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**МЕТОДИЧЕСКИЙ ПОДХОД К ОЦЕНКЕ
СТЕПЕНИ КОМПЕТЕНТНОСТИ
ПЕРСОНАЛА ГОСТИНИЧНОГО
ХОЗЯЙСТВА****SYSTEMATIC APPROACH TO THE
ASSESSMENT OF HOTEL MANAGEMENT
STAFF COMPETENCE**

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Ключевым преимуществом успешной деятельности современных организаций является наиболее полное раскрытие и реализация компетенций сотрудников, работающих во всех отраслях экономики страны. Особенно актуальным этот вопрос является для гостиничной индустрии, так как процесс производства и потребления услуги в этой индустрии неразрывный. Наиболее полное раскрытие компетенций каждого сотрудника и как следствие повышение его производительности может стать главным преимуществом гостиницы среди конкурентов. Для наиболее точного удовлетворения потребностей отрасли необходимо знать навыки и компетенции, которые предъявляются к сотруднику. В этой статье предлагается Венгерский метод для оценки компетенций сотрудников действующей гостиницы. Показана применимость и полезность Венгерского метода при решении реальной проблемы оценки компетентности персонала. Для решения этой задачи предлагается использовать метод парных сравнений для определения наиболее важных, эталонных компетенций сотрудников, которые будут основой для построения матрицы соответствия компетенций. Таким образом, результаты помогут отельерам самостоятельно, объективно оценивать текущий уровень компетенций персонала 5 подразделений гостиницы

To deploy fully the potential of personnel competence is the key advantage of modern organizations in all businesses of the country. This is especially critical for hotel business because producing and consuming of this service is the inseparable process. The maximum deployment of potential of an employee competence can be the key competitive advantage for a hotel. To satisfy business needs we should be aware of skills and competences an employee should possess. This paper suggests the application of the Hungarian method to assess the personnel competence of an operating hotel. We also want to show the applicability and utility of this method in solving real problem of evaluating the personnel competence. To solve this problem we suggest using pairwise comparison to identify the most important sample competence, which we use as the basis for personnel competence matrix. Thus, hoteliers will be able to make their own objective assessment of the personnel competence level of 5 divisions of the hotel

Ключевые слова: КОМПЕТЕНТНОСТЬ,
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Specific features of the tasks of staff efficient allocation in terms of official hierarchy and the maximum realization of each individual competence led to the creation of the Hungarian method to solve them. Methodological approach to assess level of hospitality staff competence (which is based on Hungarian method) is shown in Fig.1.

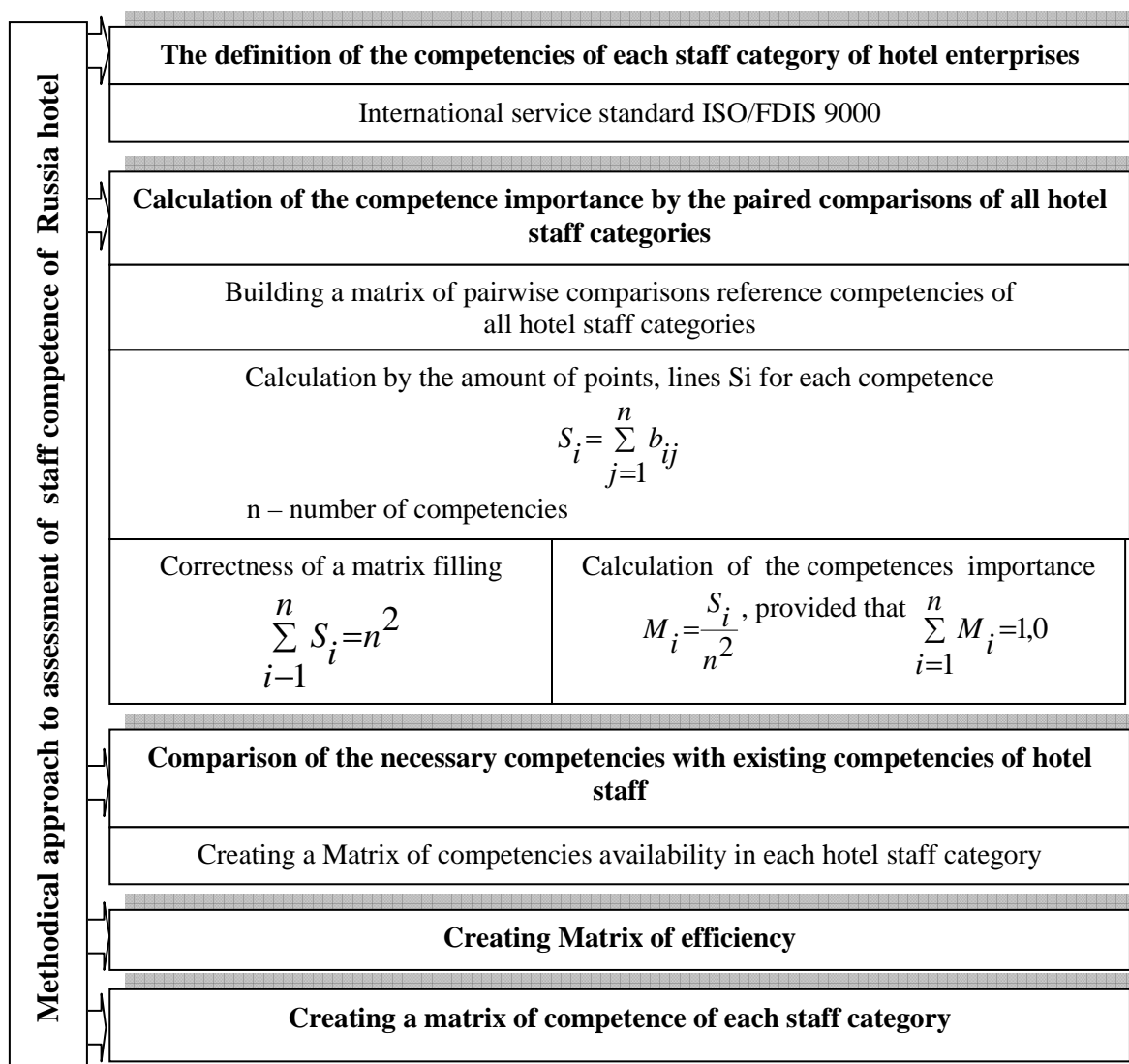


Fig. 1 - The methodical approach to an estimation of a competence degree of the hotel industry staff

The basic idea of the Hungarian method is to move from the initial square matrix of cost C to an its equivalent matrix C_e integral elements and system of n independent zeros, of which any two are not related the same row or the same

column. For a given n there are n feasible solutions. If in matrix of competence X to arrange n units in the way that in each row and column is only one unit, which is arranged in accordance with located n independent zeros from equivalent matrix of cost C_e , in this case result is acceptable solution to the problem of employee's competence by level of official hierarchy.

A sample case study

To apply the Hungarian method and assessment of hotel staff competency in Krasnodar in the first phase of the research it is necessary to describe the competencies required for each category of staff working in hotel industry. In accordance with International Standard Services it has been an allocated core hotel staff competencies (Table 1).

Table 1 - Standards of competence by the level of the job role hierarchy

The level of the job role hierarchy	Competence
Service Staff	Education, experience, health, patience, fluency in English and another foreign language, goodwill, commitment, knowledge of psychology, quick response, enthusiasm, skill
Main production staff	Fluency in one foreign language, education, creativity, punctuality, sense of taste, ability to work in a team, endurance, health, patience, experience
Technical staff	Fluency in one foreign language, education, formalism, analytic skills, usability, perseverance, health, ability to foresee, punctuality, attentiveness, clarity
Specialists	Education, experience, communication skills, work with people, ingenuity, fluency in English and another foreign language, kindness, courtesy, consistency, self-control, patience, good diction, health
Department, Division managers	Responsibility, organizer, education, work experience, health, intuition, enthusiasm, communication skills, self-critical, balance, objectivity, conflict-free, good organizational skills, ability to understand people

The second stage of the calculation is to determine the weight of competencies importance by method of paired comparisons of all staff

categories. After filling the matrix with elements the comparison needs to be calculated by rows total the amount of points S_i by each competence by Formula 1:

$$S_i = \sum_{j=1}^n b_{ij} \quad (1)$$

n – number of competencies

Correctness of filling a matrix is defined by the equation 2:

$$\sum_{i=1}^n S_i = n^2 \quad (2)$$

At the next stage we determine the significance of the competence according to the formula 3:

$$M_i = \frac{S_i}{n^2}, \text{ provided that, } \sum_{i=1}^n M_i = 1,0 \quad (3)$$

The matrixes of the second stage of methodological approach to the assessment of staff competencies in Russia hotel industry are presented in Table 2-6.

Table 2 - Matrix of standard competences by paired comparisons of Department managers

Competences of Department, Division managers	Competences of Department, Division managers														S _i	M _i	R _i
	1	2	3	4	5	6	7	8	9	10	11	12	13	14			
1. Responsibility	1	0	0	0	0	0	0	0	0	2	2	2	0	2	9	0,0459	10
2. Organizer	2	1	2	0	2	0	2	2	2	2	2	2	2	2	23	0,1173	3
3. Education	2	0	1	0	0	0	2	2	2	2	2	2	0	2	17	0,0867	6
4. Work experience	2	2	2	1	2	0	2	2	2	2	2	2	2	2	25	0,1276	2
5. Health	2	0	2	0	1	0	2	2	2	2	2	2	0	2	19	0,0969	5
6. Fluent English	2	2	2	2	2	1	2	2	2	2	2	2	2	2	27	0,1378	1
7. Enthusiasm	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0,0051	14
8. Sociability	2	0	0	0	0	0	2	1	2	2	2	2	0	2	15	0,0765	7
9. Self-criticism	2	0	0	0	0	0	2	0	1	2	2	2	0	2	13	0,0663	8
10. Poise	0	0	0	0	0	0	0	0	0	1	2	0	0	2	5	0,0255	12
11. Objectiveness	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3	0,0153	13
12. Focus on conflict-free work	0	0	0	0	0	0	0	0	0	2	2	1	0	2	7	0,0357	11
13. Knowledge of etiquette	2	0	2	0	2	0	2	2	2	2	2	2	1	2	21	0,1071	4
14. The ability to understand people	2	0	0	0	0	0	1	0	0	2	2	2	0	2	11	0,0561	9

The research found that for managers of the department, division the most important competencies are: fluent English and another foreign language, experience, organizer, knowledge of etiquette, health, the competency importance factor is 0,13; 0,12; 0,11; 0,1, 0,09 respectively. The above mentioned competencies are the most important because of the hotel industry specific. The last place among the competencies required for department, division management, by calculated competency importance, are: enthusiasm – 0,005; objectiveness – 0,05; poise – 0,02; focus on conflict-free work – 0,03; responsibility – 0,04.

Table 3 - Matrix of standard competences by paired comparisons of specialists

Competence of specialists	Competence of specialists													S _i	M _i	R _i
	1	2	3	4	5	6	7	8	9	10	11	12	13			
1. Work experience	2	2	2	2	2	2	2	2	2	2	2	2	2	26	0,1538	1
2. Good diction	0	0	0	0	1	0	1	0	0	0	0	0	0	2	0,0118	13
3. Education	0	0	0	0	2	0	0	0	0	2	0	2	0	6	0,0355	11
4. Health	1	1	1	1	0	0	2	1	0	0	0	0	0	7	0,0414	10
5. Fluent English	2	1	2	2	2	2	2	2	2	2	0	0	0	19	0,1124	4
6. Ingenuity	2	2	1	0	0	0	2	2	0	2	2	0	2	15	0,0887	6
7. Communicative skills	2	2	2	0	0	1	2	2	0	2	2	0	2	17	0,1005	5
8. Self-control	1	1	2	2	2	2	1	0	2	2	2	2	2	21	0,1242	3
9. Poise	1	0	0	0	1	0	0	1	1	0	0	1	0	5	0,0295	12
10. Kindness	2	2	1	1	1	0	0	0	1	1	0	0	0	9	0,0532	8
11. Focus on conflict-free work	2	2	0	0	0	0	0	0	0	0	2	2	2	10	0,0591	7
12. Patience	1	1	2	2	2	2	2	2	2	2	2	2	2	24	0,1420	2
13. Working in team	1	1	1	2	0	0	0	1	1	1	0	0	0	8	0,0473	9

Ranking of hotel industry specialists competencies in Russia is showing importance of the next qualification requirements: work experience – competency importance factor equal 0,15; patience – 0,14; self-control – 0,12; fluent English – 0,11; communicative skills – 0,1. The last place is taken by: good diction – 0,01; poise – 0,02; level of education – 0,03; health – 0,04.

Table 4 - Matrix of standard competences by paired comparisons of technical staff

Competences of technical staff	Competences of technical staff											S _i	M _i	R _i
	1	2	3	4	5	6	7	8	9	10	11			
1. Fluent English	1	2	2	2	2	1	2	2	1	1	1	17	0,1404	3
2. Education	2	2	2	2	2	2	2	2	2	1	2	21	0,1735	1
3. Formalism	2	1	1	1	0	0	0	0	0	0	0	5	0,0413	9
4. Analytical skills	1	2	2	1	2	1	2	2	1	1	1	18	0,1487	2
5. Practical skills	1	2	2	1	1	1	2	2	0	1	1	14	0,1157	4
6. Perseverance	2	0	0	2	0	0	0	0	0	0	0	4	0,0330	10
7. Health	1	1	1	1	1	1	1	1	1	1	1	11	0,0909	5
8. Ability to foresee	1	1	1	1	1	1	1	1	1	1	0	10	0,0826	6
9. Punctuality	0	0	1	0	0	1	0	0	0	1	0	3	0,0247	11
10. Attentiveness	1	1	1	0	0	1	0	1	1	0	0	6	0,0495	8
11. Clarity	0	0	0	0	1	0	1	1	0	0	0	8	0,0661	7

For technical hotel staff the most important competencies are: level of education - competency importance factor equal – 0,17; analytical skills – 0,14; fluent English – 0,14; practical skills – 0,11; health – 0,09. The lowest competency importance factor among other 11 technical hotel staff competencies is: punctuality – 0,02; formalism – 0,04.

Table 5 - Matrix of standard competences by paired comparisons of main production staff

Competences of main production staff	Competences of main production staff										S _i	M _i	R _i
	1	2	3	4	5	6	7	8	9	10			
1. Fluent English	1	0	0	0	0	1	1	2	2	2	9	0,09	6
2. Education	0	2	2	2	2	2	2	2	2	2	18	0,18	1
3. Creativity	0	0	0	0	1	1	1	1	1	1	6	0,06	9
4. Accuracy	1	0	0	0	1	2	2	1	0	0	7	0,07	8
5. Feeling of taste	2	2	1	1	0	0	0	2	1	0	11	0,11	4
6. Ability to work in a team	1	0	0	2	2	2	1	2	0	0	10	0,1	5
7. Endurance	1	1	0	2	2	2	2	2	2	1	15	0,15	2
8. Health	1	1	1	0	0	2	0	1	1	1	8	0,08	7
9. Patience	1	0	0	1	0	0	0	0	0	0	2	0,02	1 0
10. Experience	1	1	1	1	0	2	2	2	2	2	14	0,14	3

For the main production staff were selected 10 standard competencies, ranking of which revealed that the biggest competency importance factor is for the following competencies: education – 0,18; endurance – 0,15; work experience – 0,14.

Table 6 - Matrix of standard competences by paired comparisons of service staff

Competence of service staff	Competence of service staff											S _i	M _i	R _i
	1	2	3	4	5	6	7	8	9	10	11			
1. Education	1	2	2	2	2	2	1	1	1	0	0	14	0,1157	4
2. Experience	2	2	2	2	0	0	0	0	0	0	0	8	0,0661	8
3..Health	1	2	1	2	0	0	0	1	1	1	1	9	0,0743	7
4. Patience	0	0	0	0	0	0	1	1	0	0	0	2	0,0165	
5. Fluent English	2	2	2	2	2	2	2	2	2	2	1	21	0,1735	1
6. Kindness	1	2	2	2	2	2	1	1	1	2	2	19	0,1570	2
7. Responsibility	0	0	1	1	1	2	2	2	2	2	0	13	0,1074	5
8. Knowledge of psychology	2	1	2	2	0	0	2	2	2	2	2	17	0,1404	3
9. Quick reaction	1	1	1	0	0	1	0	1	0	0	0	5	0,0413	9
10. Enthusiasm	0	1	0	0	0	0	0	0	0	0	0	1	0,0082	10
11. Agility	2	2	2	0	0	1	1	0	1	2	1	12	0,0991	6

Successful business activity of companies in hotel industry based on effective and professional service staff work at the hotels. Primary purpose for development of quality management system of any hotel is identification and evaluation of standard competencies.

Based on the constructed matrix of standard paired-comparisons competencies of service staff was identified that competencies factors such as: fluent English, kindness, knowledge of psychology, level of education and responsibility are the highest – 0,17; 0,15; 0,14; 0,11; 0,1 respectively.

Determine the correctness of standard paired-comparisons competencies:

- managers of the Department

$$n = 14, \quad \sum S_i = n^2, \quad 196 = 196, \quad \sum M_i = 1,0$$

- specialists

$$n = 13, \quad \sum S_i = n^2, \quad 169 = 169, \quad \sum M_i = 1,0$$

- main production staff

$$n = 10, \quad \sum S_i = n^2, \quad 100 = 100, \quad \sum M_i = 1,0$$

- service staff

$$n = 11, \quad \sum S_i = n^2, \quad 121 = 121, \quad \sum M_i = 1,0$$

- technical staff

$$n = 11, \quad \sum S_i = n^2, \quad 121 = 121, \quad \sum M_i = 1,0$$

On the next stage required hotel staff competencies need to be compared with existing ones, for the matrix of competencies availability in each hotel staff category needs to be build. 4 hotels in Krasnodar were investigated for the assessment of staff competency (Table 7-11).

Table 7 - Matrix of appropriate competences of Department, Division managers

The competence of the Department, Division managers	M _i	Hotels			
		Hotel 1	Hotel 2	Hotel 3	Hotel 4
1. Responsibility	0,0459	+		+	
2. Organizer	0,1173	+		+	
3. Education	0,0867	+			
4. Work experience	0,1276	+	+	+	
<i>The rest of the table 7</i>					
5. Health	0,0969			+	
6. Fluent English	0,1378	+	+		
7. Enthusiasm	0,0561	+	+		+
8. Sociability	0,0765				
9. Self-criticism	0,0663				
10. Poise	0,0255				
11. Objectiveness	0,0153	+			
12. Focus on conflict-free work	0,0357	+			
13. Knowledge of etiquette	0,1071				
14. The ability to understand people	0,0051		+	+	
c_{ij}		0,62	0,32	0,38	0,5

Among departments, divisions managers of the researched hotels the highest efficiency ratio has staff at Hotel 1 – 0,62 (8 out of 14 competencies available), the lowest – staff at hotel 2 – 0,32 (4 out of 14 competencies available).

Following competencies need to be developed for all of the researched hotels: communication ability, self-criticism, poise and knowledge of etiquette.

Table 8 - Matrix of appropriate competences of specialists

The competence of the specialists	M _i	Hotels			
		Hotel 1	Hotel 2	Hotel 3	Hotel 4
1. Work experience	0,1538	+	+	+	+
2. Good diction	0,0118			+	
3. Education	0,0355	+	+	+	+
4. Health	0,0414	+	+		
5. Fluent English	0,1124	+		+	+
6. Ingenuity	0,0887				
7. Communicative skills	0,1005	+	+	+	+
8. Self-control	0,1242				
9. Poise	0,0295			+	+
10. Kindness	0,0532		+	+	
11. Focus on conflict-free work	0,0591	+			+
12. Patience	0,1420		+		
13. Working with people	0,0473			+	+
c_{ij}		0,5	0,52	0,54	0,53

Calculated efficiency ratio is proving lack of compliance between required and existing competencies for staff at hotel 1 – 0,5 (6 out of 13 competencies available) and maximum possible one for staff at hotel 3 – 0,54 (8 out of 13 competencies available). Undeveloped competencies for this staff category are creativity and self-control.

Table 9 - Matrix appropriate of competences of main production staff

The competences of main production staff	M _i	Hotels			
		Hotel 1	Hotel 2	Hotel 3	Hotel 4
1. Fluent English	0,09	+	+		+
2. Education	0,18	+		+	+
3. Creativity	0,06	+			
4. Accuracy	0,07		+	+	+
5. Feeling of taste	0,11	+			
6. Ability to work in a team	0,1				
7. Endurance	0,15				+
8. Health	0,08	+	+		+
9. Patience	0,02	+	+		
10. Experience	0,14	+			+
c_{ij}		0,68	0,26	0,25	0,71

Among main production staff the highest efficiency ratio has staff at hotel 4 – 0,71 (6 out of 10 competencies available), the lowest has staff at hotel 2 – 0,26 (4 out of 10 competencies available). For the efficient use of main production staff labour potential on the researched companies following competencies need to be developed: ability work in a team, creativity and endurance.

Table 10 - Matrix of appropriate competences of technical staff

The competences of technical staff	M _i	Hotels			
		Hotel 1	Hotel 2	Hotel 3	Hotel 4
1. Good knowledge of foreign language	0,1404	+			
2. Education	0,1735	+	+	+	
3. Formalism	0,0413		+		
4. Analytical skills	0,1487		+		
5. Practical skills	0,1157			+	
6. Perseverance	0,0330		+		
<i>The rest of the table 10</i>					
7. Health	0,0909		+	+	+
8. The ability to foresee	0,0826				
9. Punctuality	0,0247	+	+		
10. Attentiveness	0,0495				+
11. Clarity	0,0661		+		+
c_{ij}		0,33	0,57	0,55	0,2

Calculation of the efficiency ratio of technical staff showed – 0,57 (7 out of 11 competencies available) – staff at hotel 2 and 0,2 (3 out of 11 competencies available) – staff at hotel 4. More complete implementation required such competence as the ability to foresee, attentiveness, knowledge of foreign languages, practical skills, formalism, analytical skills. It is necessary to note insufficient level of compliance of the competencies specific to the technical staff, which is unacceptable in the related activities of all hotel services. Comparison of the available competencies of service staff with the necessary ones allowed to state about the highest compliance of hotel 1 – 0,86 (8 out of 11 competencies available) and the lack of compliance at the hotel 3 – 0,33 (3 out of 11 competencies available). Improvement of compliance ratio may be possible under development of competencies such as: patience, commitment, enthusiasm.

Table 11 - Matrix of appropriate competences of service staff

The competences of service staff	M _i	Hotels			
		Hotel 1	Hotel 2	Hotel 3	Hotel 4
1. Education	0,1157	+	+		+
2. Experience	0,0661	+			+
3. Health	0,0743	+		+	
4. Patience	0,0165		+		
5. Fluent English and knowledge of another foreign language	0,1735	+			+
6. Kindness	0,1570	+		+	
7. Responsibility	0,1074		+		
8. Knowledge of psychology	0,1404	+	+		+
9. Quick reaction	0,0413	+			+
10. Enthusiasm	0,0082				
11. Agility	0,0991	+		+	+
c_{ij}		0,86	0,38	0,33	0,63

For more detailed analysis let's present results of the coefficients of the compliances calculation of all staff categories at 4 hotels in Krasnodar in the form of matrix of efficiency (table. 12).

Table 12 - Matrix of efficiency

Hotels	Category of hotel staff				
	Department managers	Main production staff	Specialists	Technical staff	Service staff
Hotel 1	0,62	0,68	0,5	0,33	0,86
Hotel 2	0,32	0,26	0,52	0,57	0,38
Hotel 3	0,38	0,25	0,54	0,55	0,33
Hotel 4	0,05	0,71	0,53	0,2	0,63

Solving the obtained matrix by the Hungarian method at the maximum, we obtain the matrix of competence of each staff category (table. 13).

Table 13 - Matrix of competence of each staff category

Hotels	Category of hotel staff				
	Department, division managers	Main production staff	Specialists	Technical staff	Service staff
Hotel 1	1	0	0	0	1
Hotel 2	0	0	0	1	0
Hotel 3	0	0	1	0	0
Hotel 4	0	1	0	0	0

Most disclosed competences are of Department, Division managers and service staff of the hotel 1 - efficiency ratio is 0,62; 0,86 respectively. Compliance with International Standards Services is 8 of 14 competence of Department, Division managers and 8 out of 11 - service staff. The situation for the other studied hotels is less positive, so in the hotel 2 the only competence of technical staff meets the international level, the coefficient of efficiency is 0.57 (7 out of 11 competencies available), the high ratio of efficiency in hotel 3 - specialists - 0,54 (8 out of 13 competencies available), service staff at the hotel 4 - 0,71 (6 out of 10 competencies available).

Conclusion. In the article presented the methodical approach to an estimation of a degree of competence of hotel industry staff and calculated the competence degree of Krasnodar hotels staff on the basis of the Hungarian method, which increases the validity of the conclusions and the possibility of practical application of this approach.

The proposed methodological approach will allow to define the categories of staff hotels with the lowest level of competence, competences which are insufficiently implemented and hotels where staff competence is at quite high level.

Prospects for further research is to study the directions of the Hungarian method use, taking into account the negative competencies, which are reducing the overall competence of the staff.

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