits, are only partially utilized, therefore only 5.56% of total volume of arable land is covered with grapevines.

The possibilities of defining a strategy for further development of viticulture in the Jablanica district, as a sector which can potentially drive the overall development of agriculture in this region, are discussed in this paper.

1. Description of the region

Jablanica District, with its administrative center in the city of Leskovac, has only 5.56% of the total farmland area covered with grapevines. In this area there are four registered vine regions including: Babičko, Pustorečko, Vinaračko and Vlasotinačko. The largest vineyard plantation, in which grapevine is being cultivated using modern methods, covers the area of approximately 400 ha, and belongs to the company Navip and it is located near the city of Leskovac.

The total area planted with grapevines in the Jablanica District is 1459 hectares with 88% of grape varieties. A large proportion of 43% belongs to extensive vineyards. In this region, 10 863 households own vineyards which makes 33.6% of the total number of agricultural households. Average vineyard size, handled by a single farm household, is 13.4 hectares (Ivanišević & Jakšić, 2015).

Climatic conditions for production of quality grapes in the Jablanica District are favorable. Mild moderate-continental climate, with an average temperature of 11.4 °C, mean annual rainfall of 628 mm, 210-240 m altitude and favorable terrain (distribution of hilly and plain areas), makes this area suitable for agricultural activities and development of horticulture and viticulture.

The territory of Jablanica District has the most dissected population structure in Serbia with 144 settlements, of which three are of urban type, among which the city of Leskovac is the socio-political, cultural and immigration center of the entire area. It currently has about 40% of the total population of Jablanica District.

Highway corridor 10 runs through Jablanica District, as well as railway Belgrade-Athens,

while the airport in Nis is only 45 km from Leskovac. These facts suggest that the geographic position of the Jablanica District and the city of Leskovac is extremely favorable for any economic activities and international cooperation.

Bearing in mind the increase in wine exports to the EU market (Contini et al., 2015), the geographical position of the region as well as the possibility of organizing organic production of grapevine in it, this represents a good basis for defining the strategy for the development of viticulture as a foundation for wine production and its placement on the EU market.

2. Situational - SWOT analysis

In order to define the possible strategies of development of viticulture in the Jablanica district the situational SWOT analysis of the area was carried out in terms of possibilities for further development of viticulture.

Strengths. Jablanica District has a good road infrastructure and is connected with major commercial and administrative centers by highway, railway and air transportation. Such favorable geographic position of Jablanica District provides an opportunity for development of many areas of economic activity, especially for the development of agriculture, due to the possibilities of short delivery time of products to the market. Favorable climatic conditions allow for the successful development of agriculture in general and especially growing of vegetables, fruit and grapes. The land in this region is unpolluted and allows farming of healthy food, which is what Leskovac region is famous for in the Serbian market. In the past period it has been shown that natural resources are particularly suitable for growing top-quality grape varieties, which allows further development of the manufacturing industry, in this case particularly wine industry. Faculty of Technology and the Higher Education School of Professional Studies in the field of economics and management are located in the city of Leskovac, while University Center in Nis is located only 45 km away from it. These facts indicate that all conditions are met for the education of future personnel for many sectors of the economy. At the same time many years of experience in the production of grapes and wines, in the public and private sector, presents a good starting point for further development of agricultural production of grapevines, high quality grapes and the wine industry as a logical upgrade.

Weaknesses. Under transitional conditions in which Serbia has been for a number of years, with many social and political changes that have taken place, economic and particularly agricultural development mostly had the extensive character. Despite the favorable geographical position of the Jablanica District and the city of Leskovac, internal infrastructure within the district is at a low level of development. Agricultural holdings and viticulture, in private as well as in state-owned companies (larger plantations), are not adequately developed, both regarding the assortment of grapevines and the current state of vineyard surfaces and protection from natural disasters. Unfavorable economic structure does not allow for the development of agricultural holdings and planting of new of grapevine plantings using modern technological solutions. There is no institutional cooperation between small and medium-sized producers, and despite the existence of government incentives for the development of viticulture and winemaking industry, there are no new investments in the development of agricultural activities, particularly in the development of viticulture as a starting point for the development of the wine industry. Although the incentives for the development of viticulture are significant, defined procedures in the process of obtaining these funds, as well as the uncertainty of product placement on the market, does not stimulate the private sector to use these funds.

Opportunities. The fact that Serbia is in the process of joining the EU provides great opportunities for the development of regional cooperation in the field of viticulture and winemaking industry, primarily with developed wine-growing regions in Bulgaria and Macedonia. A stable monetary policy and harmonization of legislation with the EU provides a starting point and an opportunity to obtain investments, via the access to various EU investment funds, as well as to develop international cooperation, thus creating conditions for foreign investments and opens new possibilities to gain access to many segments of the EU market.

Threats. In the future, despite the adoption of certain EU norms of behavior, centralized management and the excessive influence of politics everywhere and anywhere, constitute a serious obstacle to further development in general, which is also the case for the development of viticulture and winemaking industry in Jablanica. The current political situation in Serbia still contains some destabilizing elements that cause the crisis, which slows down the progress of Serbia towards the EU, especially in building a functional legal

framework with the EU legislation. Serbia's hindered progress towards EU presents a serious threat to the intensive development of the Serbian economy as a whole, especially in rural areas where the existing development in all areas is at a low level.

Based on the derived situational analysis and considered S (strengths), W (weaknesses), O (opportunities) and T (threats), the SWOT matrix is defined with characteristic sub-criteria under each SWOT criteria. By comparing the sub-criteria under each SWOT criteria, TOWS matrix is generated with defined strategies (Weihrich, 1993; Živković, Nikolić, Djordjević, Mihajlović, & Savić, 2016):

1. **SO strategies (maxi - maxi strategies)** are defined by putting in comparative relationship defined sub-factors, within the strengths and opportunities, which are defined in the SWOT matrix. These strategies generally rely on inner strengths while utilizing the identified opportunities in the environment. SO strategies are the most desirable type of strategic situations, in which all the opportunities that come from the market and external environment are being utilized to the maximum by maximizing the internal strengths.
2. **WO strategies (mini-maxi strategies)** include actions to reduce and minimize the defined weaknesses along with the utilization of identified opportunities in the environment, which are defined with sub-factors of the SWOT matrix. WO strategies imply minimization of internal weaknesses and maximization of the opportunities provided by the external environment.
3. **ST strategies (maxi-mini strategies)** imply defining the possible strategies which rely on inner strengths while minimizing the impact of the threats that come from the environment. This is a situation when an organization has strengths and seeks to maximize its internal strengths and at the same time minimize the threats that come from the environment.
4. **WT strategies (mini-mini strategies)** imply defining those activities that should reduce and minimize the perceived weaknesses and to simultaneously reduce and minimize defined threats that come from the environment.

Considered sub-criteria in SWOT matrix represent the full picture of the organization in relation to the internal analysis of the organization and analysis of the external environment, in which certain events that have an impact on the organization should be predicted. Weihrich developed in 1993 the so-called TOWS matrix (Weihrich, 1993), in which the priority is given to threats (T - Threats) and opportunities (O - Opportunities) as factors of the future - factors that determine future events in relation to the strengths (Strengths - S) and weaknesses (W - Weaknesses) as factors of the past.

3. Prioritization of strategies

One of the major constraints in prioritization of strategies generated based on the TOWS matrix is the fact that the importance of each factor in the decision making cannot be quantitatively measured, which makes it difficult to assess which factor has the greatest impact on individual strategies. With the development of methods of group and multi-criteria decision-making, techniques are defined for weighted assessment of the impact of SWOT criteria, as well as sub-criteria under each criterion, on the definition and prioritization of strategies. In addition, this approach has extended the lifecycle and expanded the application of the SWOT matrix for multi-criteria optimization used in the process of making a number of managerial decisions (Kurttila, Pesonen, Kangas, & Kajanus 2000).

In contemporary literature, in the first and the second decade of the 21st century, defined SWOT and TOWS matrices serve as the initial framework for defining possible strategies and their prioritization in the considered time horizon spanning at least ten years (Dyson, 2004; Yuksel & Dagdeviren, 2007; Hamidi & Delbahari, 2011; Sevkli et al., 2012; Gorener, Toker, & Ulucay, 2012; Sharifi, 2012; Nikolić et al. 2015; Živković et al., 2016).

The combination of SWOT and TOWS matrices, while using the *Multiple Criteria Decision Making* methods (MCDM) including: *Analytical Hierarchy Process* (AHP), *Analytical Network Process* (ANP), *Preference Ranking Organization Method for Enrichment Evaluation* (PROMETHEE), *Technique for Order Preference by Similarity to an Ideal Solution* (TOPSIS) and others, as well as implementation of integrated models such as: AHP + TOPSIS; ANP + TOPSIS and others, represents a convenient method to determine prioritization of defined strategies. In

the prioritization of alternative strategies, based on the TOWS matrix, a key role is designated to elements of group decision-making - *Group Decision Support Systems* (GDSS), as well as elements of Fuzzy Logic (Sevkli et al., 2012, Živković et al., 2016).

Development of SWOT – AHP hybrid model for prioritization of strategies for development of viticulture in the Jablanica District, which was implemented in this study through six steps, is described in the literature dealing with this topic (Kurttila et al., 2000; Kangas, Pesonen, Kurttila, & Kajanus, 2001; Nikolić et al., 2015).

Step 1. Based on the results of SWOT analysis conducted for the case of viticulture in the Jablanica district and by comparing the SWOT factors: strengths, weaknesses, opportunities and threats, as well as sub-criteria under each criterion, the possible strategies for future development of viticulture in the region were defined.

Based on considered objective strengths, weaknesses, opportunities and threats, SWOT sub-criteria were defined within each of these determinants and the results are presented in the form of a TOWS matrix in Table 1.

Table 1 SWOT analysis and TOWS matrix for the development of viticulture in the Jablanica district. Defined criteria and sub-criteria in the model, as well as generated strategies.

	Internal factors	
External factors	**Strengths (S)** **S_1** - Favorable geographical position **S_2** - Human resources **S_3** - Natural resources **S_4** - Viticulture tradition	**Weaknesses (W)** **W_1** - Low level of constructed internal infrastructure **W_2** - Lack of institutional cooperation **W_3** - Unfavorable economic structure **W_4** - Lack of new investments
Opportunities (O) **O_1** - Regional cooperation **O_2** - Stable monetary policy **O_3** - Access to various EU funds **O_4** - Modified legislation	**SO – Strategy** **SO_1** – Strategy of developing new products	**WO – Strategy** **WO_1** – Development of the market and international cooperation
Threats (T) **T_1** - Centralized management **T_2** - Political instability and slow EU accession **T_3** - Excessive influence of politics	**ST – Strategy** **ST_1** – Education of personnel	**WT – Strategy** **WT_1** – Establishment of strategic alliances

Source: The authors

Comparative expert analysis of the SWOT factors shown in Table 1 enabled defining the possible strategy SO_1 which enables the utilization of potentials of strengths in order to take advantage of the opportunities that have been observed in the environment. Strategy WO_1 was defined to overcome internal weaknesses using the opportunities in the environment. Utilization of internal strengths in order to avoid threats is allowed by strategy ST_1. Finally, strategy WT_1 enables reduction of the weaknesses to avoid the threats. In principle, in the context of each of the binary relations of SWOT factors, a number of strategies can be defined (Živković et al., 2016), however in this case, just one strategy is defined per binary relation.

Based on the SWOT – AHP hybrid model for prioritization of the development strategy, on the basis of the results of the SWOT factors, sub-factors, defined strategies and established goal of determining the best strategy, the AHP working model is presented in Figure 1 which is used for defining mutual relations of SWOT factors and sub-factors in order to prioritize defined strategies for the development of viticulture in Jablanica District.

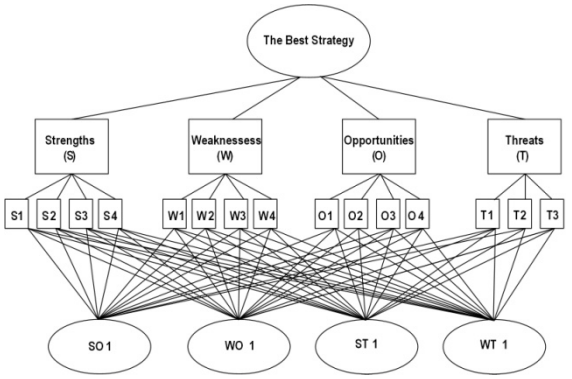

Figure 1 AHP model for the selection of the best strategy
Source: The authors

Step 2. Based on the assessments of the expert team using Saaty's scale, shown in Table 2, the importance of each of the SWOT factors (criteria)

in the model is determined, where their internal interdependence was not taken into consideration but only importance in relation to the set objective within the level 1 – SWOT criteria Strengths - S, Weaknesses - W, Opportunities - O and Threats - T (see Figure 2). The resulting importance of each SWOT factor is shown in Table 3, where it can be noticed that the greatest importance, based on the assessment of the expert team, is given to the SWOT factor Strengths (52% of importance).

Table 2 Saaty's scale 1 ÷ 9 used for pairwise comparison of decision-making elements (criteria, sub-criteria and alternatives) (Saaty, 1990)

Saaty's score	Definition	Description
1	Equal dominance	Two elements are of equal importance in regard to the higher level objective
3	Weak dominance	Experience or judgment slightly favor one element over other
5	Strong dominance	Experience or judgment considerably favor one element over other
7	Very strong dominance	Very strong dominance of one element over the other
9	Absolute dominance	Dominance of the highest degree
2,4,6,8	Intermediate values	They are used to demonstrate compromise intermediate values of priorities between the above listed scores 1, 3, 5, 7 and 9

Source: The authors

Table 3 Pairwise comparison of SWOT groups without interdependences between them

SWOT group	S	W	O	T	Importance of the SWOT groups
Strengths (S)	1	4	3	5	0.520
Weaknesses (W)		1	1/3	3	0.141
Opportunities (O)			1	4	0.268
Threats (T)					0.071
Consistency ratio relative to the goal: CR=0.067					

Source: The authors

From the Table 3, it follows that:

$$w_1 = \begin{bmatrix} S \\ W \\ O \\ T \end{bmatrix} = \begin{bmatrix} 0.520 \\ 0.141 \\ 0.268 \\ 0.071 \end{bmatrix}$$

Step 3. In this step, local importance of SWOT sub-criteria was determined by the expert team, while the scores of comparative pairs of SWOT sub-criteria, defined in Table 3, are given in tables 4 - 7:

Table 4 Pairwise comparisons of the SWOT sub-criterion – Strengths

Strengths (S)	S_1	S_2	S_3	S_4	Local weights
S_1 - Favorable geographical position	1	5	3	4	0.520
S_2 - Human resources		1	¼	1/3	0.071
S_3 - Natural resources			1	3	0.268
S_4 - Viticulture tradition				1	0.141
The consistency ratio in relation to the group Strengths: CR=0.067					

Source: The authors

Table 5 Pairwise comparisons of the SWOT sub-criterion – Weaknesses

Weaknesses (W)	W_1	W_2	W_3	W_4	Local weights
W_1 - Low level of constructed internal infrastructure	1	5	4	3	0.520
W_2 - Lack of institutional cooperation		1	1/3	1/4	0.071
W_3 - Unfavora-ble economic structure			1	1/3	0.141
W_4 - Lack of new investments				1	0.268
The consistency ratio in relation to the group Weaknesses: CR=0.067					

Source: The authors

Table 6 Pairwise comparisons of the SWOT sub-criterion – Opportunities

Opportunities (O)	O_1	O_2	O_3	O_4	Local weights
O_1 - Regional cooperation	1	4	3	5	0.520
O_2 - Stable monetary policy		1	1/3	3	0.141
O_3 - Access to various EU funds			1	4	0.268
O_4 - Modified legislation				1	0.071
The degree of consistency in relation to the group Opportunities: CR=0.067					

Source: The authors

Table 7 Pairwise comparisons of the SWOT sub-criterion – Threats

Threats (T)	T_1	T_2	T_3	Local weights
T_1 - Centralized management	1	¼	1/2	0.137
T_2 - Political instability and slow EU accession		1	3	0.623
T_3 - Excessive influence of politics			1	0.239
The degree of consistency in relation to the group Threats: CR=0.018				

Source: The authors

Step 4. Through mutual multiplying of obtained weight factors from Step 2 and Step 3, global importance of SWOT sub-criteria is derived, as presented in Table 8**.**

Table 8 The importance of the criteria and sub-criteria of the SWOT analysis, determined using AHP methodology

SWOT groups - criteria	Importance of the SWOT criteria	SWOT sub-criteria	Degree of consistency within the SWOT group (CR)	Importance of SWOT criteria within the group	The overall importance of SWOT factors
Strengths - S	0.520	S_1 - Favorable geographical position S_2 - Human resources S_3 - Natural resources S_4 - Viticulture tradition	0.067	**0.520** 0.071 0.268 0.141	**0.270** 0.037 0.139 0.073
Weaknesses - W	0.141	W_1 - Low level of constructed internal infrastructure W_2 - Lack of institutional cooperation W_3 - Unfavorable economic structure W_4 - Lack of new investments	0.067	**0.520** 0.071 0.141 0.268	**0.073** 0.010 0.020 0.038
Opportunities - O	0.268	O_1 - Regional cooperation O_2 - Stable monetary policy O_3 - Access to various EU funds O_4 - Modified legislation	0.067	**0.520** 0.141 0.268 0.071	**0.139** 0.038 0.072 0.019
Threats - T	0.071	T_1 - Centralized management T_2 - Political instability and slow EU accession T_3 - Excessive influence of politics	0.018	0.137 **0.623** 0.239	0.010 **0.044** 0.017

Source: The authors

The results of the overall significance of the SWOT sub-criteria suggest the dominant influence of the following sub-criteria: S_1 - favorable geographical position (0.270) within the Strengths, as well as O_1 - regional cooperation (0.139) under Opportunities, as positive sub-criteria. Furthermore, W_1 - low level of constructed internal infrastructure (0.073) and T_2 - political instability and slow EU accession (0.044) were singled out as the most important negative sub-criteria. It is obvious that the strength of the positive sub-criteria is greater than the strength of impact of the negative sub-criteria which is of crucial importance for choosing the best strategy in the considered case.

It follows that:

$$W_2 = W_{SWOTsub-factros(global)} = \begin{bmatrix} 0.270 \\ 0.037 \\ 0.139 \\ 0.073 \\ 0.073 \\ 0.010 \\ 0.020 \\ 0.038 \\ 0.139 \\ 0.038 \\ 0.072 \\ 0.019 \\ 0.010 \\ 0.044 \\ 0.017 \end{bmatrix}$$

Situational analysis of the SWOT results, based on the data from Table 8, is graphically presented in Figure 2. The results indicate the size of the impact of SWOT criteria in following descending order: S → O → W → T. The values of the overall importance of SWOT sub-criteria, with the greatest importance in the context of one factor, also descend in the following order: $S_1 \rightarrow O_1 \rightarrow W_1 \rightarrow T_2$. In the next steps of this analysis, by

evaluating the weighted impact of SWOT sub-criteria on the alternative strategies defined in the TOWS matrix (Table 1), the final prioritization of proposed alternative strategies in the framework of all binary relationships of SWOT criteria, will be determined.

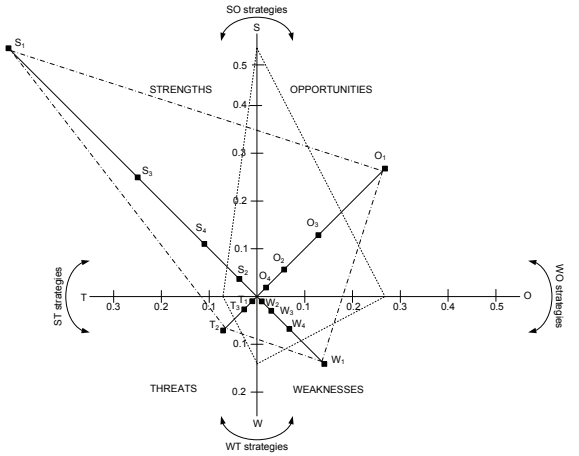

Figure 2 Situation analysis of compared values of weighted SWOT criteria and overall importance of SWOT sub-criteria based on the AHP procedure.
Source: The authors

Step 5. In this step, by expert scoring, importance weights of each alternative strategy (SO_1, WO_1, ST_1, WT_1) were determined relative to the defined SWOT sub-criteria, and the resultant matrix W_3 was obtained:

$$W_3 = \begin{bmatrix} 0.227 & 0.167 & 0.424 & 0.424 & 0.122 & 0.286 & 0.141 & 0.200 & 0.167 & 0.333 & 0.286 & 0.200 & 0.227 & 0.424 & 0.12 \\ 0.122 & 0.500 & 0.122 & 0.227 & 0.424 & 0.286 & 0.455 & 0.400 & 0.167 & 0.167 & 0.143 & 0.200 & 0.424 & 0.227 & 0.42 \\ 0.424 & 0.167 & 0.227 & 0.122 & 0.227 & 0.286 & 0.141 & 0.200 & 0.333 & 0.333 & 0.286 & 0.400 & 0.227 & 0.122 & 0.22 \\ 0.227 & 0.167 & 0.227 & 0.227 & 0.227 & 0.143 & 0.263 & 0.200 & 0.333 & 0.167 & 0.286 & 0.200 & 0.122 & 0.227 & 0.22 \end{bmatrix}$$

Step 6. Finally, the overall priority of the considered strategies was calculated as:

$$W_{alternatives} = \begin{bmatrix} SO1 \\ ST1 \\ WO1 \\ WT1 \end{bmatrix} = W_3 \times W_{SWOT\,sub-factros(global)} = \begin{bmatrix} 0.263 \\ 0.208 \\ 0.290 \\ 0.239 \end{bmatrix}$$

This implies that the final order of the considered strategies is as follows:

$$WO1 \rightarrow SO1 \rightarrow WT1 \rightarrow ST1$$

4. Discussion of results

Given the size of normalized values (step 6), the conclusion regarding the order of implementation of defined strategies is that the first priority is the implementation of WO_1 - strategy of development of the market and international cooperation, with the weight factor of 0.290. It is obvious that the Serbian wine market is small and underdeveloped, therefore market development, together with regional cooperation with its closest environment, can be the basis for the development of viticulture in this region, because this strategy ensures product placement which is now hindered.

Shortly after implementation of WO_1 strategy, it is necessary to start implementing the strategy SO_1 – strategy of developing new products that logically arises as a result of the implementation of the previous strategy of market development, which provides information about demanded assortments required by new markets.

In order to realize the strategy of growth and development of viticulture in Jablanica District, through the development strategies of market development and new product development, it is necessary to develop a strategy WT_1 – establishment of strategic alliances and association with large manufacturers which are already positioned on the EU market, by creating conditions for foreign investments and the arrival of branded companies in the field of viticulture and winemaking industry.

In order to fulfill these growth strategies and to introduce new types of grapevines, create new products, align operations with foreign partners in strategic alliances and to become desirable partners in international cooperation, it is essential to acquire new knowledge and to continuously improve the existing one in accordance with the requirements of the new era. Therefore, the application of ST_1 strategy of education of personnel is being imposed as a logical sequence of events in the long term strategic plan of development of viticulture in Jablanica district.

Conclusion

Conducted research regarding the possibility of further development of viticulture in Jablanica District indicates, based on the situational SWOT analysis, that the potential for development of this agricultural segment is obvious. The opportunities that are recognized in terms of Serbian accession to the EU are also apparent and should be taken advantage of in future.

Through a hybrid SWOT – AHP model the prioritization of defined development strategies for viticulture in Jablanica District was conducted, which shows that there are realistic opportunities to achieve significant growth and development of viticulture in this region, compared to the present situation of stagnation and slight decline, by using

the defined order of implementation of the identified strategies. SM

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