

The impact of accounting information on managerial decisions – Empirical study conducted in the hospitality industry entities in Romania

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Abstract. *Our research is an empirical one and it is based on a survey conducted between November 2012 and January 2013, using a questionnaire that consists of 38 questions administered online and on field to managers in the hospitality industry in Bihor county, Romania. The total population consists of 146 entities from Bihor county, authorized to operate in this sector, the sample comprised 91 tourism entities and the response rate to our questionnaire was 62.33%. The study adds value to the literature regarding managerial accounting in the hospitality industry and tourism in Romania. In what regards the limitations of our research, these are related to the restricted area of application of the questionnaires (Bihor county), the large number of questions in the questionnaire that require maximum concentration of the respondents as well as managers losing patience while filling out the questionnaire.*

Keywords: accounting information; accounting management; managers; hospitality industry.

JEL Classification: M41, L83.

REL Classification: 14I.

Introduction

Hospitality and tourism industry represent one of the sectors that are nowadays facing a major dynamic, as it provides the main services that meet the vital needs of tourists, namely accommodation and catering, but also services that offer the guests the opportunity of leisure and services aimed at the satisfaction of desires, preferences and motivations requested by tourists. Each economic entity in this sector is facing an increasingly high demand for accounting information, which is managed through the informational system. The accounting information represents the basis for determining the economic indicators regarding all economic and financial operations and for all transactions; it also provides the certainty needed to develop reliable forecasts.

The effects of the global crisis as well as the continuously increasing expectations of the guests create a huge competition in this sector, the role of effectively piloting the business being vested in managers. In this context, the managerial accounting must be a useful means to provide relevant, reliable and timely information in order to effectively manage entities in this sector of activity.

1. Research methodology

Our study aimed to investigate the perception and attitude of managers in hospitality business in Romania regarding the usefulness of the information provided by the management accounting, the frequency of using this information and also the importance associated by managers to the formulation of clear objectives of management accounting as well as the way the information can be used in decision making. Our research is an exploratory one and it describes and analyzes human behavior: it is based on a questionnaire administered to a sample of managers in the hospitality industry from Bihor County, Romania. In this regard we have identified a number of 146 economic entities legally constituted as stock companies or limited liability companies (from the 230 entities of tourists' accommodation licensed to operate, according to information published on the ministry website <http://www.mdrtr.ro/ro/turism/unitati-clasificate>). From our total population we have eliminated a total of 84 entities that were operating as sole proprietorship, family business or freelancers. The questionnaire consists of 38 questions divided into four parts, as follows:

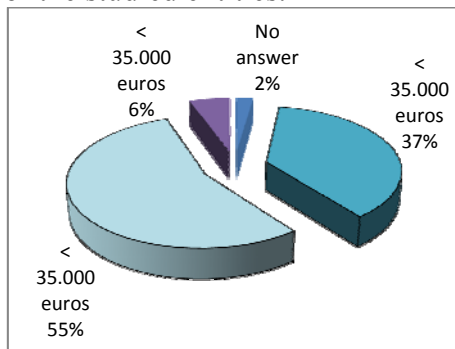
- general questions, that will reveal some characteristics of the economic entities in our sample and the profile of managers interviewed. These questions were arranged in the first parts of the questionnaire - *Part I. Data on the economic entity* and *Part IV. Personal profile of managers*;
- questions regarding the perception of managers in the hospitality and tourism industry on the usefulness of accounting information, especially that provided

by management accounting, the way of using this information for taking decisions for a sound management of the existing capacity. These questions are to be found in *Part II. Aspects of the importance of accounting information* as well as in *Part III. Aspects on organizing management accounting and cost management*.

In order to fill out the questionnaire we have used the direct approach, trying to talk to one of the people in the management teams (general manager, assistant manager, hotel manager) from the larger entities in our sample, or to the owner of the accommodation unit for smaller entities. We have also posted the questionnaire on a website at <http://bit.ly/ToN16W> and asked the potential respondents to fill it out.

3. Descriptive analysis of the responses

The general questions of the survey are related, on the one hand, to aspects that shape the identity of the respondents and, on the other hand, to the characteristics of the studied entities.



Source: own elaboration based on the answers in the questionnaires.

Figure 1. Distribution of entities by size of turnover

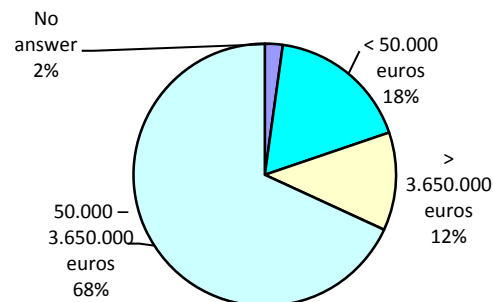


Figure 2. Distribution of entities by value of total assets

First we will describe the firms included in the sample, from different points of view. The general aspects highlighted by the questions in Part I of the questionnaire were focusing on the distribution of entities from the sample in terms of turnover, the value of total assets, number of employees and the classification of the accommodation unit and additional facilities of the entity (the treatment base, opportunities for leisure time). As shown in the previous figures, 54.9% of companies have a turnover of between 35,000 and 7,300,000 Euro; in what regards their total assets, 68% of our respondents said that this value is between 50,000 and 3,650,000 Euro. A percentage of 2% of the surveyed managers considered that the answers to these questions are confidential. In what

regards the number of employees, 45.1% of the entities in the sample have less than 10 employees, 33% have between 10 and 49 employees, 8.8% between 50 and 99 employees, while only 2.1% declared having more than 249 employees, here included employees from all offices.

Respondents were questioned on the classification of accommodation units they run as well as on their categories. To characterize the sample of firms from this point of view, we have built a crosstabulation between the two variables, as seen below.

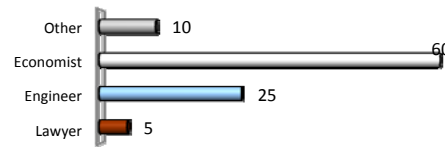
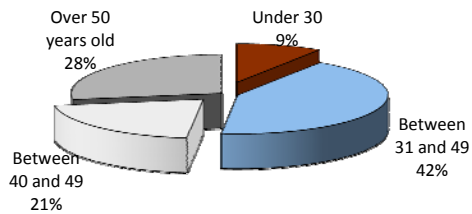
Table 1. *Distribution of the firms in the sample by classification and category of the accommodation unit*

| | | Classification of the accommodation unit | | | | | | | Total |
|---|-------------------|--|-----|------|------------|--------------|--------------|--------------|-------|
| | | ** | *** | **** | 1 Daisy | 2 Daisies | 3 Daisies | 4 Daisies | |
| STRUCTURES WITH ACCOMMODATION FUNCTIONS | Tourist cottage | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Hotel complex | 7 | 3 | 4 | 0 | 0 | 0 | 0 | 14 |
| | Hostel | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| | Hotel | 8 | 14 | 6 | 0 | 0 | 0 | 0 | 28 |
| | Mini-hotel | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Motel | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 5 |
| | Villa | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| | Rural guest-house | 2 | 4 | 1 | 0 | 3 | 17 | 3 | 30 |
| | Urban guest-house | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 5 |
| | Total | 22 | 31 | 12 | 1 | 4 | 18 | 3 | 91 |

Source: own elaboration based on the answers in the questionnaires.

Our sample is representative, given that there is sufficiently good representation of the tourist structures with accommodation functions, both as category and as classification according to Government Decision no. 1267/2010 on the issuing of classification certificates, licenses and tourism patents and the MDRT Order no. 1051/2011 approving the Methodological norms regarding the issuing of classification certificates, licenses and tourism patents. The proportion of 4 star accommodation units in our sample is 13.18%. Of these, half are hotels and a third are hotel complexes. Most guest houses are classified as of three daisies (51.4%), but among them there is also a four star one.

The Part IV of the questionnaire contains general questions that reveal the profile of the managers. Regarding their profession, as seen in Figure 4, the majority of managers had declared to be economists (58.24%), while nearly 25% of those surveyed declared themselves to be engineers. In the case of entities a significant proportion of the managers in the hospitality industry in Bihor county have other professional training than those expressly mentioned by us (13.94%). Regarding the gender of the managers, the proportions are similar, 50.5% being men and 49.5% women.



Source: own elaboration based on the answers in the questionnaires.

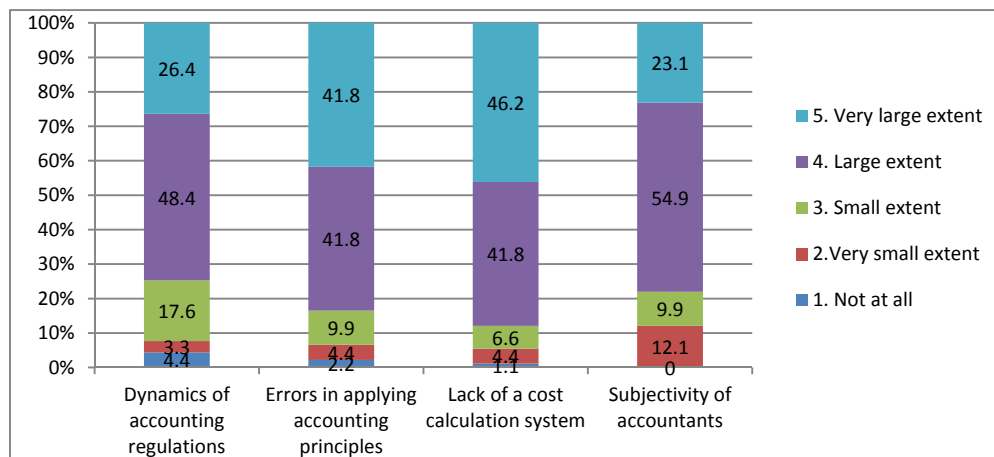
Figure 3. Distribution of managers by age

Figure 4. Distribution of managers by their profession

While part II of the questionnaire includes questions on the frequency and purpose of the use of accounting information, on the perception of managers about the qualitative characteristics of accounting information as well as the factors that can influence these characteristics. Part III shifts the focus mainly on aspects regarding the organization of management accounting and of cost management in the industry of hospitality and tourism.

We consider also relevant the managers’ perception on the factors that influence the qualitative aspects of the information provided by management accounting. Here are the answers to question II. 4. What are, in your opinion, the factors that may affect the quality of the accounting information provided by management accounting?

- Dynamics of accounting regulations,
- Errors in applying accounting principles,
- Lack of a cost calculation system,
- Subjectivity of accountants,
- Others (please specify).



Source: own elaboration based on the answers in the questionnaires.

Figure 5. Distribution of factors that can affect the quality of the accounting information provided by the management accounting, according to the managers in the sample

As seen in Figure 5, 88% of the managers of the entities in our sample stated that the most important factor that can affect the quality of the information provided by management accounting is the lack of a cost calculation system (46.2% stating that the influence is present to a very great extent and 41.8% to a large extent) and what matters the least is the dynamics of accounting regulations (74.8%). The role of the human factor is significant, "the professional with glasses and sleeves", being capable, in the opinion of 78% of the interviewed managers, to influence the quality of the accounting information by his/her subjectivity.

4. Testing the research hypotheses

In what follows, we will analyze the validity of certain research hypotheses at the level of the sample and generalize the results on the total population.

Hypothesis H1: The perception of managers with regard to the usefulness of the accounting information is in correlation with (their) formulating of some clear objectives of the management accounting.

We will test the validity of this research hypothesis using the answers to the following questions in our questionnaire:

II 5 b. How would you rate the importance and usefulness of accounting information provided by management accounting?

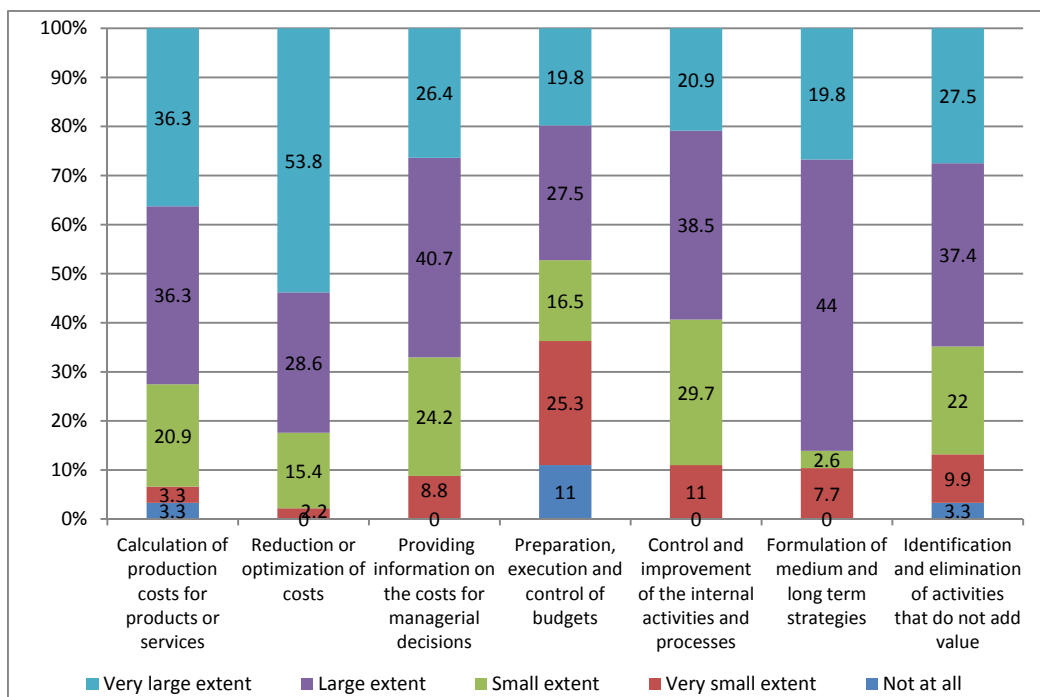
III. 4. On a scale from 1 to 5 please present the managerial accounting objectives within your entity:

- Calculation of production costs for products or services,
- Reduction or optimization of costs,
- Providing information on the costs for managerial decision-making,
- Preparation, execution and control of budgets,
- Control and improvement of the internal activities and processes,
- Formulation of medium and long-term strategies,
- Identification and elimination of activities that do not add value to the business.

Analyzing the distribution of the answers given by the 91 managers from our sample, we find that 57 managers (62.63%) stated that the information provided by financial accounting is very useful in decision-making; in what regards the managerial accounting, 60 of them (65.93%) considered that it provides very useful information for decision-making.

The answers to question III.4 are shown in Figure 6. Most managers believe that controlling and reducing costs constitutes the most important interest among the objectives of managerial accounting, followed by the calculation of production costs for the services provided.

The managers in our sample were asked to evaluate on a scale from 1 to 5 the importance associated with the objectives of managerial accounting within the entity to which they belong, namely: calculation of production costs for products or services, cost reduction and optimization, providing information on the costs for founding managerial decisions, preparation, execution and control of budgets, control and improvement of internal processes and activities, formulation of medium and long-term strategies and, respectively, identification and elimination of activities that do not add value.



Source: own elaboration based on the answers in the questionnaires.

Figure 6. Evaluation of the importance associated by managers to management accounting objectives, at the level of the sample

In order to use this information to validate our research hypothesis, we have associated importance scores for each answer, allotting five points to managers who appreciate an objective of management accounting as important to a very large extent and one point to those who appreciate the objectives as not important. We have then determined average scores on each manager and we assigned these scores based on the appreciation given by managers to the importance and usefulness of accounting information. The crosstabulation between the scores associated to the variables is presented in Table 2.

Table 2. Distribution of average scores for the variables used in the validation of hypothesis H1

| | | Appreciation given by managers to the importance and usefulness of accounting information | | | | Total |
|--|-----------|---|--------|--------------|-------------|-------|
| | | Not very useful | Useful | Quite useful | Very useful | |
| Appreciation of the importance attributed by managers to the objectives of managerial accounting | (2 - 2.5] | 1 | 1 | 0 | 0 | 2 |
| | (2.5 - 3] | 0 | 5 | 7 | 4 | 16 |
| | (3 - 3.5] | 0 | 2 | 3 | 7 | 12 |
| | (3.5 - 4] | 0 | 2 | 3 | 22 | 27 |
| | (4 - 4.5] | 0 | 2 | 2 | 17 | 21 |
| | (4.5 - 5] | 0 | 0 | 3 | 10 | 13 |
| Total | | 1 | 12 | 18 | 60 | 91 |

Source: own elaboration based on the answers in the questionnaires.

The distribution of the frequencies in the table reveal a positive correlation between the two variables. The more the managers appreciate the importance and usefulness of accounting information, the higher the significance scores associated to the importance of managerial accounting objectives. In order to extend this result on the total population we will apply the χ^2 method. The table of

recalculated frequencies, using the formula $n'_{ij} = \frac{n_{i\cdot} \cdot n_{\cdot j}}{n}$ is presented as follows:

Table 3. Table of recalculated frequencies associated to Table 2

| | | Appreciation given by managers to the importance and usefulness of accounting information | | | | Total |
|--|-----------|---|--------|--------------|-------------|-------|
| | | Not very useful | Useful | Quite useful | Very useful | |
| Appreciation of the importance attributed by managers to the objectives of managerial accounting | (2 - 2.5] | 43.52 | 2.06 | 0.40 | 1.32 | 2 |
| | (2.5 - 3] | 0.18 | 3.96 | 4.65 | 4.07 | 16 |
| | (3 - 3.5] | 0.13 | 0.11 | 0.17 | 0.11 | 12 |
| | (3.5 - 4] | 0.30 | 0.68 | 1.03 | 0.99 | 27 |
| | (4 - 4.5] | 0.23 | 0.21 | 1.12 | 0.72 | 21 |
| | (4.5 - 5] | 0.14 | 1.71 | 0.07 | 0.24 | 13 |
| Total | | 1 | 12 | 18 | 60 | 91 |

Source: own elaboration based on the answers in the questionnaires.

Since the $\chi^2_{\text{calculated}} = 68.10$ is greater than 0, there is a correlation between the analyzed variables in our sample, so the *perception of managers with regard to the usefulness of accounting information is correlated with their formulation of some clear objectives of managerial accounting*. To extend our result on the total population - all managers in Bihor county, the following hypotheses are issued:

$$H_0 : \chi^2 = 0$$

$$H_1 : \chi^2 \neq 0.$$

The calculated value, 68.10, is compared to the critical value of the test, for 15 degrees of freedom and a probability of 95%, which in our case is 25.00. Since the calculated value is greater than the critical one, the null hypothesis is rejected and

hypothesis H1 is accepted, so there is a strong correlation between the two variables at the level of the total population, as the difference between the two values is significant.

Hypothesis H1: The perception of managers with regard to the usefulness of the accounting information is in correlation with (their) formulating of some clear objectives of the management accounting is validated.

Hypothesis H2: The frequency of using the accounting information in the activity of entities in the hospitality industry is closely related to the relevance and reliability of information provided by management accounting.

The questions based on which we will test the validity of this research hypothesis are II.3. and II.1. These are:

II.3. How would you rate the importance of the following qualitative characteristics of the information provided by management accounting?

- Relevance
- Reliability.

II.1. On average, how frequently do you use accounting information in your work? We will proceed to the validation of hypothesis H2 using the χ^2 – Chi-square method. The crosstabulation between the scores determined from the answers referring to the assessment of the qualitative characteristics of the information provided by management accounting (relevance and reliability) and, respectively, the frequency of its use, is presented in Table 4.

Table 4. Distribution of responses for the variables used in validating hypothesis H2

| | | Frequency of using accounting information | | | | Total |
|---|------|---|---------|--------|-------|-------|
| | | 2-3 times a month | monthly | weekly | daily | |
| Average scores of evaluation of some features of accounting information (relevance, reliability) | 2.50 | 0 | 0 | 0 | 1 | 1 |
| | 3.00 | 0 | 0 | 2 | 6 | 8 |
| | 3.50 | 1 | 1 | 5 | 1 | 8 |
| | 4.00 | 3 | 4 | 7 | 15 | 29 |
| | 4.50 | 0 | 2 | 1 | 13 | 16 |
| | 5.00 | 2 | 1 | 4 | 22 | 29 |
| Total | | 6 | 8 | 19 | 58 | 91 |

Source: own elaboration based on the answers in the questionnaires.

The distribution pattern of the frequencies in the table reveal a positive correlation between the two variables. The high values of the average scores for the evaluation of certain characteristics of the accounting information (relevance, reliability) correspond to the managers that use frequently the accounting

information in their work. The table of recalculated frequencies using the formula $n'_{ij} = \frac{n_{i\cdot} \cdot n_{\cdot j}}{n}$ is presented as follows:

Table 5. Table of recalculated frequencies associated to Table 4

| | | Frequency of using accounting information | | | | Total |
|--|------|---|---------|--------|-------|-------|
| | | 2-3 times a month | monthly | weekly | daily | |
| Average scores of evaluation of some features of accounting information (relevance, reliability) | 2.50 | 0.53 | 0.70 | 0.07 | 0.16 | 1 |
| | 3.00 | 0.42 | 0.13 | 6.64 | 3.30 | 8 |
| | 3.50 | 0.62 | 0.83 | 0.15 | 0.66 | 8 |
| | 4.00 | 1.05 | 0.25 | 1.64 | 0.77 | 29 |
| | 4.50 | 0.00 | 0.94 | 0.70 | 0.67 | 16 |
| | 5.00 | 0.53 | 0.70 | 0.07 | 0.16 | 29 |
| Total | | 6 | 8 | 19 | 58 | 91 |

Source: own elaboration based on the answers in the questionnaires.

With the help of $\chi^2_{\text{calculated}} = \sum_i \sum_j \frac{(n_{ij} - n'_{ij})^2}{n'_{ij}}$ formula, we have determined the

$\chi^2_{\text{calculated}}$ value, which equals 20.21. Since this value is much greater than 0, there is a correlation between the two variables at a sample level. The high frequency of using accounting information in the activities of the economic entities in the hospitality industry is closely related to the relevance and reliability of the information provided by the management accounting.

To extend our result on the total population - all managers from the hospitality industry in Bihor county, the following hypotheses are issued:

$$H_0 : \chi^2 = 0$$

$$H_1 : \chi^2 \neq 0.$$

The calculated value, 20.21, is compared with the critical one, for 15 degrees of freedom and a probability of 95%, which in our case is 25. Since the calculated value is lower than the critical one, the null hypothesis cannot be rejected, so between the high frequency of using accounting information in the activities of the economic entities in the hospitality industry and the relevance and reliability of information provided by management accounting there is no correlation at the level of the total population.

Hypothesis H2: The frequency of using the accounting information in the activity of entities in the hospitality industry is closely related to the relevance and credibility of information provided by management accounting is not validated.

5. Conclusions and further research

The information provided by the financial accounting and the one revealed given by the managerial accounting in the hospitality industry have sometimes different though very important roles (Zubac, 2012). As indicated by several authors (Mia, Patier, 2001, Sharma, 2002, Pellinen, 2003, Mongiello, Harris, 2006, Pavlatos, Paggios, 2007, Pavlatos, Paggios, 2009, Santos, 2010), only few aspects are known, as yet, with respect to the usefulness and relevance of the information provided by management accounting and of the managerial practices in the hospitality industry. The studies on this topic in the Romanian literature are extremely rare.

This paper presents only a few aspects regarding the managerial accounting, as result of a broader research. The study was conducted on a sample of 91 entities in the hospitality industry its results being in accordance with the scientific literature on the importance of accounting information in decision making.

Results obtained

- 88% of the managers surveyed said that the most important factor influencing the quality of information provided by management accounting is the lack of a cost calculation system and on the second place as a factor of influence is the subjectivity of the accountants (78%);
- 65.93% of the managers surveyed believe that the accounting information resulting from the managerial accounting is very useful in decision making, while in what the financial accounting is concerned 62.63% of the managers stated that managerial accounting provides very useful information for the decision making process;
- At the level of the sample the managers' perception of the usefulness of accounting information is correlated with the formulation (by them) of clear objectives of managerial accounting and this correlation can be extrapolated to the level of the total population as well;
- At the level of the sample there is a close link between the frequency of using the information and two of the qualitative characteristics of the information provided by the management accounting (relevance and reliability), but this assertion cannot be extended to the total population.

In spite of its limitations related to the formulation of the questions in the questionnaire and the choice of the sample, our research brings new and original elements to the Romanian literature on the subject of managerial accounting in the hospitality industry.

In our future researches we will continue to investigate the managers in the hospitality industry with regard to various aspects concerning the capitalization of the information provided by management accounting, the particularities of cost calculation in this branch of activity, as well as different management practices in the sector.

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