

# Recruitment and Selection of Student-volunteers: a Multicriteria Methodology

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*The Career Center operating within the frameworks of the Faculty of Economics-Skopje, Ss. Cyril and Methodius University in Skopje, published an announcement for recruiting students-volunteers, thus giving the students an opportunity to actively participate in the Faculty's operations and consequently add value to their studies. Considering the notion that recruitment requires search, attraction and provision of pool of candidates who are to be further subjected to a process of selection the result of which will be selection of those candidates who best meet the requirements, the team of experts from the Career Center set a framework for making the selection process in four phases. It is this paper's objective to describe and present the selection process for the purpose of which one of the best known and most often applied methods of multicriteria decision making is being used i.e. the AHP Method (the Analytic Hierarchy Process Method).*

## 1. Introduction

On the occasion of year 2011 announced by European Union as a European Year of Volunteering, under the motto: "By volunteering we create better society", the Career Center at the Faculty of Economics-Skopje, Ss. Cyril and Methodius University in Skopje, published an announcement for recruiting students-volunteers who are to be engaged within the frameworks of the Faculty's operations. Working in the direction of setting and fulfilling the already set goal: "From the students to the students – from the Faculty to the Faculty" the Career Center published this announcement for recruiting students-volunteers studying at the Faculty of Economics-Skopje, thus following the European initiatives for creating a better society in which students can really make a difference by becoming active within the frameworks of their high-educational institution.

The precondition for the students becoming eligible for applying to this announcement, was to have completed the first year of their studies, and the required application documents were the following ones: 1. Certificate for being a student at the Faculty (with specified year of studies); 2. Short CV (Curriculum Vitae); 3. Recommendation issued from one Professor; and 4. Short essay (containing not more than 100 to 150 words) on the topic: "I can change the world...I will start with myself...I WILL VOLUNTEER!". In order to make the right selection of students-volunteers, a team of three experts at the Faculty of Economics-Skopje (Head of the Career Center, Vice-Dean of Academic Affairs and an Assistant at Organizational Sciences and Management, at the subjects Management Science and Economical and Mathematical Methods and Models, the Assistant be-

ing certified in the Republic of Macedonia as a Human Resources Professional) set a framework for carrying out the selection process in four phases. In the first phase of the selection process, the submitted application documents are to be inspected; in the second phase the ranking is to be made by application of the AHP Method; the third phase is the phase when the candidates are to be interviewed (for this purpose a structured interview is to be applied) and in the last, fourth phase the final selection of candidates is to be made, in accordance with the suitability of their profile for the volunteers' vacancies.

This paper is structured as follows: besides the introduction in Section 1, the second part gives a short overview of both the recruitment process as well as the selection process. The third part provides a detailed presentation of the four phases applied during the selection process, whereas the concluding remarks are given in Section 4.

## 2. Recruitment and selection

Recruitment and selection of new candidates are two pretty complex processes that are difficult to be successfully realized, even when well focused. The organization which tries to carry out both of the processes at the same time will probably not carry out any of the two [6].

### 2.1. The recruitment process

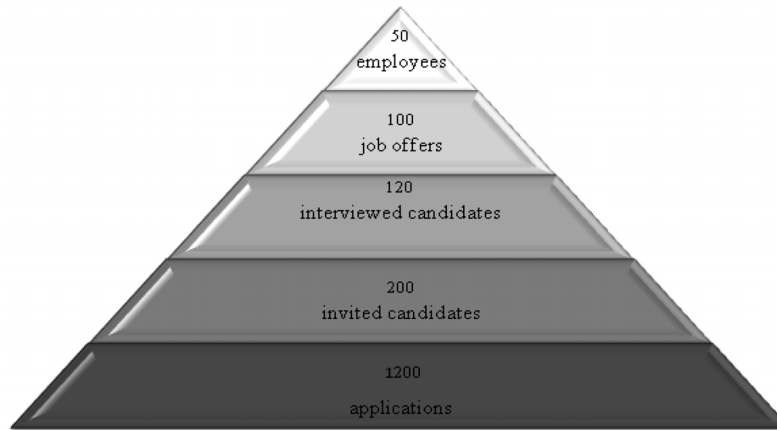
Recruitment is a process of attracting candidates for vacancies, the candidates possessing knowledge, abilities, skills and personality features necessary for task performance. Recruitment can also be defined as practice or activity carried out by the organization for the purpose of identifying and attracting its potential employees [1]. However, it is not only that the recruitment

process intends to attract large number of candidates. Namely, if the process creates a multitude of non-qualified candidates, the organization should make greater efforts for selecting people, and this selection would fill in small number of job positions.

What is often used as basis for assessing the number of required applications for the purpose of selecting the

right candidates is the Pyramid of Recruitment Benefit (Figure 1), details can be found in [10].

The experience of many companies shows that only 1/6 of the received applications are usually included in the detailed selection process; however these indicators can change in accordance with the number of interested candidates who apply at that moment [4].



**Figure 1.** *Pyramid of Recruitment Benefit*

However, as Barber [1] points out, it is important that employers do not consider the recruitment process to be finished at the point at which a pool of applications has been received. It continues during the short-listing and interviewing stages and is only complete when an offer is made and accepted. Until that time there is an ongoing need to ensure that a favorable impression of the organization and an employer is maintained in the minds of those whose services they wish to secure.

There are two fundamental sources of candidate recruitment: the first one consists of external recruitment i.e. recruitment of candidates outside the organization, those who are present at the actual labour market, whereas the second one refers to internal recruitment i.e. attraction of potential candidates in the organization itself, for more details see [6 and 11].

## 2.2. The selection process

*"All the wise strategies and advanced technologies in the world would not be as effective as they actually are if right people do not stand behind them as their managers."*

*Jack Welch*

*(Former Chief Executive Officer of General Electric)*

One of the most important areas in human resource management is the selection of right people for right job positions. Selection is a procedure that is implemented in accordance with previously determined standardized methods and techniques, standard for certain job position, for the purpose of selecting those ones

who best suit the needs of the organization. The selection covers evaluation and candidates' assessment in terms of their work performance as well as projections about their future success at the job position and the working organization. The organization is the one that decides who is to be selected and who is not, in accordance with the strategy, the organization culture and the concrete job requirements [4].

The selection methods and procedures for collecting relevant data can be divided into two larger groups:

1. Standard-conventional, and
2. Unconventional-alternative.

Conventional methods and sources of data are the following ones: application form, Letter of Intent, short curriculum vitae (CV), documents and education degree diplomas, recommendations, psychological tests, interview, case tests, centers for individual potential assessment etc. Unlike the standard methods and sources of data, the unconventional methods and sources of data refer to: polygraph examinations, graph analysis, drugs examination, astrology etc. The above mentioned methods and sources of data are explained in detail in [3, 6 and 11].

## 3. The four phases of the selection process

Before carrying out the recruitment and the selection of students-volunteers activities, it is necessary that we determine the policies and strategies regarding volunteering. Strategy as planned action governs the whole recruitment and selection processes because it determines the following:

- What kind of students institution needs;
- Whether the students are to be recruited internally or externally i.e. from the organization or outside it;
- Whether the students are to adapt to the job or the job is to adapt to them;
- Whether the activities are to be directed to developing the students or towards using their actual competences;
- Whether individuals or team players are to be preferred;
- Which criteria and methodological tools are to be used during the selection.

What is visible in our Announcement for recruiting students-volunteers, published at the web site of the Faculty of Economics-Skopje<sup>1</sup>, on 20.05.2011 is that we are applying the internal source of recruitment.

As advantages of the internal source of recruitment we outline the following ones:

- The student is well familiar with the institution, its strengths and weaknesses;
- It has positive influence on the internal motivation within the institution and
- It strengthens the perception that the institution takes care of good students.

In the section that follows the four phases of the selection process are going to be explained in detail.

### **3.1. First phase – checking the submitted documentation**

Within the frameworks of this phase, our team prepared a form for identification of the documents submitted on behalf of the candidates. What was required to be filled in this document was the name and surname of the candidate, his/her index number, and in the table that contained the list of the required documents, it was necessary to circle the symbol “✓” if the candidate submitted that document or the symbol “x” if the document was not submitted. At the end of the form two options were given:

1. The candidate submitted the required application documents;
2. The candidate has not submitted the required application documents;

Out of these two options, and in accordance with the circled symbols in the form of identification, it was necessary to select the appropriate one. All the candidates who submitted the complete application documents qualified in phase two.

### **3.2. Second phase - candidates ranking: analytic hierarchy process (AHP) method**

In the second phase – candidates ranking, our team determined 7 criteria and 5 sub-criteria for each of the criteria according to which candidates were to be ranked, and prepared a form for their assessment. In order to be capable of determining the importance of each criterion we implemented the multicriteria method called Analytic Hierarchy Process (AHP) Method. In part 3.2.1 we give a short overview of the AHP Method, whereas the appropriate AHP model which represents a simplified image of reality is presented in part 3.2.2.

#### **3.2.1. The analytic hierarchy process**

The Analytic Hierarchy Process [7] is a powerful and flexible decision making process which is helpful in setting priorities and making the best decision when both qualitative and quantitative aspects of a decision need to be considered. The AHP is one of the most widely exploited decision making methods in cases when the decision (the selection of given alternatives and their prioritising) is based on several criteria/sub-criteria [2]. Complex decision problem solving, which this method uses, is based on the problem decomposition into a hierarchy structure which consists of the goal, the criteria, sub-criteria and the alternatives [5].

The method of application can be explained in four steps [9]:

1. Define the problem and determine the kind of knowledge sought.
2. Structure the decision hierarchy from the top with the goal of the decision, then objectives from a broad perspective, through the intermediate levels (criteria on which subsequent elements depend) to the lowest level (which usually is a set of the alternatives).
3. Construct a set of pairwise comparison matrices. Each element in an upper level is used to compare the elements in the level immediately below with respect to it.
4. Use the priorities obtained from the comparisons to weigh the priorities in the level immediately below. Do this for every element. Then for each element in the level below add its weighed values and obtain its overall or global priority. Continue this process of weighing and adding until the final priorities of the alternatives in the bottommost level are obtained.

To make comparisons, we need a scale of numbers that indicates how many times more important or dominant one element is over another element with respect to the criterion or property with respect to which they are compared. The fundamental scale of values to represent the intensities of judgements is shown in Table 1.

<sup>1</sup> <http://www.eccf.ukim.edu.mk/>

Importance intensity	Definition
1	Equal importance
3	Moderate importance of one over another
5	Strong importance of one over another
7	Very strong importance of one over another
9	Extreme importance of one over another
2,4,6,8	Intermediate values
Reciprocals	Reciprocals for inverse comparison

**Table 1.** *The Fundamental Scale*

More on AHP Method see in [7, 8 and 9].

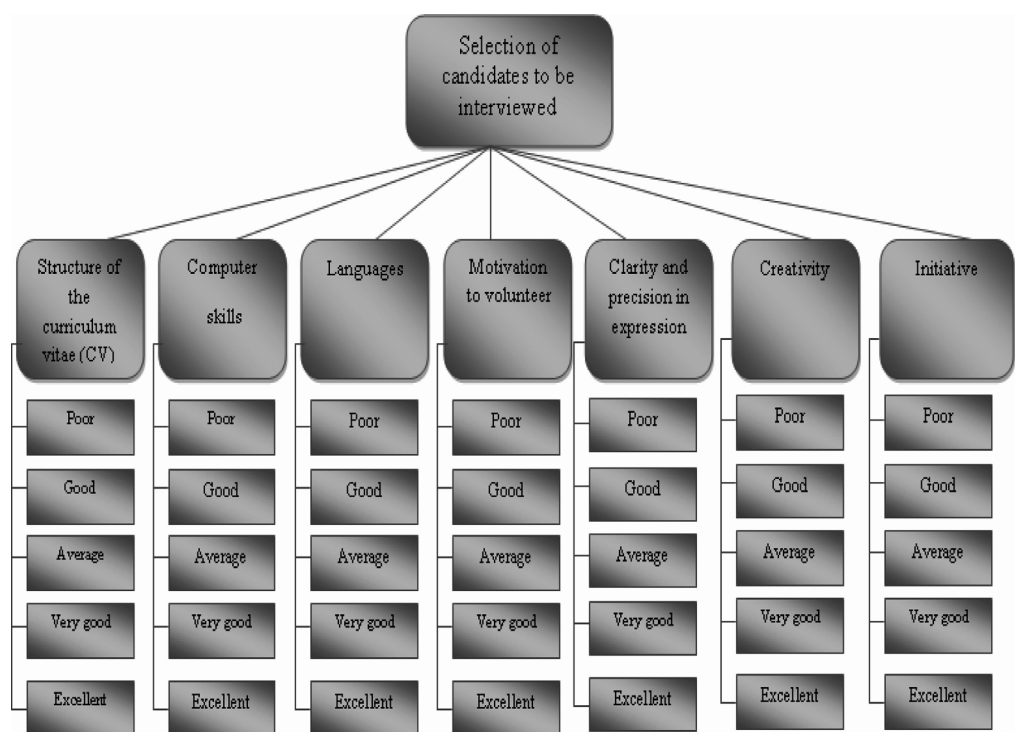
### 3.2.2. AHP based model for ranking student-volunteers

On the basis of the determined 7 criteria, being the following ones: structure of CV, computer skills, foreign languages, student’s motivation to volunteer at the Faculty of Economics-Skopje, clear and precise expression skills, creativity and initiative<sup>2</sup>, as well as the sub-criteria for each of the above listed criterion (poor, good, average, very good and excellent) we developed our AHP model that will enable us do the candidates ranking (Figure 2).

<sup>2</sup> From the submitted CV we evaluate the first three criteria (the structure of CV, the computer skills and foreign languages), and from the short essay we assess the student’s motivation to volunteer at the Faculty of Economics-Skopje, how clear and precise his/her expression is, as well as his/her creativity and initiative.

By using the Saaty’s scale that consists of 9 degrees, we make the necessary comparison regarding the stated criteria and sub-criteria in pairs and by calculating the model we get the appropriate values for each of them. For the purpose of assessing the candidates and rank them appropriately we made a form that besides filling in the candidate’s name and surname, his/her index number and gender, it is necessary that for each of the 7 criteria for which 5 sub-criteria are given, and in accordance with the collected data about the candidate, the appropriate assessment sub-criteria be circled.

In the same form, it is necessary to fill in the results from the assessment i.e. the rank of the candidate got with the AHP method, which serves for the purpose of deciding whether to invite the candidate to an interview or not. At the end of the form, it is necessary that the evaluators (the expert team) state their name and surname, the position they hold, and sign the form.



**Figure 2.** *AHP Model for candidates’ ranking*

### 3.3. Third phase - interviewing

Within the frameworks of the third phase we decided to make a structured interview and for the purpose of doing this we focused on four criteria that are essential for the candidate becoming a volunteer at our institution, the criteria being the following ones: time management, confidentiality, personal communication and interpersonal skill and organizational skills. For each of these criteria we made questions that each of the candidates is to be asked, and in accordance with the candidate's response the criteria are to be valued (as follows: 0-insufficiently; 1-less than acceptable; 2-acceptable; 3-more than acceptable; 4-outstanding). In order to be capable of assessing the candidates we prepared a form in which the above mentioned criteria are to be evaluated.

### 3.4. Fourth phase - selecting students-volunteers and informing them

According to the results from the interview and the recommendation from one course professor, the candidate can be selected as a volunteer at the Faculty of Economics-Skopje, not accepted as a volunteer, or put on the waiting list (Figure 3). It is in this phase that the candidates are to be informed about the result they achieved.

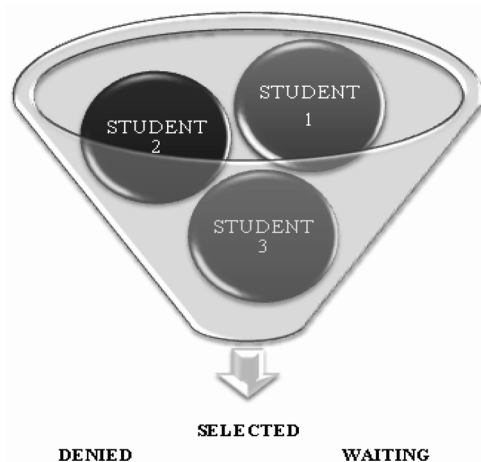


Figure 3. Results from the selection process

### 4. Conclusion

In this paper we presented how the processes of recruitment and selection can be carried out in a high-education institution for the purpose of selecting students – volunteers who will participate in the institution's operations. The selection process was presented with its four phases including the multicriteria AHP method, whereas the results that we will get are going to be subject topic in the next article.

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