

IMPACT OF HUMAN CAPITAL ON BUSINESS PERFORMANCE OF HOTEL ENTERPRISES IN SERBIA

Marko Slavković^{1*}, Jasmina Ognjanović²

¹University of Kragujevac, Faculty of Economics, Kragujevac, Serbia

²University of Kragujevac, Faculty of Hotel Management and Tourism
in Vrnjci Spa, Vrnjci Spa, Serbia

**m Slavkovic@kg.ac.rs*

Abstract

In a knowledge-based economy, the success, growth and development of hotel companies relies in a large extent on knowledge, since employees are directly involved in the process of service production and consumption. The results of numerous studies demonstrate the impact of human capital on business performances, so management must invest and improve human capital in order to create differentiated products / services and ensure a stable competitive position. The main goal of the research is to analyze the interdependence of human capital components and business performance of the hotels in Serbia. The research results confirm the influence of human capital on the non-financial performance of hotel companies. In order to test the structural relationships between variables, reliability analysis, factor analysis and structural modeling equation are employed.

Key words: human capital, financial performance, non-financial performance, hotel, Serbia.

УТИЦАЈ ЉУДСКОГ КАПИТАЛА НА ПОСЛОВНЕ ПЕРФОРМАНСЕ ХОТЕЛСКИХ ПРЕДУЗЕЋА У СРБИЈИ

Апстракт

У економији заснованој на знању, успех, раст и развој хотелских предузећа у великој мери ослања се на знање, будући да су запослени непосредно укључени у процес производње и потрошње услуга. Резултати бројних студија доказују утицај људског капитала на резултате пословања, па менаџмент компанија мора инвестирати и унапређивати људски капитал како би осмислили диференциране производе/услуге и обезбедили стабилну конкурентску позицију. Основни циљ истраживања односи се на анализирање међузависности компонената људског капитала и пословних перформанси хотела у Србији. На основу обрађених података, доказан је утицај људског капитала на нефинансијске перформансе хотелских предузећа. У циљу тестирања структуралних односа између променљивих, у раду се користе анализа поузданости, факторска анализа и једначина структуралног моделовања.

Кључне речи: људски капитал, финансијске перформансе, нефинансијске перформансе, хотел, Србија.

INTRODUCTION

Being the key element of value creation, human capital is a source of innovation and strategic renewal (Scafarto, Ricci, & Scafarto, 2016). This capital encompasses employees with their abilities, knowledge, skills and competences and makes the most important component of intellectual capital (Nerdrum, & Erikson, 2001). According to human capital theory, intellectual capital is the complementary ability of an individual to create added value (Nerdrum, & Erikson, 2001) and, consequently, human resources represent a part of intellectual capital. These resources especially gain on importance in service companies since employees directly participate in production and consumption of hotel services. Acting towards meeting guest's expectations and needs, employees directly influence the guest's overall perception of the service.

The paper examines human capital in hotel companies and its impact on business results. Hospitality represents a set of activities where 'people deal with people' (Barrows, & Bosselman, 1999), which makes the development of human resources critically important in this field of industry. The development of hospitality in the Republic of Serbia (RS) is, to a large extent, conditioned by the development of tourism. The sector of Accommodation and food service activities employs 22,921 people, which makes up 2.3% of the total number of RS workforce (STAT.YEARB.SERB. 2016, p.205). The share of this sector in the structure of gross value added amounts to 1.06%, while its share in the realized RS turnover is 0.6% (STAT.YEARB.SERB. 2016, p.205). These indicators point to the insufficient development of this sector and stress the arising need to create an adequate climate and develop infrastructure, which would ensure the hotel industry growth. On the another hand, Dobrivojević, Pavlović, & Popesku (2017) point out that Serbia provides good conditions for investments in the area of competency of the labour force, the ability of the domestic economy to respond to investors needs for products and services.

The subject of the research is the identification of human capital components which determine the success of hotels in Serbia. The paper focuses on the following human capital components: competencies of employees, intellectual agility and attitude of employees and monitors hotel business performance, of both financial and non-financial nature. *The main goal of the research* is to analyse the interdependence of human capital components and business performance of hotels in Serbia.

The paper employs the original model for testing the influence of human capital on the business performance of hotels in Serbia. The research

resulted in identification of non-financial performances of hotel companies which are influenced by human capital. The performance and human capital criteria that make the base of the current research have not been used by Serbian authors so far.

LITERATURE REVIEW

Human Capital Theory

Special attention paid to intellectual capital and intangible investments in the last years of the twentieth century led to a growing interest in human capital, learning and knowledge management (Rompho, & Siengthai, 2012). Human capital is a component of intellectual capital, i.e. intangible assets (Bontis, 1998; Massingham, & Tam, 2015). Human capital development should be seen as the intelligence booster of organization members (Bontis, 1998, p.65). It supports the operation of other intellectual capital components, which directly influences company performance (Inkinen, 2015).

Human capital is associated with the personality of a company's founder, managers and all other employees within the company, which makes human resource management an important functional area as it is associated with company success and its survival (Claver-Cortés, Zaragoza-Sáez, Molina-Manchón, & Úbeda-García, 2015, p.200). Based on research results, Jackson (2007) maintains that, for the growth of existing ventures and the development of new ones, the personal characteristics of employees are not as significant as the previous employment and work experience. Bearing this in mind, company management has to develop the awareness of necessity for cooperation and knowledge exchange among employees, since this is the way to increase human capital value. One of the essential characteristics of human capital is the ownership right. Human capital is not owned by the business owner (Delery, & Roumpi, 2017), since knowledge, know-how and employees skills cannot be separated from an individual (Scafarto et al., 2016). After employees leave a company either temporarily, after their work day, or permanently, as a consequence of giving a notice, it remains without a part of human capital. Thus, it becomes clear that, for the employer, employees represent an important asset, which creates value (Delery & Roumpi, 2017).

According to human capital theory, individuals possess the skills, abilities and knowledge that provide economic value for a company (Claver-Cortés et al., 2015). There are different ways of considering human resources output, which consequently influences the definition of human capital components. Bontis (1998, p.65) defines human capital as a set of generic heritage, education, experience and attitude towards life and work. According to Nemeč Rudez, & Mihalič, (2007), human capital encompasses the employee competence, their attitude towards business and their

innovativeness, while Lentjušenkova, & Lapina (2016) maintain that human capital consists of motivational capital, interpersonal relationships, knowledge, skills, attitude and agility of employees. According to Scafarto et al., (2016) human capital includes collective experience, creativity and ability to solve problems, leadership, entrepreneurial and managerial skills that employees possess. Ognjanovic (2017) analyzes human capital through the following components: ability of employees, intellectual agility and behavior and motivation of employees. Tovstiga, & Tulugurova, (2007) and Khalique, Bontis, Nassir bin Shaari, & Hassan Md. Isa, (2015) emphasize three components of human capital: competence, attitude and intellectual agility of employees. Using the results of the research, Tovstiga, & Tulugurova, (2007) prove that human capital value is primarily determined by the attitude of employees. This classification is used as the basis for analyzing the impact of human capital on hotel performance in this paper.

Performance Measurement in Service Industry

Different concepts of performance measurement systems developed so far have also found their use in measuring hotel operations. These concepts are: critical success factors, harmonized list, results and determinants model and strategic cost management (Atkinson, & Brown, 2001; Harris, & Mongiello, 2001). In the process of measuring results, each of them starts from classifying performance into financial and non-financial.

Results and determinants model developed by Fitzgerald, Johnston, Brignall, Silvestro, & Voss, (1991) is one of the performance measurement frameworks. According to Atkinson, & Brown, (2001), the model includes six key performances classified into two categories. The first is *result criteria* (competitiveness, financial performance and service quality) which reflect the success of the applied strategy, while the second is *determinant criteria* (flexibility, resource utilisation and innovation) which focus on monitoring those activities and factors necessary for achieving the strategic goals of a company. Atkinson, & Brown, (2001) use this model to analyse hotel performance in Britain. They conclude that result criteria (competitiveness, financial performance and service quality) are dominant to a large degree, which means that managerial attention continues to be focused upon the indicators of past activities instead of being focused upon the indicators of future business operations. The same concept is applied by Wadongo, Odhuno, Kambona, & Othuon, (2010) in a research conducted on Kenyan hotels, with non-financial performances including competitiveness, service quality, flexibility, resource utilisation, innovation, supplier performance and environmental conditions. Based on the results, they conclude that hoteliers continue to rely heavily on financial performance while ignoring non-financial performance, which is similar to the findings of Atkinson, & Brown, (2001). The research of hotel performance described in this paper is based on the same concept, where the examined performance

influenced by human capital is classified into financial performance and non-financial performance.

Financial statements make the basis of financial performance computing. The value of financial performance depends on a number of factors, such as accounting method, economic environment, business activities, etc. (Prieto, & Revilla, 2006). Simon, Bartle, Stockport, Smith, Klobas, & Sohal, (2015) point out that financial indicators measure the growth in profitability and financial stability. However, sole financial indicators are not sufficient for companies operating in a knowledge-based economy.

The importance of non-financial performance and the information they provide varies from one industry to another. Since hotels 'produce' invisible services, observing the performance of hotel activities relies heavily on qualitative non-financial indicators. Prieto, & Revilla, (2006) and Low, & Siesfeld, (1998) emphasize the importance of non-financial performance in a developing service industry in the process of predicting business activities and believe that non-financial factors can be the leading indicators of future financial performance. In their research, they conclude that the scope of non-financial criteria influence in investment decision is 20-50%. Said, HassabElnaby, & Wier, (2003) point out that non-financial criteria are substantially related to accounting and market rates of return, as well as innovation-oriented strategy, quality assurance initiative, product development time, industrial regulations and the level of financial stress.

As a component of intellectual capital, human capital has been analysed by numerous authors. Tovstiga & Tulugurova, (2007) come to the conclusion that human capital is the most important category of intellectual capital that affects the competitiveness of small and innovative Russian companies. They also confirm the influence of human capital on the performance of the observed enterprises. Maditinos, Chatzoudes, Tsairidis, & Theriou (2011) analyze the intellectual capital in Greek companies whose shares are listed on the Athens Stock Exchange and conclude that there is a statistically significant correlation between human capital and financial performance of the observed companies. Clarke, Seng, & Whiting, (2011) examine the impact of intellectual capital on the performance of companies in Australia and conclude that human capital affects the performance of the observed companies and that there is a link between human capital and the value added intellectual coefficient (VAIC). Cleary, & Quinn, (2016) prove that there is a positive and statistically significant correlation between human capital and the business performance of the observed small and medium-sized enterprises. Based on the research of the impact of intellectual capital on the results of hotel operations in Slovenia, Nemeč Rudež, & Mihalič, (2007) maintain that hotel managers should improve the value of intellectual capital by investing in human capital and information technology. Although human capital does not affect directly the financial performance of hotels in Slovenia, but end-customer

relationships capital, its influence cannot be neglected by managers. Laing, Dunn, & Hughes-Lucas, (2010) analyse the impact of intellectual capital on hotel performance in Australia and conclude that human capital is a key element of the achieved results, especially in hotel industry. Domínguez-Falcón, Martín-Santana, & Saá-Pérez, (2016) analyse the impact of highly-dedicated human resources practices on the organizational performance of hotels through the commitment and satisfaction of managers and supervisors. They prove that highly-dedicated human resources practices affect the satisfaction and commitment of managers and supervisors, and that the commitment and satisfaction of supervisors lead to better economic results. Wang, & Chang, (2005) examined the impact of components of intellectual capital on the business performance of Taiwanese enterprises and concluded that human capital indirectly affects performance through the other three elements: innovation capital, process capital, and customer capital. Contrary to previous research, Khalique et al. (2015) demonstrate that human capital does not affect the performance of small and medium-sized enterprises in Pakistan.

RESEARCH METHODOLOGY

Sample Description

In collecting data on human capital, financial and non-financial criteria, survey method was employed. The database on the number, type and rating of hotels operating in the Republic of Serbia is taken from the website of the Ministry of Trade, Tourism and Telecommunications of the Republic of Serbia (www.mtt.gov.rs); it refers to catering accommodation facilities of the following types - hotels, motels, garni hotels and apart hotels. Figure 1 shows the number of hotels that operated in RS in 2014 and 2016 in relation to hotel rating. On the overall, in 2016, there were nine hotels more than in 2014. The number of one-, two- and five-star hotels decreased in comparison to 2014, but, at the same time, the number of three- and four-star hotels increased, which means that in total the quality of hotel services offer in 2016 was at a higher level than in 2014.

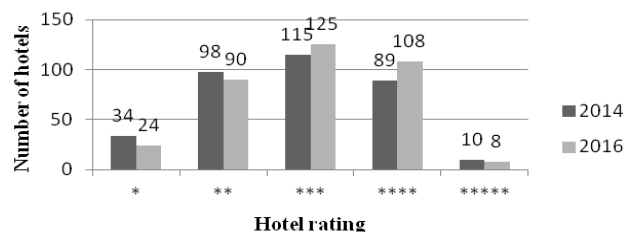


Figure 1 The number of hotels in relation to hotel rating, Republic of Serbia, 2014 and 2016

Source: The authors, based on data publication at Ministry of Trade, Tourism and Telecommunications of the Republic of Serbia

The research is based on a survey undertaken with managers operating at one-, two-, three-, four- and five-star hotels. The questionnaire was forwarded to the e-mail addresses of 355 hotels. The sample, however, includes 42 hotel companies operating in Serbia, as the response rate is 11.8%, which is a usual response rate for the method of survey. Table 1 overviews the number of hotels whose managers responded to the questionnaire and the total number of hotels operating in RS in relation to their rating. Expressed in percentages, the largest number of responses comes from the managers of one- and three-star hotels, while there are no responses gained from five-star hotel managers.

Table 1 Total number of hotels in RS and the response rate in relation to hotel rating

No.	Hotel rating	Population	Sample	% of responses in relation to population
1	*	24	2	8%
2	**	90	8	9%
3	***	125	18	14%
4	****	108	14	13%
5	*****	8	-	-
Σ		355	42	11.8%

Source: The authors

Research Instrument

The questionnaire that is used as a research instrument consists of three parts. The first measures the general characteristics of hotels, the second measures human capital components, whereas the third measures hotel performance, both financial and non-financial. The 26 items of the questionnaire are measured on the basis of the summarized 5-point Likert scale with 1 signifying 'I completely disagree' and 5 signifying 'I completely agree'.

Human capital measuring components represent independent variables in the paper and include employee competencies (skills and know-how), intellectual agility (employees' ability to learn quickly, innovativeness and entrepreneurial spirit, and ability to adapt to changes) and employee attitudes (motivation and leadership skills of managers) (Bontis et al., 1999, p.397-398). The part of the questionnaire relating to human capital components is compiled on the basis of the research conducted by Chen, Zhu, & Yuan Xie, (2004) and Engstrom, Westnes, & Westnes, (2003).

The impact of human capital on hotel business operations is measured through performance, both financial and non-financial. The questionnaire is also used here as an instrument for data gathering. The part of the questionnaire that measures hotel performance is based on the work of

Atkinson, & Brown, (2001) who analysed the performance of the hotels in Britain and the work of Hernaus et al. (2012) who examined the way in which the processes of managing business operations and the one of measuring performance influence financial and non-financial performance. Financial performance in the paper is measured in regard to *profitability*, *return on assets* (ROA) and *value added per employee* (Hernaus et al., 2012) while the observed non-financial performance indicators include *competitiveness*, *quality of services*, *flexibility*, *resource utilisation* and *innovation* (Atkinson, & Brown, 2001).

On the basis of the defined sample and variables, the following research hypotheses are formulated (Figure 2):

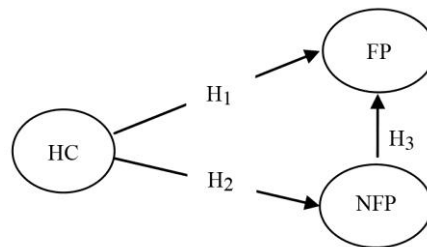


Figure 2 Research hypotheses

- H1*: There is statistically significant impact of human capital on the financial performance of the observed hotels
- H2*: There is statistically significant impact of human capital on the non-financial performance of the observed hotels
- H3*: Human capital has an indirect, positive impact on the financial performance of the observed hotels through influencing non-financial performance

RESULTS AND DISCUSSION

Statistical Methods

The statistical processing of data is carried out with the computer support of IBM SPSS Statistics, Version 23. Statistical significance is determined by using $\alpha = 0.05$ confidence level.

Reliability Analysis

The reliability and consistency of the questionnaire items is measured by means of the Cronbach's alpha coefficient, where the values of above 0.7 suggest high reliability and consistency (Nunnally, 1978). The Cronbach's alpha value of the entire model is 0.909, while the value of this coefficient of each individual variable ranges from 0.895 to 0.918,

which also indicates a very high level of internal consistency of the items (Table 2).

Table 2 Cronbach's alpha coefficient value

Latent variables	Cronbach's alpha coefficient value
Employee competences	0.896
Intellectual agility	0.896
Employee attitude	0.895
Profitability	0.903
Return on assets	0.906
Added value per employee	0.906
Competitiveness	0.898
Service quality	0.900
Flexibility	0.918
Resource utilisation	0.895
Innovation	0.895

Source: The authors

Confirmatory Factor Analysis

The application of a confirmatory factor analysis aims at determining whether the factor weight values of the observed factors are higher than the minimum recommended value (0.3) (Pallant, 2011, p.190). The analysis confirms that the proposed items are grouped around the eleven observed factors. Factor weight values for all the findings are higher than the recommended value (0.3), which implies that the selected items are significant for each factor, just as suggested by the survey authors (Atkinson, & Brown, 2001; Chen et al., 2004; Engstrom et al., 2003; Hernaes et al., 2012).

Assessment of Model Adaptability

The model adaptability is measured using the following indexes: Chi-square (χ^2), *Relative /Normed Chi-square* (χ^2/df), NFI (*Normed-fit index*), TLI (*Tucker-Lewis Index*), CFI (*Comparative fit index*), IFI (*Incremental fit index*) and RMSEA (*Root Mean Square Error of Approximation*). Hooper, Coughlan, & Mullen, (2008) define the limits of the indicated indexes that point to the model adaptability level. The adaptability of the observed research model is determined by comparing the indexes obtained from the processed data with the prescribed index limits (Table 3). The results in Table 4 suggest that the model adaptability is good. The index value χ^2/df , NFI, TLI, IFI and CFI indicate a high degree of model flexibility, while only RMSEA records a very small percentage of deviation from the limits.

Table 3 Adaptability indexes of the observed research model

Adaptability indexes	Index value	Comment on result
Chi-square (χ^2)	62.267	Insignificant Chi-square value
Degrees of freedom (df)	39	
p-value	0.018	
χ^2/df	1.519	good, approximates 2
NFI	0.846	good, approximates 0.9
TLI	0.899	excellent
CFI	0.937	excellent
IFI	0.941	excellent
RMSEA	0.109	average

Source: The authors

Hypotheses Testing

The correlation between the observed variables is tested by means of Structural Equation Modelling (SEM) with the support of Amos software - the statistical package for social sciences, using the Maximum Likelihood model of the observed variables. The parameters monitored in the analysis are the standardised path coefficients and the squared multiple correlations coefficient. The value of the standardized path coefficients (β) indicates the strength of influence of a specific variation, while the values of the multiple correlations coefficient show the percentage of the variance of the observed variable explained by the model. The results presented in Figure 3 point to the high degree of impact of the observed components on human capital value, as well as human capital impact on the observed indicators.

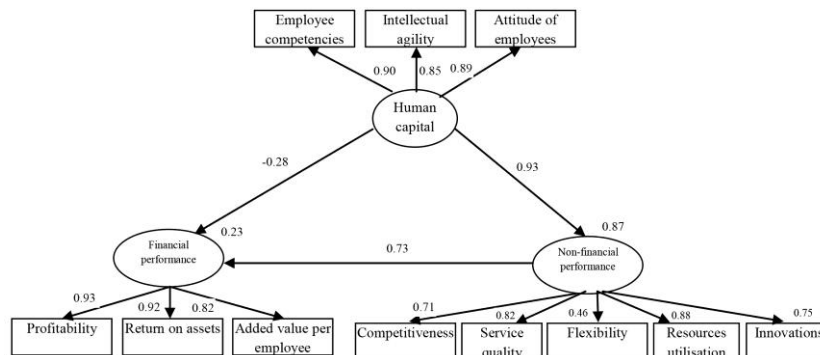


Figure 3 Path diagram with standardised regression values

Source: The authors

The obtained research results go in favour of confirming research Hypotheses 2 and 3. However, Hypothesis 1 is rejected (Table 4). Human capital does not affect the financial performance of the observed hotels, which is confirmed by the coefficients $\beta = -0.28$; $p = 0.683$. Financial performance being rated low by the respondents, such a result is expected. Multiple correlation coefficient is 0.23, which means that 23% of the financial performance variability is explained by the influence of human capital while the remaining part is influenced by other factors. H2 is confirmed, which means that human capital affects the hotel non-financial performance. The regression value of the path coefficient is $\beta = 0.93$; $p = 0.000$ while the multiple correlation coefficient is 0.87, i.e. 87% of non-financial performance variability is explained by the influence of human capital. These values point to the conclusion that the degree of human capital impact on non-financial performance is very high, which should be taken into account by hotel managers in the process of business plan creation. H3 is also confirmed ($\beta = 0.73$; $p = 0.000$), which proves that human capital indirectly influences financial performance, through the impact on non-financial hotel performance.

Table 4 Research hypotheses – result overview

Variables	Results		Hypothesis	Confirmed
	p value	β		
Human capital → financial performance	0.683	-0.28	H ₁	No
Human capital → non-financial performance	0.000	0.93	H ₂	Yes
Non-financial → financial performance	0.000	0.73	H ₃	Yes

Source: The authors

The values of the multiple correlation coefficients given in Table 5 describe the percentage of the observed variability criteria which explains the change of independent variable. The variable which contributes most to the explanation of financial performance variability is *profitability* (87%), while the remaining part is influenced by other factors. Human capital variability is mostly influenced by *employee competence* (80%), and the remaining part is under the influence of other factors. *Resources utilisation* mostly explains the variability of non-financial performance (78%), while the remainder is influenced by other factors.

Table 5 Multiple correlation coefficient values

Variables	Multiple correlation coefficient value
Employee competences	0.802
Intellectual agility	0.720
Employee attitude	0.784
Profitability	0.870
Return on assets	0.855
Added value per employee	0.675
Competitiveness	0.500
Service quality	0.668
Flexibility	0.212
Resource utilization	0.779
Innovation	0.565
Financial performance	0.231
Non-financial performance	0.873

Source: The authors

DISCUSSION

Just like other profitable companies, hotels can monitor the impact of human capital through the use of appropriate indicators. They are usually divided into financial performance, which measures the effectiveness of previously applied strategies, and non-financial performance, which measures the performance of all those business factors that cannot be numerically expressed. Financial hotel performance indicators observed in this paper are profitability, rate of return on assets and added value per employee, whereas the observed non-financial indicators encompass competitiveness, service quality, flexibility, resource utilisation and innovation.

The aim of the paper is to examine the impact of human capital on the hotel performance in Serbia. By testing the defined hypotheses, it is proven that human capital does not directly affect financial performance so hypothesis 1 is rejected. Its influence is, however, exercised indirectly, through the value of non-financial indicator which is confirmed by hypotheses 3. Hence, human capital indirectly influences financial performance, through the impact on non-financial hotel performance as confirmed by Nemeč Rudež, & Mihalič, (2007) and Wang, & Chang, (2005). The processed data confirm the influence of human capital on non-financial performance and hypotheses 2 is confirmed, as noted by Laing et al. (2010) and Domínguez-Falcón et al. (2016). The greatest influence on human capital value, and consequently on the observed performance, has the human capital component of *employee competence*. The adaptability of the model is analysed using Chi-square (χ^2), χ^2/df , NFI, PNFI, CFI, IFI and

RMSEA indexes, whose values indicate a high degree of the observed research model adaptability (Hernaus et al., 2012).

Confirmation of the research hypotheses 2 and 3 suggests that hotel managers analyze the value of non-financial performance. The use of these performances is justified because human capital provides intangible services, and the quality and satisfaction of such services can be best shown qualitatively, using non-financial performance. Hence, when management of Serbian hotels defines future directions of growth and development, they must analyze not only the financial performance but also the non-financial ones. Rejection of hypothesis 1 can be related to the insufficient development of the sector of accommodation and food service, as already mentioned. The share of this sector in the structure of gross value added amounts to 1.06%, while its share in the realized RS turnover is 0.6% (STAT.YEARB.SERB. 2016, p.205). Hypothesis 1 is rejected so it is necessary to monitor the indicator of revenue per employee in order to link the achieved business results with the value of human capital.

CONCLUSION

Some authors find human capital to be the most important component of intellectual capital (Demartini & Paoloni, 2011), since it is a source of creativity, on the one hand, and innovation, change and improvement, on the other (Massingham, & Tam, 2015). This paper examines the impact of human capital on business performance of hotel enterprises in Serbia. The research results confirm the influence of human capital on the non-financial performance of hotel companies. Results also confirm that human capital indirectly affects financial performance, through the value of non-financial indicators.

The *practical implications* of this study are fourfold. First, the results show that managers need to focus on monitoring changes in human capital components (employee competencies, intellectual agility and employee attitudes), and in particular the change of employees' competences, their skills and know-how, since this component, compared to the others, is most influential in determining the value of human capital. Second, since it is a service sector, monitoring business success through non-financial performance is of particular importance, especially the variable of *resources utilisation*. Business continuity and demand stability for hotel services are based on monitoring and improving non-financial performance, such as service quality, competitiveness, flexibility, resources utilisation and innovation. On the other hand, indirect influence of human capital on financial performances is proven, which can be explained by the low level of development of the Serbian economy as well as low competitiveness (Bontis et al., 2015, p.1380). In Serbian hotels, human resources are used in an appropriate way, which results in a high value of non-financial indicators,

but obviously hotels do not achieve satisfactory financial benefits due to high fixed operating costs and seasonality effects. Third, the obtained results point out the importance of investing in human capital and managers can make assessment by ratio analysis on the way investment into human capital would affect business performance. Fourth, hotels with a high rate of investment in human capital create a positive working environment for employees, which affects the motivation and satisfaction of employees, and consequently the final results of the business.

The limitations of the research relate to the size of the sample. Although the response rate (11.8%) is quite small, it is usual for data collection using the survey method. The credibility and reliability of the results is higher when the sample is larger. Furthermore, the assessment of financial measures would give more reliable results if it were calculated using the value of balance sheet items of the financial statements, on the basis of which ratio numbers are also calculated. Nevertheless, collecting data through surveys is anonymous, and researchers do not know the hotel identity. If the survey was not anonymous, the response rate would be even lower. The third limitation refers to a small number of the observed components that constitute human capital. A more comprehensive analysis of the human capital roles in hotel companies would require observation of a larger number of components constituting human capital.

The paper was based on an examination of the impact of human capital components on the financial and non-financial hotel performance. Future research could be based on repeated research in a 5-year time interval and a comparative analysis of the impact of human capital on the observed performances of Serbian hotels. It would be useful to expand the analysis by introducing some new financial and non-financial indicators. Furthermore, further research could be based on an analysis of the frequency of use of financial or non-financial performance in decision making, for independent hotels, on the one hand, and for hotels that are part of an international hotel chain, on the other.

REFERENCES

- Atkinson, H., & Brown, J. (2001). Rethinking performance measures: assessing progress in UK hotels. *International Journal of Contemporary Hospitality Management*, 13(3), 128 – 136.
- Barrow, C., & Bosselman, R. (1999). *Hospitality Management Education*. New York, NY: Haworth Hospitality Press.
- Bontis, N. (1998). Intellectual capital: an exploratory study that develops measures and models. *Management Decision*, 36(2), 63 – 76.
- Bontis, N., Dragonetti, N., Jacobsen, K., & Roos, G. (1999). The knowledge toolbox: A review of the tools available to measure and manage intangible resources. *European Management Journal*, 17(4), 391-402.

- Chen, J., Zhu, Z., & Yuan Xie, H. (2004). Measuring intellectual capital: a new model and empirical study. *Journal of Intellectual Capital*, 5(1), 195 – 212. DOI 10.1108/14691930410513003
- Clarke, M., Seng, D., & Whiting, R. (2011). Intellectual capital and firm performance in Australia. *Journal of Intellectual Capital*, 12(4), 505 – 530.
- Claver-Cortés, E., Zaragoza-Sáez, P. C., Molina-Manchón, H., & Úbeda-García, M. (2015). Intellectual capital in family firms: human capital identification and measurement. *Journal of Intellectual Capital*, 16(1), 199 – 223. DOI 10.1108/JIC-04-2014-0046
- Cleary, P., & Quinn, M. (2016). Intellectual capital and business performance An exploratory study of the impact of cloud-based accounting and finance infrastructure. *Journal of Intellectual Capital*, 17(2), 255 – 278. DOI 10.1108/JIC-06-2015-0058
- Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: is the field going in circles? *Human Resource Management Journal*, 27(1), 1–21.
- Demartini, P., & Paoloni, P. (2011). Assessing human capital in knowledge intensive business services. *Measuring Business Excellence*, 15(4), 16 – 26.
- Dobrivojević, G., Pavlović, D., & Popesku, J. (2017). Location attractiveness for investments as a competitiveness factor in tourism. *TEME*, XLI(3), 655–671. DOI: 10.22190/TEME1703655D
- Dominguez-Falcón, C., Martin-Santana, J., & Saa-Perez, P. (2016). Human resources management and performance in the hotel industry: The role of the commitment and satisfaction of managers versus supervisors. *International Journal of Contemporary Hospitality Management*, 28(3), 490 – 515. DOI 10.1108/IJCHM-08-2014-0386
- Engstrom, T., Westnes, P., & Westnes, S.F. (2003). Evaluating intellectual capital in the hotel industry. *Journal of Intellectual Capital*, 4(3), 287 – 303. DOI 10.1108/14691930310487761
- Fitzgerald, L., Johnston, R., Brignall, S., Silvestro, R., & Voss, C. (1991). *Performance Measurement in Service Business*. London:CIMA.
- Harris, P., & Mongiello, M. (2001). Key performance indicators in European hotel properties: general managers' choices and company profiles. *International Journal of Contemporary Hospitality Management*, 13(3), 120 – 128.
- Hernaus, T., Pejic Bach, M., & Bosilj Vukšić, V. (2012). Influence of strategic approach to BPM on financial and non-financial performance. *Baltic Journal of Management*, 7(4), 376 – 396. DOI 10.1108/17465261211272148
- Hooper, D., Coughlan, J., & Mullen, M.R. (2008). Structural equation modelling: guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60.
- Inkinen, H. (2015). Review of empirical research on intellectual capital and firm performance. *Journal of Intellectual Capital*, 16(3), 518 – 565. DOI 10.1108/JIC-01-2015-0002
- Jackson, P. (2007). A systems approach for human capital management. *VINE*, 37(4), 399- 403.
- Khalique, M., Bontis, N., Nassir bin Shaari, J.A., & Hassan Md. Isa, A. (2015). Intellectual capital in small and medium enterprises in Pakistan. *Journal of Intellectual Capital*, 16(1), 224 – 238. DOI 10.1108/JIC-01-2014-0014
- Laing, G., Dunn, J., & Hughes-Lucas, S. (2010). Applying the VAIC™ model to Australian hotels. *Journal of Intellectual Capital*, 11(3), 269 – 283.

- Lentjušenkova, O., & Lapina, I. (2016). The transformation of the organization's intellectual capital: from resource to capital. *Journal of Intellectual Capital*, 17(4), 610 – 631. DOI 10.1108/JIC-03-2016-0031
- Low, J., & Siesfeld, T. (1998). Measures that matter: Non-financial performance. *Strategy & Leadership*, 26(2), 24 – 38.
- Maditinos, D., Chatzoudes, D., Tsairidis, C., & Theriou, G. (2011). The impact of intellectual capital on firms' market value and financial performance. *Journal of Intellectual Capital*, 12(1), 132 – 151.
- Massingham, P., & Tam, L. (2015). The relationship between human capital, value creation and employee reward. *Journal of Intellectual Capital*, 16(2), 390 – 418.
- Nemec Rudež, H., & Mihalič, T. (2007). Intellectual capital in the hotel industry: A case study from Slovenia. *International Journal of Hospitality Management*, 26(2007), 188-199. doi:10.1016/j.ijhm.2005.11.002
- Nerdrum, L., & Erikson, T. (2001). Intellectual capital: a human capital perspective. *Journal of Intellectual Capital*, 2(2), 127 – 135.
- Nunnally, J.C. (1978). *Introduction to Psychological Measurement*. New York: McGraw-Hill.
- Ognjanovic, J. (2017). Relations of intellectual capital components in hotel companies. *Industrija*, 45(2), 181-196. DOI: 10.5937/industrija45-12144
- Pallant, J. (2011). *SPSS priručnik za preživljavanje, [SPSS Survival Manual]* Beograd: Mikro knjiga.
- Prieto, I., & Revilla, E. (2006). Learning capability and business performance: a non-financial and financial assessment. *The Learning Organization*, 13(2), 166 – 185.
- Rompho, B., & Siengthai, S. (2012). Integrated performance measurement system for firm's human capital building. *Journal of Intellectual Capital*, 13(4), 482 – 514.
- Said, A., HassabElnaby, H., & Wier, B. (2003). An Empirical Investigation of the Performance Consequences of Nonfinancial Measures. *Journal of management accounting research*, 15, 193–223.
- Scafarto, V., Ricci, F., & Scafarto, F. (2016). Intellectual capital and firm performance in the global agribusiness industry: The moderating role of human capital. *Journal of Intellectual Capital*, 17(3), 530 – 552. DOI 10.1108/JIC-11-2015-0096
- Simon, A., Bartle, C., Stockport, G., Smith, B., Klobas, J., & Sohal, A. (2015). Business leaders' views on the importance of strategic and dynamic capabilities for successful financial and non-financial business performance. *International Journal of Productivity and Performance Management*, 64(7), 908 – 931. DOI 10.1108/IJPPM-05-2014-0078
- STAT. YEARB. SERB. (2016) – Statistical yearbook of the Republic of Serbia, Statistical office of the Republic of Serbi, Belgrade.
- Tovstiga, G., & Tulugurova, E. (2007). Intellectual capital practices and performance in Russian enterprises. *Journal of Intellectual Capital*, 8(4), 695 – 707.
- Wadongo, B., Odhuno, E., Kambona, O., & Othuon, L. (2010). Key performance indicators in the Kenyan hospitality industry: a managerial perspective. *Benchmarking: An International Journal*, 17(6), 858 – 875. DOI 10.1108/14635771011089764
- Wang, W., & Chang, C. (2005). Intellectual capital and performance in causal models. *Journal of Intellectual Capital*, 6(2), 222 – 236. DOI 10.1108/14691930510592816

УТИЦАЈ ЉУДСКОГ КАПИТАЛА НА ПОСЛОВНЕ ПЕРФОРМАНСЕ ХОТЕЛСКИХ ПРЕДУЗЕЋА У СРБИЈИ

Марко Славковић¹, Јасмина Огњановић²

¹Универзитет у Крагујевцу, Економски факултет, Крагујевац, Србија

²Универзитет у Крагујевцу,

Факултет за хотелијерство и туризам у Врњачкој Бањи, Врњачка Бања, Србија

Резиме

Пословање компанија у економији заснованој на знању све више се ослања на употребу интелектуалне имовине, док материјална имовина поприма секундарни значај. Најважнија компонента интелектуалне имовине постаје људски капитал кога чине компетентност запослених, интелектуална агилност и став запослених. Бројни аутори сматрају да је људски капитал покретач стварања вредности у услужним компанијама. Савремени услови пословања све више приморавају менаџмент компанија да инвестира и развија људски капитал како би креирали диференциране производе/услуге и обезбедили стабилну конкурентску позицију. Бројне студије доказују утицај ове имовине на резултате пословања што је и очекивано будући да су запослени непосредно укључени у процес производње и потрошње услуга.

Ефикасна употреба људског капитала захтева праћење одговарајућих пословних перформанси, финансијских и нефинансијских. Значај употребе нефинансијских мерила расте сразмерно расту значаја људског капитала за компаније, нарочито за оне које послују у сектору услуга. С обзиром да производе неопипљиве услуге, услужне компаније посебно морају обратити пажњу на праћење квалитативних, нефинансијских показатеља јер они представљају основу за дефинисање будућих праваца активности. Свакако, не треба занемарити значај финансијских показатеља, али треба имати на уму, да они указују на успешност претходно спроведених пословних активности.

Спроведено истраживање засновано је на испитивању утицаја компоненти људског капитала на финансијске и нефинансијске перформансе хотела у Републици Србији. Резултати истраживања указују на то да људски капитал утиче на нефинансијске перформансе посматраних хотела док на финансијске перформансе утиче индиректно, преко вредности нефинансијских показатеља. Како је у раду потврђен утицај људског капитала на нефинансијске перформансе, може се закључити да се хотелска предузећа у Србији у високом степену ослањају да људске ресурсе у креирању хотелских услуга. Утицај људског капитала на финансијске перформансе посматраних хотела је индиректан, што се може објаснити ниским нивоом развоја српске економије и хотелске индустрије. У српским хотелима људски ресурси користе се на одговарајући начин што резултира високом вредношћу нефинансијских показатеља, али очигледно да хотели не остварују задовољавајућу финансијску корист услед високих фиксних трошкова пословања и утицаја сезоне.