AN APPROACH TO PERSONNEL SELECTION IN THE TOURISM INDUSTRY BASED ON THE SWARA AND THE WASPAS METHODS

Abstract. Tourism is a very complex phenomenon which occupies an important place in the process of strong and continual changes. In parallel with the development of tourism, the personnel who have decided on their life and work orientations, economic and existential interests tied to tourism as a social and economic activity have also been developed. In recent times, with the skills and personality characteristics as the key sources of individual differences, the concept of competence has been introduced. In particular, managers must possess the necessary knowledge, skills and competencies that will help them to respond quickly to the changes that have occurred in their organizations, and to make timely decisions on the performance of given tasks. Therefore, the manuscript proposes an approach to the selection of personnel for the position of sales manager in the tourism sector based on the use of the SWARA and the WASPAS methods. The application of the proposed approach, as well as its efficiency and effectiveness, are shown in the conducted numerical example.

Keywords: personnel selection, sales manager, tourism, MCDM, SWARA, WASPAS.

JEL Classification: D81, O15, Z32

* Corresponding author
1. Introduction

Tourism is a labour intensive industry, which means that in order to carry out this economic activity it takes a lot of human potential. The quality of a temporary tourist’s stay largely depends on the quality, therefore the engagement, the good will and the education of human resources at all levels of hospitality. That immediately entails the attractiveness of tourist destinations, which in turn depends on the carrier and executor of the activities within the same market segment (Durbarry, Sinclair, 2003).

The role of the human factor – personnel – in tourism is particularly significant, especially in urban locations because they enable a rapid response to changes in tourist demand (Lai, Baum, 2005). In most cases, tourist business is conducted through a direct contact and on-site between the provider and the consumer of tourism services, i.e. tourists (Anderson et al., 2003). Therefore, it presents the special uniqueness and significance of personnel working in tourism. It is not necessary to emphasize the fact that, in the tourism industry, personnel who, additionally, possess an expertise and broad humanistic ideas and education are needed. In this respect, towards the whole of the population, it is necessary that a tourism receptive culture should be developed by using various forms of training courses through seminars and other forms of education. It follows that the economic justification of investment in human resources largely depends on good practice (Bolton, Houlihan, 2007). That is also adopted by many tourist companies, as well as the fact that a far greater percentage of support lies on the human resources in the tourism industry, rather than in many other manufacturing companies (Hoque, 2000).

Therefore, the selection of personnel in the tourism sector has its own specificities. In this sense, the process of recruitment and selection aims to, in a short period of time, carry out a selection of candidates, on the basis of pre-generated applications, who will be employed after the completion of the process.

A certain number of authors approach the process of the recruitment and selection of personnel by using traditional methods, such as: interviews, structured interviews, personality tests, intelligence tests, cognitive tests etc.

As a part of operational research, Multiple-Criteria Decision Making (MCDM) is one of the fastest-growing fields. So far, the MCDM has been applied in solving various and complex decision-making problems. Due to the development speed of the MCDM field, many MCDM methods have been proposed over time, such as: the AHP, ELECTRE, PROMETHEE, COPRAS, VIKOR, ARAS, MOORA, MULTIMOORA, WASPAS, SWARA, EDAS and so on.

MCDM methods can also be successfully used when solving problems related to the selection of personnel, such as: the selection of candidates in the mining industry, based on the use of the SWARA and the MULTIMOORA methods (Karabasevic et al., 2015), personnel selection based on the game theory and MCDM approaches (Hashemkhani Zolfani, Banihashemi, 2014), a new MCDM
An Approach to Personnel Selection in the Tourism Industry Based on the SWARA and the WASPAS Methods

framework for personnel selection based on the hybrid methods SWARA-VIDOR (Nabian, 2014), a personnel selection approach based on the ANP and the fuzzy DEA methods (Lin, 2010), the fuzzy AHP approach to problems related to personnel selection (Güngör, et al., 2009), personnel evaluation and selection by applying MCDM (Bogdanovic, Miletić, 2014) and so forth.

The proposed MCDM model in this manuscript is based on the use of the SWARA and the WASPAS methods. The SWARA method is used to determine the weights of the evaluation criteria, whereas the WASPAS method is used to range the alternatives, i.e. the candidates.

The main reason for using the hybrid SWARA-WASPAS method lies in the simplicity that these methods bring; so, the SWARA method enables a considerably lower pairwise comparison, whereas the WASPAS method is much simpler to apply, if compared with the well-known PROMETHEE, TOPSIS and VIKOR methods.

The manuscript is organized as follows: Section 1 presents the Introduction; Section 2 discusses the specifics of human resources in the tourism industry; Section 3 demonstrates the competencies of the sales manager in the tourism industry; Section 4 accounts for the SWARA method, while in Section 5, the WASPAS method is presented; a numerical example is given in Section 6; finally, the conclusions are given in Section 7.

2. The peculiarities of human resources in tourism

Tourism is an important industry, rapidly expanding and constantly growing; it offers a large number of job positions. As a powerful generator of new jobs, tourism is characterized by the four main features, which further characterize the issue of personnel for tourism needs (Stefanović, Urošević, 2012). Those are:

- a high level of the employment of women;
- a high age-level of employees;
- a high share of unqualified personnel;
- demands for the seasonal labour potential.

Regarding the high participation of women, it should be noted that tourism is a hospitality industry, and in a way, according to the baseline characteristics, is suitable for women. In the hotel industry, household tasks (the organization of rooms, housekeeping and the laundry service), serving food and drink, especially numerous tasks in the kitchen, are performed mostly by women. This also applies to the reception, cashier jobs, administrative and accounting tasks. In the activities of travel agencies, women are also prevalent. All in all, a large number of other services used by tourists are usually performed by the female population.
Another basic characteristic of employment in the tourism sector is the need for a high proportion of unskilled and semi-skilled labour resources. There are a large number of jobs for the performance of which one is not required either to have a special professional qualification or acquire an educational degree. Such a low qualification structure, on the other hand, shows that it takes relatively little time for their professional training and specialization.

Human resources in the tourism industry are also characterized by a high level of the age structure of employees. This reflects the state of the economy and society, because all those who cannot follow the trends of modern knowledge and education are left without work engagement in other industries, and thus seek salvation in the tourism industry. On the other hand, tourism is an “industry” of experience, which primarily requires dynamics, enthusiastic, bright and professional young people, who are ready to respond and adapt to any challenge. The positive perception of the tourist destination, i.e. a pleasant first impression on tourists, must be encouraged by young people who are ambitious, professional and knowledgeable of several foreign languages and possessing quality information.

Travel trends are, as a rule, tied to certain seasons, as the entire tourism industry is. Seasonal business creates one of the biggest problems of tourism, as well as the need for seasonal hiring of personnel. There are three main issues of seasonal workers, who, as is known as a rule, do not live in tourist areas that have a need for these personnel.

Work in tourism is carried out in multiple shifts, during holidays, seasons, when temperatures are all but the most pleasant ones etc. The result is an increased rate in permanent and temporary employees, as well as a lack of interest expressed by young people for working in tourism. The tourism sector mainly engages personnel with secondary education, only to be followed by highly-skilled and skilled workers. One of the peculiarities of the tourist activity lies in the fluctuation in the number of employees during the year, because the part of the workforce is engaged in the tourist season for certain types of tourism and specific jobs. Regardless of the type of work and the length of engagement, in the case of the majority of participants in the tourism industry it is needed for them to be additionally trained in order to achieve a higher level of professionalism. Therefore, human resources, i.e. personnel who are already working or who are preparing to work in the tourism industry, are forced to constantly innovate expert knowledge due to the increasing competition of knowledge and ideas in both the domestic and the international markets.

3. The competencies of managers in the tourism industry

Man as a factor is the most important in the organization, which we should have in mind at any moment, so, the motivation of associates and all employees should be one of managers’ essential tasks. Gaffarand and Setiyorini (2010) point out that communication skills and interpersonal relations are essential for the development
of human resources in tourism. For the performance of the organization it is important that a manager should be resourceful, knowledgeable of business processes. He must be responsible and conscientious when making decisions, courageous when assuming business risks and must have a strong will and intrusive, professional and capable associates. So, the managerial job is very complex. In order to be able to work successfully, managers need to communicate, receive and provide information, have knowledge, as well as intuition and a feeling, accurately determine the policy, rules, procedures, actions, plans, programs and projects, think analytically and conceptually, behave diplomatically, which implies their being proficient, skilful and flexible, and all this only for the purpose of making management decisions and taking actions.

In the understanding of most authors who have dealt with research in management, the fact that in order to achieve objectives and tasks at all levels of management, adequate knowledge, abilities and skills, together with appropriate experience are required is especially emphasized. Due to the above, managers at all levels must possess certain knowledge and skills necessary to successfully perform their job (Stefanović et al., 2012). They must possess three basic types of knowledge and skills, such as: technical knowledge and skills, knowledge and skills in dealing with people and conceptual knowledge and skills (Sikavica et al., 2008). In other words, the manager must have professional, social and strategic skills. Professional knowledge includes knowledge of and skills for the application of methods and techniques in specific areas, such as e.g. finances, or technical skills, such as engineering, computing, production etc. The domain of interpersonal relationships involves the ability and skills to work with people, includes incentives to work, the creation of a comfortable working atmosphere, the development of teamwork and directing efforts to achieve the objectives. Conceptual skills involve the understanding of the entirety of business, the relation between the parts among themselves and with the entirety, conceptual skills related to the understanding of the place of the organization of the market and its relationship with other organizations.

Robert Katz argued this claim and presented the relationship between the skills and the levels of management, by which not all skills are equally important at all levels of management. He showed that the technical skills are the most important to the lowest levels of management, people’s skills are equally important for all levels of management, whereas conceptual skills are the most significant to the highest levels of management (Robbins et al., 2005). Tavitiyaman et al. (2014) especially emphasizes leadership competencies necessary for general managers in hotel industry, such as: leadership, motivational/interpersonal skills, strategic orientation, planning and implementation, team building and ethics, communication skills, flexibility, and concern for the community.
Lately, along with the skills and personality characteristics, the concept of competencies has been introduced as the key source of individual differences. Competency could be determined as the ability of a person to perform a successful job or a specific task. This is an ability of a person to demonstrate that he/she can do the jobs, tasks or activities to the required standard.

In its most basic meaning, a model of competencies means a set of characteristics, namely knowledge, skills and behaviours that enable success at a workplace. Individuals aware of the importance of competencies are always focused on their professional and personal development. The assessment of competencies during employment occupies an extremely important role, for which reason, recruiters tend to employ personnel who possess the highest level of required competencies.

Urošević (2012) states that competency is a set of skills, knowledge and attitudes for personal development, employment and participation. They allow people to fulfil their objectives in finding suitable employment, as well to be able to hold them and take part in social life. They could be said to stand for a precondition for work success.

Therefore, in order to enable individuals to respond to the increasingly demanding challenges of today, it is necessary for one to possess a wide range of competencies. Each developed competence greatly contributes to individuals in terms of their successful coping with different demands and situations set before them.

The role of sales managers in the tourism sector is crucial for achieving business success. Today’s managers combine different functions. They are expected to be familiar with the industry they are dealing with, know the market and the position of the product, organize and manage human resources in order to achieve business goals.

To become a sales manager in the tourism sector, it is necessary that a person should possess certain personal attributes, abilities, knowledge and experience. Personal characteristics are based on our genetic code and upbringing. Abilities stem from personal characteristics, while experience is acquired through practical work and solving concrete problems. The education of sales managers should be comprehensive and should include the development of important characteristics, such as oral and written communication, creativity, innovativity, high motivation and leadership. In order to successfully manage the company of twenty-first century, the manager must be characterized by confidence, the ability to rapidly solve a problem, skills for setting up interpersonal relationships and the awareness of personal advantages and disadvantages. In their research, Petkovski (2012) shows the important attributes and skills of the modern manager in tourism: energy, mobility, self-confidence, originality, creativity, communicativeness and the ability to set goals.

A successful manager in tourism, as a leader, should preferably be educated in such a manner as to achieve a high level of culture in different spheres of life. He/she must to possess expert knowledge and information. His/her overall
appearance, behaviour, manners, parlance and eloquence is also what makes them attractive. They must adhere to high standards of ethical behaviour, be ambitious, energetic and original, necessarily adaptable to persons and situations, as well to different cultures, if they want to succeed as leaders. Moura (2013) states that, in order for a manager to improve his/her competencies, he/she is required to develop his/her social skills, awareness, self-regulation, motivation and empathy. In their research, Tesone and Ricci (2012) deal with the knowledge, skills and evaluation of competencies for the development of managers, and in their evaluation, they use 107 competencies that can be classified into the following categories: 1) communication, 2) efficiency management, 3) self-management, 4) leadership, 5) interpersonal management, 6) cross-cultural management, and 7) conflict management.

A larger number of the conducted studies indicate some key competencies managers need to have in the tourism sector, such as: steadiness, contribution, rationality, long-term strategic management, leadership, practicability of goals, understanding skill and advanced communication skill. Sales staff also must possess necessary sales competencies, that leads to a better sales efficiency, i.e. sales results, and it is reasonable to assume that it will lead to better corporate results.

On the basis of the investigated literature and the conducted research, the authors of the manuscript propose the following model of the evaluation criteria that will be used in a numerical example. The list of the evaluation criteria for the position of a Sales Manager in the tourism industry is shown in Table 1.

Table 1. The evaluation criteria for a Sales Manager

<table>
<thead>
<tr>
<th>Criteria</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$C_1$</td>
<td>Communication skills</td>
</tr>
<tr>
<td>$C_2$</td>
<td>Leadership skills</td>
</tr>
<tr>
<td>$C_3$</td>
<td>Flexibility</td>
</tr>
<tr>
<td>$C_4$</td>
<td>Decision making</td>
</tr>
<tr>
<td>$C_5$</td>
<td>Negotiating skills</td>
</tr>
<tr>
<td>$C_6$</td>
<td>Analytic skills</td>
</tr>
<tr>
<td>$C_7$</td>
<td>Consistency</td>
</tr>
</tbody>
</table>

4. A Step-wise Weight Assessment Ratio Analysis

The Step-wise Weight Assessment Ratio Analysis (SWARA) method was developed by Kersulienė et al. (2010). The SWARA method can successfully be used instead of the AHP, the ANP and the FARE methods. The SWARA method can also be defined as an expert-oriented method for calculating weights (Hashemkhani-Zolfani et al., 2015). Stanujkic et al. (2015) points out some of the advantages of using the SWARA method compared to the AHP, such as the
number of the required comparisons in the SWARA method is significantly lower compared with the AHP method, which makes the SWARA method more attractive for use and easier to use.

Despite the fact that the SWARA method has recently been developed, the SWARA method has so far found the way to be applied in solving different problems in various areas such as: rational dispute resolution method selection, architect selection, the product design, the prioritizing of the sustainability assessment indicators of the energy system, machine tool selection, the MCDM approach used for the assessment and ranking technique for alternatives of technology in construction, investments prioritizing in high tech industries, the evaluation of the wall insulation in residential buildings, the selection of a packaging design, personnel selection, the evaluation of strategies and so on.

Based on Kersuliene et al. (2010) and Stanujkic et al. (2015), the process of determining the relative weights of the evaluation criteria by applying the SWARA method can accurately be shown through the following steps:

**Step 1.** Sort the evaluation criteria in descending order, based on their expected significances.

**Step 2.** Starting from the second criterion, make the respondent express the relative importance of the criterion \( j \) in relation to the previous \((j-1)\) criterion, and do this for each particular criterion. According to Kersuliene et al. (2010), this ratio is called the Comparative Importance of an Average Value, \( s_j \).

**Step 3.** Determine the coefficient \( k_j \) as follows:

\[
k_j = \begin{cases} 
1 & j = 1 \\
\frac{s_j}{s_j + 1} & j > 1
\end{cases}
\]  

(1)

**Step 4.** Determine the recalculated weight \( q_j \) as follows:

\[
q_j = \begin{cases} 
1 & j = 1 \\
\frac{q_{j-1}}{k_j} & j > 1
\end{cases}
\]  

(2)

**Step 5.** Determine the relative weights \( w_j \) of the evaluation criteria as follows:

\[
w_j = \frac{q_j}{\sum_{k=1}^{n} q_k}
\]  

(3)

where \( n \) denotes the number of such criteria.

5. **The Weighted Aggregates Sum Product Assessment method**

The Weighted Aggregates Sum Product Assessment (WASPAS) method was proposed by Zavadskas et al. (2012). Somewhat later, has been introduced an extension to the WASPAS method with interval-valued intuitionistic fuzzy
numbers (WASPAS-IFIV) in order to cope with problems characterized by an uncertain environment.

The WASPAS method combines two well-known MCDM approaches: the weighted sum (WS) method and the weighted product (WP) method. Although it is a relatively new MCDM method, the SWARA method is used to solve different problems, such as: decision-making in manufacturing, the evaluation of fasades' alternative, the multi-criteria selection of a deep-water port, and so on.

The computational procedure of the WASPAS method can be precisely presented as follows:

**Step 1.** Determine the optimal performance rating for each criterion. In this step, the optimal performance ratings are calculated as follows:

$$
\begin{align*}
  x_{ij}^0 &= \begin{cases} 
    \max x_{ij}, & j \in \Omega_{\text{max}} \\
    \min x_{ij}, & j \in \Omega_{\text{min}}
  \end{cases},
\end{align*}
$$

where $x_{ij}^0$ denotes the optimal performance rating of the $j$-th criterion, $\Omega_{\text{max}}$ denotes the benefit criteria, i.e. the higher the values are, the better it is; and $\Omega_{\text{min}}$ denotes the set of the cost criteria, i.e. the lower the values are, the better it is; $m$ denotes the number of the alternatives; $i = 0, 1, ..., m$; and $n$ denotes the number of the criteria, $j = 0, 1, ..., n$.

**Step 2.** Construct the normalized decision matrix. The normalized performance ratings are calculated as follows:

$$
\begin{align*}
  r_{ij} &= \begin{cases} 
    x_{ij}, & j \in \Omega_{\text{max}} \\
    \frac{x_{ij}^0}{x_{ij}}, & j \in \Omega_{\text{min}}
  \end{cases},
\end{align*}
$$

where $r_{ij}$ denotes the normalized performance rating of the $i$-th alternative in relation to the $j$-th criterion.

**Step 3.** Calculate the relative importance of the $i$-th alternative, based on the WS method. The relative importance of the $i$-th alternative, based on the WS method, is calculated as follows:

$$
Q_i^{(1)} = \sum_{j=1}^{n} w_j r_{ij},
$$

where $Q_i^{(1)}$ denotes the relative importance of the $i$-th alternative in relation to the $j$-th criterion, based on the WS method.
**Step 4.** Calculate the relative importance of the $i$-th alternative, based on the WP method. The relative importance of the $i$-th alternative, based on the WP method, is calculated as follows:

$$Q_i^{(2)} = \prod_{j=1}^{n} r_{ij}^{w_j},$$

(7)

where $Q_i^{(2)}$ denotes the relative importance of the $i$-th alternative in relation to the $j$-th criterion, obtained based on the WP method.

**Step 5.** Calculate the total relative importance, for each alternative. The total relative importance, or more precisely the joint generalized criterion of the weighted aggregation of additive and multiplicative methods (Zavadskas et al., 2012), can be calculated as follows:

$$Q_i = \lambda Q_i^{(1)} + (1 - \lambda)Q_i^{(2)} = \lambda \sum_{j=1}^{n} w_j r_{ij} + (1 - \lambda)\prod_{j=1}^{n} r_{ij}^{w_j}$$

(8)

where $\lambda$ is the coefficient and $\lambda \in [0,1]$.

When decision-makers have no preference in relation to the coefficient, its value is set to 0.5 and the Eq. (8) is as follows:

$$Q_i = 0.5Q_i^{(1)} + 0.5Q_i^{(2)} = 0.5 \sum_{j=1}^{n} w_j r_{ij} + 0.5\prod_{j=1}^{n} r_{ij}^{w_j}$$

(9)

6. **A numerical example**

With the aim to demonstrate the efficiency and simplicity of the proposed approach, in this section a numerical example is presented. Suppose that a team of three human resource experts was formed and that the team has a duty to evaluate four candidates based on the evaluation criteria obtained from the conducted research. The evaluation process and selection of the candidates can be accurately shown through the following steps:

**Step 1.** Determine the weights of the evaluation criteria. In this step, it is necessary to determine the weights of the evaluation criteria based on the application of the SWARA method. The resulting group weights obtained according to the three experts are shown in Table 2.
Table 2. The group resulting weights obtained from the three human resource experts

<table>
<thead>
<tr>
<th>Criteria</th>
<th>( w_j )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( C_1 ) Communication skills</td>
<td>0.23</td>
</tr>
<tr>
<td>( C_2 ) Leadership skills</td>
<td>0.19</td>
</tr>
<tr>
<td>( C_3 ) Flexibility</td>
<td>0.17</td>
</tr>
<tr>
<td>( C_4 ) Decision making</td>
<td>0.13</td>
</tr>
<tr>
<td>( C_5 ) Negotiating skills</td>
<td>0.13</td>
</tr>
<tr>
<td>( C_6 ) Analytic skills</td>
<td>0.08</td>
</tr>
<tr>
<td>( C_7 ) Consistency</td>
<td>0.06</td>
</tr>
</tbody>
</table>

**Step 2.** Evaluate the candidates in relation to the selected criteria. In this step, the evaluation of the candidates is performed. On the basis of the ratings obtained from the three experts, the group ratings are calculated as follows:

\[
 x_{ij} = \left( \prod_{k=1}^{3} x_{ij}^k \right)^{1/3},
\]

where \( x_{ij} \) denotes the ratings of the \( i \)-th alternative in relation to the \( j \)-th criterion, and \( x_{ij}^k \) denotes the ratings of the \( i \)-th alternative in relation to the \( j \)-th criterion obtained from the \( k \)-th expert.

The group ratings of the four evaluated candidates obtained from the three human resource experts are shown in Table 3.

Table 3. The initial decision-making matrix

<table>
<thead>
<tr>
<th>Criteria Candidates</th>
<th>( C_1 )</th>
<th>( C_2 )</th>
<th>( C_3 )</th>
<th>( C_4 )</th>
<th>( C_5 )</th>
<th>( C_6 )</th>
<th>( C_7 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( w_j )</td>
<td>0.23</td>
<td>0.19</td>
<td>0.17</td>
<td>0.13</td>
<td>0.13</td>
<td>0.08</td>
<td>0.06</td>
</tr>
<tr>
<td>( A_1 )</td>
<td>4.33</td>
<td>3.33</td>
<td>3.67</td>
<td>3.33</td>
<td>4.00</td>
<td>4.00</td>
<td>3.67</td>
</tr>
<tr>
<td>( A_2 )</td>
<td>5.00</td>
<td>4.33</td>
<td>4.67</td>
<td>4.33</td>
<td>4.33</td>
<td>4.33</td>
<td>4.67</td>
</tr>
<tr>
<td>( A_3 )</td>
<td>3.67</td>
<td>3.33</td>
<td>3.33</td>
<td>3.00</td>
<td>3.67</td>
<td>4.33</td>
<td>3.67</td>
</tr>
<tr>
<td>( A_4 )</td>
<td>3.33</td>
<td>3.67</td>
<td>3.00</td>
<td>3.33</td>
<td>4.00</td>
<td>3.33</td>
<td>3.00</td>
</tr>
</tbody>
</table>

**Step 3.** Calculate a normalized decision matrix. In the next step, using Eq. (5), a normalized decision matrix has been formed. The normalized decision matrix, as well as the weights of the criteria are accounted for in Table 4.
Table 4. The normalized decision matrix and the weight of the criteria

<table>
<thead>
<tr>
<th>Criteria Candidates</th>
<th>$C_1$</th>
<th>$C_2$</th>
<th>$C_3$</th>
<th>$C_4$</th>
<th>$C_5$</th>
<th>$C_6$</th>
<th>$C_7$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$w_j$</td>
<td>0.23</td>
<td>0.19</td>
<td>0.17</td>
<td>0.13</td>
<td>0.13</td>
<td>0.08</td>
<td>0.06</td>
</tr>
<tr>
<td>$A_1$</td>
<td>0.87</td>
<td>0.67</td>
<td>0.73</td>
<td>0.67</td>
<td>0.80</td>
<td>0.80</td>
<td>0.73</td>
</tr>
<tr>
<td>$A_2$</td>
<td>1.00</td>
<td>0.87</td>
<td>0.93</td>
<td>0.87</td>
<td>0.87</td>
<td>0.87</td>
<td>0.93</td>
</tr>
<tr>
<td>$A_3$</td>
<td>0.73</td>
<td>0.67</td>
<td>0.67</td>
<td>0.60</td>
<td>0.73</td>
<td>0.87</td>
<td>0.73</td>
</tr>
<tr>
<td>$A_4$</td>
<td>0.67</td>
<td>0.73</td>
<td>0.60</td>
<td>0.67</td>
<td>0.80</td>
<td>0.67</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Step 4. Calculate the relative importances of the evaluated alternatives. The relative importances of the evaluated alternatives, based on the WS method and the WP method, as well as the total relative importances, are presented in Table 5.

Table 5. The relative and total importance of the alternatives

<table>
<thead>
<tr>
<th>$Q_i^{(1)}$</th>
<th>$Q_i^{(2)}$</th>
<th>$Q_i$</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>$A_1$</td>
<td>0.37</td>
<td>0.06</td>
<td>0.43</td>
</tr>
<tr>
<td>$A_2$</td>
<td>0.45</td>
<td>0.07</td>
<td>0.52</td>
</tr>
<tr>
<td>$A_3$</td>
<td>0.35</td>
<td>0.05</td>
<td>0.40</td>
</tr>
<tr>
<td>$A_4$</td>
<td>0.34</td>
<td>0.05</td>
<td>0.39</td>
</tr>
</tbody>
</table>

The data from Table 5 indicate that the candidate designated as $A_2$ has the highest total importance, and therefore has the best results in terms of the evaluated criteria.

7. Conclusion
Tourism is one of the leading economic sectors in the world, and thus represents the main source of employment. Therefore, people are one of the major strategic resources of an organization. In today’s business conditions, personnel with the highest level of competences are becoming an essential factor in an organization for its achieving success and competitiveness on the market. Taking into account the fact that the process of the selection and recruitment of personnel is extremely important, this manuscript provides one hybrid approach, based on the use of the SWARA and the WASPAS methods. The proposed approach has proven to be extremely easy to apply and use. In order to demonstrate the efficiency and effectiveness of the proposed approach, a numerical example has been done. Based on the conducted numerical example, it can be seen that the candidate designated as A2 ranks the best one in terms of the evaluated competencies. So, from the conducted numerical example, it can be concluded that the proposed SWARA-WASPAS approach is adaptive and easily applicable, and can be used for solving problems related to the selection of personnel. The proposed approach can also be used for solving problems in other areas as well.
REFERENCES


Sikavica P., BahtijarevićŠibe, F., PološkiVokić, N. (2008), Suvremenimenadžment-vještine, sustavi i izazovi.Školskaknjiga, Zagreb;


Urošević S. (2012), Razvojkarije. Tehničkifakultat u Boru, Univerzitet u Beogradu, Bor;