## The Identification and Development of Talents in the Environment of Logistics Companies Identifikacija i razvoj talenata u okruženju logističkih tvrtki

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#### Summary

This paper focuses on the identification of talents as a strategic investment of logistics companies to increase their competitiveness in the future. The paper represents partial result of research aimed the identification of talents as the potential key managers in the specific conditions of logistics companies. Research question is how we can optimize the identification of the potential talents of logistics companies so that investment for their development will not be lost. There is a proposed use of SAAT's pair wise comparison method for optimizing in the paper. The proposal is verified on a model example in the environment of logistics company.

#### Sažetak

Ovaj rad bavi se identifikacijom talenata kao strateškim ulaganjem logističkih tvrtki kako bi povećale svoju konkurentnost u budućnosti. U radu je izložen dio rezultata istraživanja kojemu je cilj bio identificirati talente kao potencijalne ključne menadžere u specifičnim uvjetima logističkih tvrtki. Istraživačko pitanje je kako možemo optimizirati identifikaciju potencijalnih talenata logističkih tvrtki tako da ulaganje u njihov razvoj ne predstavlja gubitak. U radu je predloženo korištenje SAAT metode usporedbe parova za optimizaciju. Taj prijedlog provjeren je na primjeru modela u okruženju logističke tvrtke.

**KEY WORDS** 

talent management

logistic companies

management competences

Saaty's pairwise comparison method

### KLJUČNE RIJEČI

menadžment talenta menadžerske kompetencije logističke tvrtke SAAT metoda usporedbe parova

#### **INTRODUCTION**

Thanks to globalization, the requirements on company competitiveness but also on the quality of human resources are increasing. There are several trends that change the view of the management of employees working in logistics companies. The key role of logistics operators is increasing their human capital, thus adding value by using the knowledge and experience of the employees and their continuous development. The perception of employees as bearers of knowledge calls for changes in the management and use of modern management tools. The area of logistics services is no exception and even creates the specific requirements for key managers because of constantly increasing demands in this area and its rapid development.

# TALENT MANAGEMET IN THE CONDICTIONS OF LOGISTIC COMPANIES

Talent management is a relatively new concept that as part of human resource management initiated a boom around the word "talent". Talent management had essentially over time become

part of the human resources strategy and even the global trend, which ultimately determines the potential (competitiveness) companies [1-3].

British website BNET [1] that deals with problems of management, defines talent management as sourcing, collection, identification, preservation, management and development of employees, which we think they have the potential for high performance. According to BNET, performance management focuses on the skills and abilities of these individuals, their growth potential and to assess their contribution to the success of the company [1]. Timely retrieval, recognition and development of these individuals may bring the most strategic source for logistics companies in the long term. Therefore, a method for assessing competencies talent (potential key management) is a strategic point for obtaining relevant information.

Wrong adjustment of talent management brings a number of problematic points. One of them is insufficient setting the talent, as well as the imprecise definition of the required competencies (evaluation criteria), under which are assessed and collected employees to "talent pool". The other problematic points are [3]:

- a wrong adjustment of who is defined as the of talent by logistic company,
- a poor selection of talents by properly set criteria (competencies), which generally result in more a unreturnable investment. If the company does not demonstrate the return on this investment, the talent management program becomes inefficient,
- incorrect communications, that causes the demotivation of the other (untalented) employees,
- unsatisfied ambitions of talented employees, where the company does not allow the growth of their careers,
- a strengthening the individualism within the company, which does not support the cooperation between organizational units and may have a negative effect on the logistics company.

By means of the criteria for the evaluation we analyse the economical and also social consequences of the actions which primarily affect the performance and motivation of employees and the whole logistics company.

### ASSESSMENT TOOLS OF THE TALENT OF LOGISTICS COMPANIES

The basic tools of the personal evaluation can be divided into two main groups: quantitative and qualitative. To quantitative tools belong economic indicators (for example labour expenses, expenses of the individual personal processes) and socioeconomic indicators (absence, fluctuation, etc). To qualitative tools belong: motivation and content of the employee (measured by sociological researches), quality of the competences of individual staff or a valuation of their achievement [4].

The qualitative tools are still less commonly used than the quantitative ones, though they can give the fundamental information about a company situation and its power. The reason for this may be higher expenses for establishing the system of qualitative indicators [3].

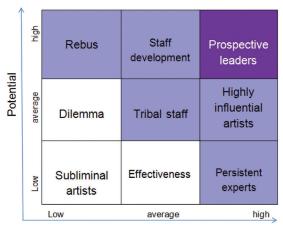
However, only the corrected chosen qualitative tools provide an avoidance and solution of the possible problems and so they cannot be neglected. Commonly used methods of determining the qualitative evaluation criteria (required competences) of the key management are based on an analysis of the job position. In practice, there is a new "ex-post model", which starts to use and can reliably identify, assess of the individual management competencies based on real facts reflecting the specifics of the logistics company. This method is based on the identification of existing competencies of successful managers in the logistics company[4].

The most effective is their identification, respectively detection, assessment and evaluation during their professional development by using selected methods and procedures of a comparison with other individuals. The purpose of the assessment should not only finding the current level, but mainly prediction to the future, because the behaviours reflect the interests, opinions and experiences of a whole person.

#### THE DRAFT OF METHOD FOR DETERMINING TO IMPORTANCE WEIGHTS FOR THE EVALUATION OF COMPETENCIES

The aim of the article is to design an appropriate method of assessing the key competences of talents within the logistics companies. Currently, in practice, there are used comparative methods for quantitative and qualitative criteria. [5] The main criterion for identifying business talents is a performance. This shows that employees have for their work corresponding skills a motivation [2]. This criterion is not the only one. If staff aren't successful at their positions, it may be also because their work is boring, they lack the necessary help, motivational support, or they lack the necessary means to their performance [6]. Therefore, it is necessary to evaluate performance in addition to the individual potential.

GE - McKinsey 9 quadrant grid (9 box grid) is used for a combination of performance appraisal a potential. There is on one side measured power (high, average a low) and, on the other side the potential [7]. The main deficiency of the method is disregarding the different importance of the evaluated criteria, which are rated at the same level. In the paper we solve this problematic point using Saaty's method which easily allows you to assign a weight of importance to identified evaluation criteria (rated managerial competencies).



Performance

Figure 1 GE - McKinsey 9 quadrant grid (9 box grid) Source: [3]

The system of evaluation of Saaty's method is based on the formation of arranged pairs consisting the weight of importance of a given parameter which the personalists evaluates within the framework of determined competences and the level (value) of this parameter (relation 1) [8]:

$$\mathbf{M}\mathbf{H} = \sum_{i=1}^{n} v_{i,\cdot} \mathbf{s}_{i} \tag{1}$$

where:

- MH total multi criteria valuation,
- v<sub>i</sub>\_relative weight of importance of the i<sup>th</sup> parameter,
- s<sub>i</sub>-level of meeting the requirements of the i<sup>th</sup> parameter.

In order to determine the weights of importance of a given parameter we use Saaty'smethod. The principle of Saaty's method lies in the fact that instead of using a numerical scale, it enables the users to express their preferences verbally which is often a much easier way of expressing themselves. Verbal expression is automatically transferred into a numerical scale.

The level of importance of one parameter before any other is expressed by the user on a whole number scale 1 to 9. The value 1 means that the pair of parameters has the same importance. The value 9 means that the value of one parameter is absolutely higher than the value of the other parameter. If one parameter is less important than the other, the reverse value of the whole numbers of the given scale is used. The information from pairwise comparison can be put into a matrix  $S = (s_{ij'}, i, j = 1, 2, ..., k)$  known as Satty's matrix. The elements of this matrix  $s_{ij}$  can be interpreted as estimates of the share of the i<sup>th</sup> and j<sup>th</sup> parameters (relation 2) [9]:

$$s_i \approx \frac{v_i}{v_j}$$
  $i, j = 1, 2, ..., k$  (2)

For the elements of Saaty's method it applies that  $s_{ii} = 1$ , i = 1, 2, ..., k, ie. units are on the diagonal; it further applies that  $s_{ij} = 1/s_{ji'}$  i, j = 1, 2, ..., k, ie. elements symmetrical according to the main diagonal carry reversed values.

User's preferences are contained in the matrix (relation 3) of pairwise comparisons S. It is important to use the information about these preferences for the estimate of the weight of the parameters. One of the conditions for usability of this information is its appropriate quality. The matrix of pairwise comparisons must be sufficiently consistent. Matrix S is fully consistent if for any index trio i, j, q it applies that  $s_{ia} = s_{ii}s_{ia}$ .

$$S = \begin{bmatrix} 1 & 2 & 6 \\ \frac{1}{2} & 1 & 3 \\ \frac{1}{6} & \frac{1}{3} & 1 \end{bmatrix}$$
(3)

A good estimate of vector v can be obtained as a geometrical average of elements in each line of the matrix.

, <u>1</u>

Matrix S normalized so that the sum of its elements is equal to 1 (relation 4 and 5) [8], [9]:

$$v_i = \left(\prod_{j=1}^k s_{ij}\right)^{\frac{1}{k}} \quad i = 1, 2, \dots, k$$
 (4)

$$v_i = \frac{v_i}{\sum_{i=1}^k v_i} \quad i = 1, 2, \dots, k \tag{5}$$

If the above method is used, weights of parameters from one expert of human resources are obtained. In order to determine the objective value of the weights of parameters, we need to obtain data from a representative group of users. The total weight of the i<sup>th</sup> parameter is then the arithmetical average of the weights obtained from individual HR experts.

#### MODEL EXAMPLE OF APPLICATION OF THE PROPOSED EVALUATION SYSTEM OF TALENT IN THE ENVIRONMENT OF LOGISTICS COMPANY

Competence assessment to identify talent was carried out in a logistics company operating in the Czech Republic.For the specific needs of the company, there were selected 7 key management competencies based on structured interviews with their senior management and HR specialists: K1 - experience, K2 - expertise in the problem of logistics services, K3 - ability to work in a team and lead it, K4 - resistance to stress, K5 - willingness and ability to continually educate, K6 -communication skills and K7 - analytical thinking.These competencies were determined for selecting the talents as potential key staff to positions at the company's top management. Preferences selected managerial competencies were determined by structured interviews with senior management of the logistics company [10], [11].

The data obtained were used to calculate the importance weights of the various competencies through a pair comparison by Saaty's method (shown in Table 1). Sample Calculations to the value  $v_1'$ ,  $v_2'$  and the resulting values of weights  $v_1$  and  $v_2$  are shown in relations 6,7,8 and 9. The sum of all the values of weights must be equal to the value 1.

$$\mathbf{v}_{1} = \left(\prod_{j=1}^{7} s_{1j}\right)^{7} = (1,00.0,11.0,20.0,11.0,11.0,11.0,11)^{\frac{1}{7}} = 0,1654$$
(6)

$$v_{2} = \left(\prod_{j=1}^{n} s_{2j}\right)^{-1} = (9,00.1,00.1,00.3,00.2,00.3,00.5,00)^{\frac{1}{7}} = 2,6031$$
(7)

$$v_{1} = \frac{v_{1}}{\sum_{i=1}^{7} v_{i}} = \frac{0.1654}{0.1654 + 206031 + 1.1877 + 0.7197 + 1.6013 + 1.3335 + 1.2724} = 0.0186$$
(8)

$$v_2 = \frac{v_2}{\sum_{i=1}^7 v_i} = \frac{2,6031}{0,1654 + 206031 + 1,1877 + 0,7197 + 1,6013 + 1,3335 + 1,2724} = 0,2930$$
(9)

| Criterion | K1   | K2   | K3   | K4   | K5   | K6   | K7   | ví         | V      |
|-----------|------|------|------|------|------|------|------|------------|--------|
| K1        | 1.00 | 0.11 | 0.20 | 0.11 | 0.11 | 0.11 | 0.11 | 0.1654     | 0.0186 |
| K2        | 9.00 | 1.00 | 1.00 | 3.00 | 2.00 | 3.00 | 5.00 | 2.6031     | 0.2930 |
| K3        | 5.00 | 1.00 | 1.00 | 2.00 | 3.00 | 0.33 | 0.33 | 1.1877     | 0.1337 |
| K4        | 9.00 | 0.33 | 0.50 | 1.00 | 0.33 | 0.20 | 1.00 | 0.7197     | 0.0810 |
| K5        | 9.00 | 0.50 | 0.33 | 3.00 | 1.00 | 2.00 | 3.00 | 1.6013     | 0.1803 |
| K6        | 9.00 | 0.33 | 3,00 | 5.00 | 0.50 | 1.00 | 0.33 | 1.3335     | 0.1501 |
| K7        | 9.00 | 0.20 | 3.00 | 1.00 | 0.33 | 3.00 | 1.00 | 1.2724     | 0.1432 |
|           |      |      |      |      |      |      |      | ∑ = 1.0000 |        |

Table1 Resulting the Saaty's matrix

Source: authors

From the resulting values of importance of determined competences follows that the most important background in evaluating talent are in the studied logistics company considered professional knowledge (expertise), which constitute 29.3% assumption for selecting talent. The second most required competence is K6 - willingness and ability to continually educate, whose weight is assessed at 0.1810. The third most important competence is communication skills with the resulting weight of importance - 0.1501. The lowest rating of importance has competence K1 - experience that is paradoxically the most required recruitment.Instead, this competence is the least important at searching for talent. This follows from the fact that the development of talent is spent considerable investments and acquisition experience is automatically assumed and unlike other competencies can be obtained [10], [11].

The logistics company may use the resulting weights of importance monitored competencies in identifying talent in its specific conditions. Monitoring the necessary competencies is possible using the Development Centre, where employees are assessed on the basis of the criteria and, therefore, are designed appropriate training and development plans for them.Using these criteria weights is possible not only to assess the return on investment for staff development, but also to evaluate the suitability of a number of alternative educations. Choosing the suitable variants (whether in the form of potential talent or forms of training and development) can be carried out Saaty's matrix - AHP method.

#### CONCLUSION

The target of paper was achieved and the design for optimizing thethe selection of the talents in the area of logistics companies has been verified on a model example. In the paper, there was Saaty's method chosen for optimization. This method was chosen because of the opportunity to test several experts as well determining the weightings of criteria from cardinal information. Compared Scoring method, it is possible to additionally evaluate the selection of variants of the solutions.

The assessment of competences does not include the entire contents of the evaluation, because it is particularly essential point for staff development [12]. The result of evaluation according to competency model should be: - knowledge of the

current level of competencies, - non-compliance of the required level of competencies, - an action plan development - acquiring other necessary competencies - rate of assistance in the development of competencies on the part of the company [13], [14]. For application to determine the significance of the proposal evaluation criteria of the talents, the specific requirements of a particular logistics company should be reflected. In this way, we can optimize of the return on investment in key staff and to develop the knowledge potential of the logistics company for the future. This potential is a huge competitive advantage in the area of logistics providers.

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