Labour Productivity in the Croatian Hotel Industry

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Abstract: The main goal of this paper is to assess labour productivity in the Croatian hotel industry. The purpose of this paper is to determine the level of productivity of employees in the hotel industry in order to improve the performance of the Croatian hotel industry. In order to achieve the goal and purpose of this research, many scientific methods have been applied, of which the survey method (N = 452), descriptive statistics methods and cluster analysis methods have been singled out. The main finding of this paper suggests that every other employee in the hotel industry shows a low level of labour productivity.

1. INTRODUCTION

The hotel industry is a business sector whose main focus is to provide accommodation for people (travellers) who do not have permanent residence in that particular area. It offers services that are realized on the tourist market by selling accommodation as well as special goods and services to tourists and the local population. That is how tourist consumption is realized. The hotel industry is a service industry that includes hotels and restaurants, retail, transport services and destinations (Cerović, Pavia, Galičić, 2005). The hotel industry is an activity that brings high incomes, contributes to economic growth and development of the national economy and is a significant source of employment.

It has been proven that the development of human capital is a vital issue that has arisen in the global hotel industry today and it will continue to be in the centre of interest of tourism and hotel management (Esichaikul and Baum, 1998; Connolly and McGing, 2006; Vujić, 2008, Tepšić 2012), and human capital management in each business system becomes completely different from the previous one (Vujić, 2010). Human capital is considered a key and differentiating element from whose capabilities permanent competitive advantages can be developed (Canizares and Lopez-Guzman, 2010, Črnjar, 2013). It is therefore not surprising that leading hoteliers point out that successful hotels invest in their people (Littlejohn, & Watson, 2004). Accordingly, it seems appropriate to investigate and determine the level of labour productivity in the Croatian hotel industry in order to improve the competitiveness and success of the Croatian hotel industry. Productivity is not only important for competitiveness, but it also measures it.

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2. THEORETICAL FRAMEWORK AND RESEARCH PROBLEM

Productivity is a measure of improving the production process. It is expressed by the relative ratio of output and input.

\[
\text{Productivity} = \frac{\text{Units produced (goods, services)}}{\text{Input used (labour, capital)}}
\]

Only by increasing labour productivity can the quality of life be improved (Pupavac, 2017). There are three key variables to increase productivity: 1) labour, 2) capital, and 3) management. The share of these variables in increasing labour productivity in the United States is clearly shown in figure 1.

Apart from the point of view of the national economy, labour productivity can be observed from the point of view of the economic branch and from the point of view of an individual enterprise. Labour productivity can be expressed in natural and value indicators. When measuring labour productivity, the natural method of production is expressed in natural or physical units of measure. Such an approach is more appropriate for manufacturing companies. In the case of applying the value method, it is necessary to reduce natural indicators to values. The value method of measuring labour productivity can be expressed in two ways, as a ratio of income and invested labour and as a ratio of profit and invested labour. The hotel industry belongs to the group of labour-intensive activities and, accordingly, labour productivity is of special importance for the success of companies in the hotel industry. Labour productivity indicators that indicate the specificity of production and service processes in the hotel industry can be classified into two groups (Avelini Holjevac, 1996; Črnjar, 2003):

- Global labour productivity indicators: 1) amount of performance expressed in equivalent units / average number of workers, 2) amount of performance expressed in equivalent units/number of conditionally qualified workers, 3) number of nights spent / average number of workers, 4) total revenue at constant prices standardized (required) working hours.
- Partial indicators of labour productivity: 1) income from food services (at constant prices) / average number of workers in the kitchen, 2) total number of meals issued / average number of workers in the kitchen, 3) income from food and beverage services (at constant prices) / average number of waiters, 4) number of meals served (number of couverts) / average number of waiters, 5) income from accommodation services (at constant prices) / average number of workers at the reception floors, 6) number of nights / average number of workers at the reception and floors, 7) number of guests / average number of workers at the reception and floors, 8) income from non-board services, at constant prices.
Factors affecting labour productivity are (Avelini Holjevac & Vrtodušić Hrgović, 2012): wages and benefits, motivation, education and training, working conditions, labour standards, planning and organization of work, morals and culture of work.

Due to the high labour intensity, the hotel industry is one of the economic sectors with the lowest level of labour productivity (Table 1).

![Table 1. Basic Structural Business Indicators, according to NKD 2007. in 2017.](image)

Based on the data in table 1, it can be seen that labour productivity in the sector of accommodation and food service activities amounts to HRK 131.3 thousand per person, while the gross operating profit rate is 21.6%. The highest labour productivity is in the sector of electricity, gas, steam and air conditioning and amounts to 540.9 thousand or four times more. The highest gross profit rate is achieved by the real estate sector of 33%.

The share of total labour costs in the total revenue of the Croatian hotel industry has been stagnant for years at the level of about 25%. The increase in labour costs follows approximately the same increase in income. Demand for labour is growing from year to year while labour supply is declining. The share of seasonal workers is increasing from year to year and is at the level of 70% of the total number of employees. This is why it is difficult to increase labour productivity in the Croatian hotel industry.
3. RESEARCH DATA AND METHODOLOGY

Data were collected using a survey questionnaire on a sample of 452 employees in the hotel industry. The research was conducted in hotels in Adriatic Croatia in the summer season of 2018. Of the total number of surveyed employees, 179 or 39.61% were male and 273 or 60.39% were female. The average age of the surveyed employees was 30.73 years (SD = 10.4). The youngest employee surveyed was 17, and the oldest was 60 years old. 222 or 49.12% of them worked in their place of residence, while 230 or 50.88% of them worked outside their place of residence. Regarding the educational structure of employees, the largest number of 220 or 48.67% had four-year secondary education, 136 or 30.08% had three-year secondary education and 75 or 16.59% had higher education. Only primary school had 21 employees or 4.65%. According to the type of employment contract, employees with an atypical employment contract predominated (79.97%). This means that only every fifth surveyed employee had an indeterminate contract, or 91 of them.

In order to assess the productivity of employees in the hotel industry, the method of self-evaluation of employees was applied. The labour productivity construct was measured by four questions (Table 2).

<table>
<thead>
<tr>
<th>Literature</th>
<th>Construct</th>
<th>Particles</th>
<th>Ordinal scale type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees Self-evaluation (Martin, M. &amp; Whiting, F., 2016., 151)</td>
<td>Productivity</td>
<td>1) How would you assess your work success in the preceding period? 2) What do you think, how would your guests assess your work success? 3) What do you think, how would your colleagues assess your work success? 4) How would your supervisor assess your work success?</td>
<td>Grade (from 1 to 5)</td>
</tr>
</tbody>
</table>

The acquired results about the productivity of workers in the hotel business in the Republic of Croatia will be shown as follows in order to ensure scientific objectivity: 1) high productivity — this group consists of employees who gave their job the highest rating and believed that all other participants (guests, co-workers, and supervisors) would rate their work the same, 2) moderate productivity — this group consists of employees who gave their work a grade lower than five and assumed that all other participants (guests, co-workers, and supervisors) rate it the same, 3) low productivity — this group includes employees who received a grade for their work that differed from the grade they expected other participants would give them (guests, co-workers, and supervisors) (Pupavac, 2020).

The Statistica program was used for all statistical analyses.

4. RESEARCH RESULTS AND DISCUSSION

The results of employee self-evaluation are given in Table 3. Table 3 shows that the surveyed employees think that they would get the best grades for their work from their guests (M=4.25; SD=0.66) and the worst from their supervisors (M=4.07; SD=0.78). Interestingly, all surveyed employees are convinced that no guest would rate their work negatively. This information may lead to the conclusion that employees are convinced that each guest is provided with at least a minimum level of service within the tolerance zone (Figure 2).
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Table 3. Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>Self</th>
<th>Guests</th>
<th>Colleagues</th>
<th>Supervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAN case 1-452</td>
<td>4,17</td>
<td>4,25</td>
<td>4,11</td>
<td>4,07</td>
</tr>
<tr>
<td>MEDIAN case 1-452</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>SD case 1-452</td>
<td>0,72</td>
<td>0,66</td>
<td>0,78</td>
<td>0,78</td>
</tr>
<tr>
<td>VALID _N case 1-452</td>
<td>452</td>
<td>452</td>
<td>452</td>
<td>452</td>
</tr>
<tr>
<td>SUM case 1-452</td>
<td>1887</td>
<td>1925</td>
<td>1860</td>
<td>1844</td>
</tr>
<tr>
<td>MIN case 1-452</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>MAX case 1-452</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>25th% case 1-452</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>75th% case 1-452</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Own research

A zone of tolerance separates the desired and adequate service level as shown in figure 2. The zone of tolerance is a range of tourist services that a guest considers satisfactory. A performance level above the tolerance zone will pleasantly surprise guests and result in a revisit tourist destination.

Total average grade is 4.15 (SD=0.73) but the grades given to the employees by their supervisors (M=4.07; SD=0,78) and colleagues (M=4.11; SD=0,78) are lower. The employees gave themselves mark M=4.17; SD=0,72 which is 0.2 index points more than the total average mark. The cluster analysis confirmed the grouping of the observed variables in two clusters (Figure 3).

Figure 2. Two Levels of Guests Expectations
Source: Berry & Parasuraman, 1991

Figure 3. Dendrogram of cluster analysis
Source: Own research
The first cluster consists of variables related to self-assessment of their own performance and assessment to assess guests’ performance. The second cluster consists of evaluation-related variables to help work colleagues and superior managers evaluate their performance. The arithmetic means of the first cluster are significantly larger, and the standard deviations from the arithmetic means are smaller than the second cluster.

Based on the collected data, employees were divided into three groups according to the demonstrated labour productivity (Table 4).

<table>
<thead>
<tr>
<th>The level of labour productivity</th>
<th>Count</th>
<th>Cumulative-count</th>
<th>Percent</th>
<th>Cumulative-percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High productivity</td>
<td>77</td>
<td>77</td>
<td>17.03%</td>
<td>17.03%</td>
</tr>
<tr>
<td>Normal productivity</td>
<td>152</td>
<td>229</td>
<td>33.63%</td>
<td>50.66%</td>
</tr>
<tr>
<td>Low productivity</td>
<td>223</td>
<td>452</td>
<td>49.34%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Source:** Own research

Table 4 shows that just 17.03 per cent of employees have a high level of labour productivity, while 33.63 per cent have a moderate level of labour productivity. Low labour productivity affects every second employee or 49.34%.

The obtained results indicate the importance of raising the level of productivity in the hotel industry because, without an increase in labour productivity, a significant increase in wages in the hotel industry is not possible. Low labour productivity in the Croatian hotel industry is the result of inadequate human resource management.

**5. CONCLUSION**

Labour productivity can be observed from the point of view of the national economy, industry and from the point of view of an individual enterprise. Observing labour productivity from the perspective of the hotel industry is of particular importance for the Croatian economy due to the large role of the hotel industry in creating new jobs and increasing overall employment. Increasing labour productivity is one of the greatest challenges of modern hotel management. Labour productivity in the Croatian hotel industry is stagnating, which could seriously jeopardize the competitiveness of Croatian tourism. The results of the research point to the conclusion that every second employee shows low labour productivity, and only every sixth high labour productivity. Increasing labour productivity in the hotel industry can be achieved by giving a greater role to the human resources department in creating strategies and policies of hotel companies. Hotel companies that want to avoid the trap of low productivity and low wages urgently need to improve their human resources management policies. This can be done through the establishment of appropriate performance standards, measurement and control of labour productivity, improving the functions of planning and obtaining human resources, investing in human resources training, improving the system of rewarding and motivating employees.
REFERENCES


