Winter destinations hotels performance measurement practice - evidence from CEE

Tijana Jugović, Velimir Štavljanin & Milica Kostić Stanković

Published online: 13 Mar 2022.

Submit your article to this journal ⬈

Article views: 622

View related articles ⬈

View Crossmark data ⬈

Routledge
Taylor & Francis Group

Winter destinations hotels performance measurement practice - evidence from CEE

Tijana Jugović, Velimir Štavljanin and Milica Kostić Stanković

Faculty of Organizational Sciences, University of Belgrade, Belgrade, Serbia

ABSTRACT

This study offers insight into the performance measurement practice of winter destination hotels in Bosnia. The research was conducted through face-to-face interviews with hotel owners, managing directors and managers. In the metrics measurement structure, financial metrics dominate, but hotels use non-financial metrics to a significant extent as well. The results point to the existence of differences in performance measurement of hotels of different income and sales growth. Moreover, the research highlights that managers mostly assess the usefulness of both organizational and operational metrics as above average. Unlike performance measurement, the managers' attitudes differ only with hotels of different sales growth.

1. Introduction

Performance measurement (PM) is key for the control of business results (Bendle et al., 2016). The interest of managers for PM in the hotel sector started in the late 90's (Phillips, 1999). Since then, an increasing number of papers are being dedicated to PM in the hotel sector (Sainagh et al., 2013). This is especially important because of the possibility for the management to efficiently deal with the high fixed cost and complex nature of hotel services (Atkinson & Brown, 2001). Sustainability, competitive advantage and PM systems are still key topics in the hotel industry today (Pereira-Moliner et al., 2021). Although PM is crucial, the authors have identified the problem of the appropriate choice of metrics. In order to solve this, many companies use some of the developed frameworks not taking into account strategy or goals (Ittner & Larcker, 2003). Mauboussin (2012) states that many business executives rely on intuition when choosing key performance indicators.

Most of the studies in the area of PM originate from developed countries (Rejc Buhovac & Zaman Groff, 2012; Wadongo et al., 2010), while it can be said that PM in developing and transition economies is not sufficiently researched (Jankulović & Škorić, 2013). However, hotel systems are unique, so the approach to PM

management demands the consideration of the specificities of each system (Gomes et al., 2007). The results of various studies (Anderson & McAdam, 2004; Marr & Schiuma, 2003; Wadongo et al., 2010) indicate the impossibility of the generalization of the KPI system for different regions and industries, which can also be said for Western practice in CEE (Rejc Buhovac & Zaman Groff, 2012).

In the last fifty years, winter tourism has developed into a global industry and a strong economic resource (Hallmann et al., 2012). For many CEE countries, winter tourism is of strategic significance (Vanat, 2019). The previous facts impose a need for efficient hotel management of winter destinations in CEE, in order to increase competitiveness and profitability (Vanat, 2019). The focus of the research in the paper is Bosnia and Herzegovina which possesses some of the most attractive locations in the region for the development of winter tourism, as evidenced by the organization of the 1984 Winter Olympics (Begić & Duman, 2013; Causevic & Kokkranikal, 2005), as well as 2019 Winter Youth Olympic Festival (EYOF, 2019). Today, winter tourism of Bosnia is one of the most significant generators of investment and the driving force of the region (Begić & Duman, 2013; Vanat, 2019).

The aim of this research is to fill the gap which exists in the literature of the practice of hotel PM in winter tourism destinations in CEE countries by finding the PM structure and differences in the levels of implementation associated to certain business circumstances and the attitude of managers in Bosnia. Winter tourism centers in Bosnia can serve as an example and benchmark for comparing PM to hotel managers in neighboring countries where winter tourism is in development and where there are no significant legal, cultural and institutional differences that would be a limiting factor (Anderson & McAdam, 2004; Marr & Schiuma, 2003; Rejc Buhovac & Zaman Groff, 2012; Wadongo et al., 2010), but also in hotels in similar regions.

Paper strives to answer the following two research questions. What metric structure do hotel managers of winter tourist destinations use in hotel management and whether the structure depend on the characteristics of the hotel? What level of attitude do managers have about usefulness of performance metrics categories in hotel management?

In order to answer the posed research questions, in the first part of the paper it will be presented the review of the literature in the field of PM systems in the hotel industry. After reviewing the literature, empirical research and research results are presented. The final part of the paper refers to conclusion, research limitations and potential developments.

2. Literature review

The existing literature in the field of KPI application in the hotel industry is mainly related to the research of the application of financial and non-financial indicators as well as the re-design of traditional measurement systems (Gomes et al., 2007; Haktanir & Harris, 2005; Onuferová et al., 2020). There is obvious concern that the hotel industry still relies on traditional metrics (Atkinson & Brown, 2001), which are linked to certain weaknesses such as accuracy, objectivity, a focus on the short-term, not taking into consideration the links between key areas and a lack of total balance

(Kaplan & Norton, 1992). Harris and Mongiello (2001), while researching hotel properties located in Europe, identified the pattern of an increased use of financial and customer-related indicators. Measurements related to the quality of service and customer satisfaction are of exceptional importance for advancing business performance in the hotel industry (Ahmad et al., 2019). Atkinson and Brown (2001) state that hotels which do not use a balanced PM system are measuring the wrong things and can have problems with future performance. Also, Gomes et al. (2007) state that hotels are unique systems and that the approach to managing PMS demands the consideration of the specificities of their systems.

The hotel size, ownership structure and rating have a significant influence on the choice of indicators (Bacik et al., 2020; Hudson et al., 2001; Odar et al., 2012). There is a difference between small and large hotels when it comes to KPI implementation (Hudson et al., 2001). Due to saving and the reduction of costs, small hotels often do not use PMS or the number of metrics comes entirely down to primary financial analyses while in the case of large hotels, it is reported that the implementation of PM effects savings, more efficient resource management and the improvement of service quality (Pereira-Moliner et al., 2015). Pereira-Moliner et al. (2015) indicate that large hotels which use a number of non-financial parameters achieve a better performance and have a powerful impact on the market through the improvement of the service quality.

Various studies indicate the fact that the ownership structure has an effect on PM, as well as that privately-owned companies apply a larger number of KPI and achieve bigger income (Whittington, 1980). However, a large number of studies in the hotel industry do not find that the ownership structure affects the levels of KPI application and the achieved income (Hudson et al., 2001; Odar et al., 2012). The cited studies claim that the size of the organization is the primary factor and has an effect on the levels of KPI implementation and the business outcome. A lack of resources and skill in KPI implementation are the main obstacles towards a detailed implementation of PMS in small hotels (Ahmad et al., 2019).

Few papers in the hospitality industry argue about managers' attitudes on indicator level importance (Krause, 2000; Vagneur & Peiperl, 2000; Wadongo et al., 2010). In a number of studies, not in the hotel industry, it is indicated that the opinions and support of the strategic management is a crucial factor for the development and implementation of measurement systems (Kennerley & Neely, 2002; Modell, 2003). Rust et al. (2004) believes that the implementation of PMS becomes efficient when company managers start observing PMS as management instruments which ensure that resources are obtained and spent efficiently and as instruments of the improvement of business processes and of business goal achievement, not just as instruments intended for control. Various studies suggest that implementation of contemporary PM systems requires managers to change attitudes when it comes to non-financial metrics, because in that way management decisions will be based on precise quantitative and qualitative information, and not on the experiences of managers (de Waal & Kourtit, 2013; Pugna et al., 2019). Vrdoljak-Raguž and Jelenc (2010) believe that the attitudes of managers are changing and they are starting to look at non-financial metrics as drivers of company development. Hotel managers, in recent years, consider

that achieving top non-financial performance affects the improvement of hotel competitiveness and business outcomes (Huang et al., 2007).

3. Research

3.1. Research methodology

In this paper, a two-step methodology has been used. The first step within the research encompassed the identification of a list of key performance indicators and its refinement. Within this step, the first stage included forming a preliminary list of performance indicators (72 indicators) through the analysis of relevant research in the area of KPI development and application (Bendle et al., 2016; Davis, 2007; Delahaye, 2007; Dixon et al., 2010; Dolan & Hermann, 2012; Edelma, 2010; Jeffery, 2010; Kabiraj & Shanmugan, 2011; Kotler et al., 2006; Rust et al., 2004). In the second stage, the refinement of the list through interviews with top managers was conducted, such as in (Harris & Mongiello, 2001; Katsikeas et al., 2016). Five managers were chosen from the research sample according to the following criteria: level of education, work experience and hotel sales growth in the past five years. Based on the interview, the initial list of indicators was refined (53 selected indicators) using the analysis of the strategy, goals, activities, company resources and stakeholder expectations.

The next step encompassed the classification of performance indicators based on the analysis of contemporary conceptual frameworks of performance systems (Katsikeas et al., 2016; Keller & Lehmann, 2006; Petersen et al., 2009; Rust et al., 2004) and the refining of the classification through interviews with the previously selected hotel managers. Within this research step, indicators were divided into two broader groups (operational and organizational indicators) (Katsikeas et al., 2016) and 12 categories (Bendle et al., 2016; Davis, 2007; Delahaye, 2007; Jeffery, 2010; McDonald & Mouncey, 2009; Rust et al., 2004). Operational indicators refer to the output of various areas of the value chain (user, service, price, distribution, advertising, personal sales, public relations, and direct marketing indicators). The achieved operational performance leads to the achievement of organizational performance (financial, market and employee). The aforementioned classification, next to the control function, enables the function of business processes improvement, based on balance, taking into consideration financial and non-financial metrics.

3.2. Research sample

Hotels of winter tourism destinations in Bosnia were the sample in the study. Of a total of 48 hotels in winter tourism destinations, 34 (71%) hotel managers took part in this research. Table 1 shows the structure of hotel managers positions, revenue in the previous year, sales growth rate in the previous five years and type of ownership. The majority of respondents were top managers (47%). More than 50 percent of the hotels generated revenues greater than or equal to USD 500,000 (55.9%). When it comes to hotel sales growth rates in the last three years, 13 hotels (38.24%) had a growth rate below 1%, 13 hotels (38.24%) had a growth rate from 1% to 3%, and 8

Table 1. Hotel sample characteristics (N = 34).

Characteristics	N	%
Manager position		
Manager	16	47
Managing director	14	41.2
Owner	4	11.8
Annual income		
<500000 USD	15	44.1
≥500000 USD	19	55.9
Sales growth in past five years		
≤1 %	13	38.24
1%<, >3 %	13	38.24
≥3 %	8	23.53
Ownership		
privately-owned	22	64.7
state owned	12	35.3

Source: Authors' own calculations.

hotels (23.53%) had a growth rate sales greater than 3%. The majority of hotels are privately owned (64.7%).

3.3. Survey questionnaire

The survey questionnaire is comprised of three groups of questions. The first group referred to the respondent business position, hotel type of ownership and currently achieved financial performance (annual income and the annual rate of sales growth of the hotels). The second group of questions referred to the application of specific performance metrics identified in the first step. Respondents could also cite in every category the metrics that they use, as was the case in the research of Harris and Mongiello (2001). The third group of questions referred to the attitudes of the respondents on the usefulness of the performance metrics categories using the Likert scale (from 1-completely useless to 5-completely useful) (Kennerley & Neely, 2002; Wadongo et al., 2010). The questionnaire was used in the face-to-face interview conducted with owners, managing directors and managers who apply or are familiar with PM in a particular hotel.

3.4. Results

The analysis first included the identification of which metrics the hotels use. The frequency of usage of a certain organizational and operational metric and the percentage of the hotels applying metrics are shown in Tables 2 and 3. The ten most used performance indicators are marked with an asterisk (*).

Table 4 shows the levels of measuring organizational and operational hotel metrics. Next to that, the total percentage of metrics which hotels measure in relation to the total number of researched metrics is shown.

Mann-Whitney U Test and the Kruskal-Wallis Test are used in order to determine whether there is a statistically significant difference in the level of category performance measurement and hotel characteristics. In Tables 5 and 6, statistically significant differences in the level of performance measurement and hotels' annual income and

Table 2. Organizational indicators used by hotels.

Indicator	N	%
Financial indicators		
Net Profit*	34	100
Return of Marketing Investment*	32	94.1
Margin*	29	85.3
Payback	20	58.8
Return on investment	18	52.9
Return on sales	14	41.2
Economic value added	1	2.9
Respondent added financial indicators		
Liquidity	24	72.7
Rentability	23	67.6
Solvency	23	67.6
Business activity	23	67.6
Market indicators		
Market demand*	27	79.4
Market growth	22	64.7
Market share	20	58.8
Market penetration	15	44.1
Employee indicators		
Compensation*	34	100
Sales Force Effectiveness	22	64.7
Sales Goal	19	55.9
Workload	12	35.3

Source: Authors' own calculations.

sales growth will be shown. The existence of statistically significant differences in the level of performance measurement and hotel ownership was not confirmed.

In the paper, the attitudes of the respondents concerning the usefulness of the application of various performance indicator categories were analyzed. Table 7 shows the distribution of the frequency of the attitudes concerning performance indicators as well as the average percentage of usage of a certain group of metrics by hotels.

The existence of a statistical difference in attitudes of managers and annual income was tested using the Mann-Whitney U Test. There was only a statistically significant difference between the rating of attitudes toward direct marketing for hotels with an income <500000 USD (Md $= 2.00$, n $= 15$) and hotels with an income $>=500000$ USD (Md $= 3.00$, n $= 19$), U $= 227.5$, z $= 3.03$, p $= 0.002$.

Afterwards, the existence of a statistical difference in the attitudes of managers and hotel ownership was tested. There was a statistically significant difference between the rating of attitudes towards direct marketing for state-owned hotels (Md $= 2.50$, n $= 12$) and privately-owned hotels (Md $= 3.00$, n $= 22$), U $= 189$, z $= 2.11$, p $= 0.0359$.

Finally, the existence of a statistically significant difference in the attitude of the managers and hotels sales growth over the past five years was tested using the Kruskal-Wallis Test (Table 8).

The correlation between the managers' attitudes towards the usefulness of a certain performance metrics category and the level of performance measurement using Kendall's tau coefficient was analyzed. In Table 9, values of the coefficient of correlation were shown. It can be seen that the correlations are mainly positive and of varying strength. There is statistically significant correlation between the managers' attitudes and the level of performance measurement of a distribution (.337), advertising (.437), personal sales (.673), sales promotion (.362), public relations (.463) and

Table 3. Operational indicators used by hotels.

Indicator	N	%
User indicators		
Net Promoter Score*	29	85.3
Customer Profit	24	70.6
Customer Retention Rate	23	67.6
Retention Rate	23	67.6
Customer Satisfaction	12	35.3
Customer Lifetime Value	6	17.6
Service indicators		
Profit of Service*	34	100
Index of Brand Value	17	50
Economic Value of Service	16	47.1
Price indicators		
Optimal Price*	30	88.2
Promotion Price*	30	88.2
Price Premium*	29	85.3
Residual Elasticity	11	32.4
Percent Good Value	8	23.5
Distribution indicators		
Total Distribution	22	64.7
All commodity volume	16	47.1
Product category volume	14	41.2
Advertising indicators		
Click	18	52.9
Impressions	15	44.1
Conversions	11	32.4
Click-through Rate	10	29.4
Cost per Click	9	26.5
Cost per Mille	8	23.5
Conversion Rate	5	14.7
Conversion Value	4	11.8
Conversion Price	4	11.8
Sales promotion indicators		
Costs for Coupons and Rebates	24	70.6
Percent Sales on Deal	16	47.1
Percentage Sales with Coupon	14	41.2
Personal sales indicators		
Profit of Personal Sales	17	50
Customer Effort Score	14	41.2
Cost of Personal Sales/min	6	17.6
Public relations indicators		
Profit of Public Relations	7	20.6
Advertising Value Equivalency	3	8.8
Cost per impression	3	8.8
Direct marketing indicators		
Quality of database	22	64.7
Percentage Sales with Direct Marketing	20	58.8
Cost per lead	5	14.7

Source: Authors' own calculations.

direct marketing (.726) metrics. The table also shows the correlation between the managers' attitudes, as well as the correlation between performance measurement levels.

4. Discussion

The results of the empirical research have shown a noticeable difference in the degree of measuring various indicators on the part of the hotels. This difference is not negligible, so hotels which are at the top of the list (according to size, income and annual

Table 4. Number of metrics that hotels measure.

	Number of measured metrics			
Hotel nr.	**Organizational** (19 measured)	**Operational** (38 measured)	**Total** (57 measured)	Total %
19	15	37	52	91.2
26	16	33	49	86.0
25	15	27	42	73.7
17	13	28	41	71.9
28	16	24	40	70.2
27	12	25	37	64.9
29	13	24	37	64.9
21	14	23	37	64.9
13	12	24	36	63.2
33	13	23	36	63.2
10	11	24	35	61.4
12	11	24	35	61.4
18	14	20	34	59.6
8	10	21	31	54.4
34	11	20	31	54.4
22	13	17	30	52.6
24	12	17	29	50.9
14	11	16	27	47.4
30	16	11	27	47.4
6	9	17	26	45.6
11	10	16	26	45.6
32	13	13	26	45.6
2	6	19	25	43.9
15	10	14	24	42.1
16	10	14	24	42.1
23	10	12	22	38.6
5	10	11	21	36.8
31	13	8	21	36.8
3	7	13	20	35.1
20	10	10	20	35.1
7	8	7	15	26.3
4	5	8	13	22.8
9	7	6	13	22.8
1	5	5	10	17.5

Source: Authors' own calculations.

Table 5. Level of performance measurement differences between different hotels' annual incomes.

		<500000 USD		≥500000 USD				
Level of measurement		Md	n	Md	n	U	Z	P
Organizational indicators	Market PI	1	15	3	19	232	3.18	0.001
	Employee PI	2	15	3	19	214	2.56	0.012
Operational indicators	Price PI	3	15	3	19	201	2.11	0.043
	Distribution PI	0	15	3	19	239	3.50	0.000
	Advertising PI	2	15	3	19	212	2.45	0.015
	Direct marketing PI	0	15	2	19	224	2.99	0.004

Source: Authors' own calculations.

sales growth) measure over 70 percent of indicators, while hotels at the bottom measure just a few indicators more than they are legally obliged (eight from the list are the legal obligation). It can be concluded that mainly financial indicators (like Net Profit, Compensation, Profit of Service) are among the ten most represented indicators. This is in accordance with research which has been conducted in the wider region by other authors in Serbia, Slovenia, Croatia, Estonia, The Czech Republic and Romania (Jankulović & Škorić, 2013). Similar results were shown by authors on the

Table 6. Level of performance measurement differences between different hotels' sales growths.

Level of measurement		≤1 %		<1, 3> %		≥3 %		χ2 (2, 34)	P
		Md	N	Md	N	Md	n		
Organizational indicators	Employee PI	2	13	3	13	3.5	8	14.07	0.001
Operational indicators	Service PI	2	13	2	13	3	8	8.78	0.012
	Sales promotion PI	0	13	2	13	3	8	8.93	0.012
	Personal sales PI	0	13	2	13	1.5	8	7.30	0.026
	Direct marketing PI	0	13	2	13	2	8	10.48	0.005

Source: Authors' own calculations.

Table 7. Attitudes of respondents concerning the usefulness (1-completely useless to 5-completely useful) and average percentage of usage of certain metrics categories.

Attitudes	Likert scale response (%)					Md	Average percentage of usage
	1	2	3	4	5		
Financial indicators	0.0	0.0	2.9	8.9	88.2	5.0	64.6
Market indicators	0.0	0.0	8.8	47.1	44.1	4.0	61.8
Employee indicators	0.0	0.0	5.9	23.5	70.6	5.0	64.0
User indicators	0.0	2.9	14.7	32.4	50.0	4.5	57.3
Service indicators	0.0	2.9	20.6	14.7	44.1	4.0	65.7
Price indicators	0.0	0.0	17.6	26.5	55.9	5.0	63.5
Distribution indicators	8.8	20.6	41.2	8.8	20.6	3.0	51.0
Advertising indicators	2.9	17.6	29.4	35.3	14.7	3.5	27.5
Personal sales indicators	17.6	17.6	26.5	23.5	14.7	3.0	53.0
Sales promotion indicators	23.5	20.6	20.6	17.6	17.6	3.0	36.3
Indicators of public relations	64.7	14.7	11.8	5.9	2.9	1.0	12.7
Direct marketing indicators	23.5	14.7	29.4	20.6	11.8	3.0	46.1

Source: Authors' own calculations.

Table 8. Attitudes of managers differences between different hotels' sales growth.

Attitudes of managers		≤1 %		<1, 3> %		≥3 %		χ2 (2, 34)	P
		Md	n	Md	n	Md	n		
Organizational indicators	Employee PI	4	13	5	13	5	8	7.02	0.03
Operational indicators	Service PI	4	13	4	13	5	8	8.89	0.012
	Advertising PI	3	13	4	13	4	8	12.69	0.002
	Personal sales PI	2	13	3	13	4	8	10.20	0.006
	Sales promotion PI	2	13	3	13	4	8	8.04	0.018
	Direct marketing PI	1	13	3	13	4	8	9.09	0.011

Source: Authors' own calculations.

global stage (Denton & White, 2000; Harris & Mongiello, 2001; Zigan & Zeglat, 2010). Although financial indicators are the most used, it is evident that hotels use a large number of non-financial indicators, especially hotels which are more competitive on the market. Also, the research results show that a redesign of financial metrics has been observed. In the past, the main financial result was profit, and today the key financial metrics are Margin, Return on investment, Return on sales, Compensation, Profit of service, Economic value added - EVA. These results are also shown by other studies (Malichova et al., 2017; Onuferová et al., 2020).

Research has confirmed that there is a statistically significant difference in the income of hotels and the level of PM. A statistically significant difference in the degree of measuring compared to the sales growth rate in the past five years was also confirmed. Next to the results of this research, numerous studies from the

Table 9. Correlation between the managers' attitudes concerning the usefulness a certain metric category and the level of performance measurement.

		Level of performance measurement											
		1	2	3	4	5	6	7	8	9	10	11	12
Mangers' attitudes	1. Financial metrics	.182	0.069	-.033	-.004	.107	.266	.141	.160	-.024	.128	.030	.076
	2. Market metrics	.193	-.037	.458**	.464**	.187	.529**	.476**	.375**	.125	.198	.401**	.361*
	3. Employee metrics	.372*	.428**	.264	.363*	.443**	.302*	.569**	.293*	.404**	.380**	.249	.503**
	4. User metrics	.309	.485**	.688**	.084	.314*	.355*	.429**	.195	.227	.227	.480**	.568**
	5. Service metrics	.430**	.188	.244	.097	.199	-.008	.332*	.453**	.278	.349*	.286	.352*
	6. Price metrics	.069	.071	.238	.155	-.072	-.116	.439**	.195	.237	.165	.321*	.324*
	7. Distribution metrics	.176	.352*	.380*	.239	.415**	.090	.337*	.304*	.298*	.174	.530**	.546**
	8. Advertising metrics	.044	.343*	.373*	.225	.299*	-.240	.557**	.437**	.312*	.294*	.342*	.335*
	9. Personal sales metrics	.063	.459**	.330*	.251	.266	-.183	.499**	.712**	.673**	.637**	.164	.447**
	10. Sales promotion metrics	.084	.268	.297	.201	.205	-.233	.383**	.676**	.745**	.362*	.178	.442**
	11. Metrics of public relations	.092	.300	.039	.164	.116	-.298	.336*	.293	.389**	.342*	.463**	.394*
	12. Direct marketing metrics	.140	.253	.132	.134	.329*	-.079	.287*	.553**	.504**	.616**	.293*	.726**

$**p < 0.01$; $* p < 0.05$.
Source: Authors' own calculations.

performance measurement field also show such results (Hoque & James, 2000; Asare et al., 2013).

The attitudes of hotel managers on the usefulness of certain categories of performance indicators were also measured. Although the results of the measurement level have shown major differences between hotels, the situation with attitudes is different. The level of attitude of managers is much less different compared to the level of measurement. The attitudes of the managers were not statistically dependent on the hotel income or ownership structure, except for direct marketing metrics. A statistically significant difference existed compared to the annual sales growth rate of hotels in the past five years with certain metrics. The research conducted by Rejc Buhovac and Zaman Groff (2012) also showed that managers of companies doing business in less competitive environments are aware of the strength that comes from relying on both financial and non-financial metrics. Research results in this paper show a high level of attitude (grades 4 and 5) which possess 91.2% of managers towards the Market metrics group composed only of non-financial indicators. Also a high level of managerial attitude is also present in non-financially dominant metric groups. 94.1% of managers possess a high level of attitude towards Employee metrics, 82.4% towards User metrics, 50% towards Advertising metrics, 35.2% towards Sales promotion metrics, 32.4% towards Direct marketing metrics and 29.4% towards Distribution metrics group. Changes in awareness of managers on the importance of measuring non-financial metrics have been identified in different researches in the region and the

world (de Waal & Kourtit, 2013; Huang et al., 2007; Pugna et al., 2019; Vrdoljak-Raguž & Jelenc, 2010).

The results of the research on the usefulness of applying organizational and operational indicators reveal that managers of the observed hotels value organizational indicators more than operational indicators, although the monitoring of op-erational indicators contributes to the development of profitable business strategies, higher productivity and strengthening the market position of the company, as proven by various research (Hoque & James, 2000; Katsikeas et al., 2016). This practice is present in companies operating in CEE countries because they have not yet modified traditional PM systems based on organizational performance and the application of financial criteria (Ivanković et al., 2010; Mitrović et al., 2016; Rejc Buhovac & Zaman Groff, 2012).

The research revealed that there is a positive statistically significant medium correlation (based on Walker, 2003) between managers' attitudes and the level of measurement distribution metrics (.337). The research determined a positive statistically significant high correlation between managers' attitudes and the level of measurement advertising metrics (.437), sales promotion (.362), public relations (.463), personal sales (.673) and direct marketing metrics (.726). This implies that for certain metrics categories (mostly operational metrics categories), the larger the level of attitude on usefulness, the higher the number of metrics that is measured. The need to work on the education of managers for the application of certain metrics categories which are measured to a smaller extent is recommended. Even authors Brown and McDonnell (1995) pointed out that it is of vital importance for hotels to develop performance measures for areas such as marketing, guest satisfaction, employee morale and staff development. In the literature review concerning the influence on hotel performance, Sainaghi (2010) identified marketing as one of the topics which many papers dealt with. The smaller hotels analyzed in this paper attached less importance to certain operative tasks, so they did not even develop metrics in those domains. In this case, it is necessary to indicate the possibility of improvement in this area (Pereira-Moliner et al., 2015; Bergin-Seers & Jago, 2007; Phillips & Louvieris, 2005).

5. Conclusion, research limitations and potential developments

Research of the structure of measuring performance indicators and attitudes of managers on the usefulness of performance indicators in this paper encompassed over 70 percent of winter destination hotels in Bosnia. The analysis of the results has shown that next to traditional financial indicators, non-financial indicators are used to a significant extent. What is needed, and is also concluded based on the hotel and managers' attitudes, and is confirmed by authors of studies in the wider region of CEE countries, is that the awareness of the significance of measuring non-financial metrics is growing. By observing the indicators and their implementation, it can be concluded that the size of the hotel is in relationship with the choice of indicators within the measurement system, while the ownership structure is not in relation. Designing contemporary measurement systems and the increasing awareness of the managers on the significance of non-financial indicators remove the 'myopia' of managers, and

influence the improvement of the competitive position of the hotels on the domestic and international market.

The potential limitations of the research include the research sample, which can deal with other countries of the CEE region in future research. The paper did not explicitly take into consideration the existence of integrated and balanced systems of PM. Implicitly, analysis may determine whether this is a matter of a balanced or unbalanced system. This fact could be very important in some subsequent research for future managers' operational directions towards developing and implementing these systems, if they are already measuring and monitoring a large number of indicators. Future research could also include the analysis of influential factors on the development of PMS, which would give complete insight into the details of the analysis of the synergetic influence of internal and external factors on the choice and application of key performance indicators.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

Ahmad, S. Z., Ahmad, N., & Papastathopoulos, A. (2019). Measuring service quality and customer satisfaction of the small- and medium-sized hotels (SMSHs) industry: Lessons from United Arab Emirates (UAE). *Tourism Review*, 74(3), 349–370. https://doi.org/10.1108/TR-10-2017-0160

Anderson, K., & McAdam, R. (2004). A critique of benchmarking and performance measurement: Lead of lag? *Benchmarking: An International Journal*, 11(5), 465–483. https://doi.org/10.1108/14635770410557708

Asare, A. K., Brashear, T. G., Yang, J., & Kang, J. (2013). The relationship between supplier development and firm performance: The mediating role of marketing process improvement. *Journal of Business & Industrial Marketing*, 28(6), 523–532. https://doi.org/10.1108/JBIM-04-2013-0100

Atkinson, H., & Brown, B. J. (2001). Rethinking performance measures: Assessing progress in UK hotels. *International Journal of Contemporary Hospitality Management*, 13(3), 128–135. https://doi.org/10.1108/09596110110388918

Bacik, R., Fedorko, R., Gavurova, B., Ivankova, V., & Rigelsky, M. (2020). Differences in financial performance between various categories of hotels in the Visegrad Group countries. *Journal of International Studies*, 13(2), 279–290. https://doi.org/10.14254/2071-8330.2020/13-2/19

Begić, N., & Duman, T. (2013). Strategic marketing management of ski-resorts in Bosnia and Herzegovina: A competitive analysis. *International Journal of Academic Research in Business and Social Sciences*, 3(8), 496–505. ISSN: 2222-6990. https://doi.org/10.6007/IJARBSS/v3-i8/174

Bendle, N. T., Farris, P. W., Pfeifer, P. E., & Reibstein, D. J. (2016). *Marketing metrics: The manager's guide to measuring marketing performancepublished by Pearson Education, Inc*. Publishing as Pearson.

Bergin-Seers, S., & Jago, L. (2007). Performance measurement in small motels in Australia: (Funded by the Sustainable Tourism Co-operative Research Centre). *Tourism and Hospitality Research*, 7(March), 144–155.

Brown, J. B., & McDonnell, B. (1995). The balanced score-card: Short-term guest or long-term resident. *International Journal of Contemporary Hospitality Management*, 7(2–3), 7–11. https://doi.org/10.1108/09596119510146751

Causevic, S., & Kokkranikal, J. (2005). *Tourism development after political turmoil: Current issues on Bosnia and Herzegovina* [Paper presentation]. 3rd Global Summit on Peace through Tourism –Education Forum (pp. 82–95). Pattaya, Thailand.

Davis, J. A. (2007). *Measuring marketing: 103 metrics every marketer needs*. John Willey & Sons.

de Waal, A., & Kourtit, K. (2013). Performance measurement and management in practice: Advantages, disadvantages and reasons for use. *International Journal of Productivity and Performance Management*, 62(5), 446–473. https://doi.org/10.1108/IJPPM-10-2012-0118

Delahaye, P. K. (2007). *Measuring public relationships*. KD Paine & Parners Berlin.

Denton, G. A., & White, B. (2000). Implementing a balanced-scorecard approach to managing hotel operations. *Cornell Hotel and Restaurant Administration Quarterly*, 41(1), 94–107. https://doi.org/10.1177/001088040004100127

Dixon, M., Freeman, K., & Toman, N. (2010). Stop trying delight your customers. *Harvard Business Review*, 88(7–8), 116–122. https://hbr.org/2010/07/stop-trying-to-delight-your-customers

Dolan, R. J., & Hermann, S. (2012). *Power pricing: How managing price transforms the bottom line*.

Edelma, D. C. (2010). Branding in the digital age you're spending your money in all the wrong places. *Harvard Business Review*, 88(12), 62–69.

European Youth Olympic Festival-EYOF. (2019). *About EYOF 2019*. https://eyof2019.net/ba/

Gomes, C. F., Yasin, M. M., & Lisboa, J. V. (2007). The effectiveness of hospitality service operations: Measurement and implementation concerns. *International Journal of Contemporary Hospitality Management*, 19(7), 560–573. https://doi.org/10.1108/09596110710818301

Haktanir, M., & Harris, P. (2005). Performance measurement practice in an independent hotel context. *International Journal of Contemporary Hospitality Management*, 17(1), 39–50. https://doi.org/10.1108/09596110510577662

Hallmann, K., Müller, S., Feiler, S., Breuer, C. C., & Roth, R. (2012). Suppliers' perception of destination competitiveness in a winter sport resort. *Tourism Review*, 67(2), 13–21. https://doi.org/10.1108/16605371211236105

Harris, P. J., & 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. https://doi.org/10.1108/09596110110388909

Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: Impact on organizational performance. *Journal of Management Accounting Research*, 12(1), 1–17. https://doi.org/10.2308/jmar.2000.12.1.1

Huang, H. C., Chu, W., & Wang, W. K. (2007). Strategic performance measurement and value drivers: Evidence from international tourist hotels in an emerging economy. *The Service Industries Journal*, 27(8), 1111–1128. https://doi.org/10.1080/02642060701673778

Hudson, M., Smart, A., & Bourne, M. (2001). Theory and practice in SME performance measurement systems. *International Journal of Operations & Production Management*, 21(8), 1096–1115. https://doi.org/10.1108/EUM0000000005587

Ittner, C. D., & Larcker, D. F. (2003). Coming up short on nonfinancial performance measurement. *Harvard Business Review*, 81(11), 88–95. Corpus ID: 6012334

Ivanković, G., Janković, S., & Peršić, S. (2010). Framework for performance measurement in hospitality industry – case study Slovenia. *Economic Research*, 23(3), 12–23. https://doi.org/10.1080/1331677X.2010.11517420

Jankulović, A., & Škorić, V. (2013). Performance management system implementation in a Southeast European transitional country. *Journal of East European Management Studies*, 18(2), 173–190. https://doi.org/10.5771/0949-6181-2013-2-173

Jeffery, M. (2010). *Data driver marketing – the 15 metrics everyone in marketing should know*. Kellogg School of Management, John Wiley & Sons, Inc.

Kabiraj, S., & Shanmugan, J. (2011). Developmerddnt of a conceptual framework for brand loyalty: A Euro – Mediterranean perspective. *Journal of Brand Management*, 18(4–5), 285–299. https://doi.org/10.1057/bm.2010.42

Kaplan, R. S., & Norton, D. P. (1992, January-February). The balanced scorecard: Measures that drive performance. *Harvard Business Review*, *70*(1), 71–80. https://hbr.org/1992/01/the-balanced-scorecard-measures-that-drive-performance-2

Katsikeas, C. S., Morgan, N. A., Leonidou, L. C., & Hult, G. M. T. (2016). Assessing performance outcomes in marketing. *Journal of Marketing*, *80*(2), 1–20. https://doi.org/10.1509/jm.15.0287

Keller, K. L., & Lehmann, D. R. (2006). Brands and branding: Research findings and future priorities. *Marketing Science*, *25*(6), 740–759. https://doi.org/10.1287/mksc.1050.0153

Kennerley, M., & Neely, A. (2002). A framework of the factors affecting the evolution of performance measurement systems. *International Journal of Operations & Production Management*, *22*(11), 1222–1245. https://doi.org/10.1108/01443570210450293

Kotler, P., Rackham, N., & Krishnaswam, S. (2006). Ending the war between sales and marketing. *Harvard Business Review*, *8*, 711–732. https://www.yuswohady.com/wp-content/uploads/2010/10/Ending-War-Between-Sales-Marketing-Kotler.pdf

Krause, O. (2000). Management knowledge engineering – a toolkit to engineer adaptive management systems. In A. Neely (Ed.), *Performance measurement – past, present, and future* (pp. 307–314). Centre for Business Performance, Cranfield University.

Malichova, E., Durisova, M., & Tokarcikova, E. (2017). Models of application economic value added in automotive company. *Transport Problems*, *12*(3), 93–102. https://doi.org/10.20858/tp.2017.12.3.9

Marr, B., & Schiuma, G. (2003). Business performance measurement – past, present and future. *Management Decision*, *41*(8), 680–687. https://doi.org/10.1108/00251740310496198

Mauboussin, M. J. (2012). The true measures of success. *Harvard Business Review*, *90*(10), 46–56.

McDonald, M., & Mouncey, P. (2009). *Marketing accountability – How to measure marketing effectiveness*. Kogan Page.

Mitrović, M., Janković, S., & Ivanković, G. (2016). *Hotel performance measurement: Literature review* [Paper presentation]. SITCON - Singidunum International Tourism Conference (pp. 250–257). Beograd.

Modell, S. (2003). Goals versus institutions: The development of performance measurement in the Swedish university sector. *Management Accounting Research*, *14*(4), 333–359. https://doi.org/10.1016/j.mar.2003.09.002

Odar, M., Kavčič, S., & Jerman, M. (2012). Performance measurement systems: Empirical evidence from Slovenia. *Economic Research-Ekonomska Istraživanja*, *25*(2), 445–464. https://doi.org/10.1080/1331677X.2012.11517517

Onuferová, E., Čabinová, V., & Dzurov Vargová, T. (2020). Analysis of modern methods for increasing and managing the financial prosperity of businesses in the context of performance: A case study of the tourism sector in Slovakia. *Oeconomia Copernicana*, *11*(1), 95–116. https://doi.org/10.24136/oc.2020.004

Pereira-Moliner, J., Font, X., Tarí, J. J., Molina-Azorin, J. F., Lopez-Gamero, M. D., & Pertusa-Ortega, M. E. (2015). The Holy Grail: Environmental management, competitive advantage and business performance in the Spanish hotel industry. *International Journal of Contemporary Hospitality Management*, *27*(5), 714–738. https://doi.org/10.1108/IJCHM-12-2013-0559

Pereira-Moliner, J., López-Gamero, M. D., Font, X., Molina-Azorín, J. F., Tarí, J. J., & Pertusa-Ortega, E. M. (2021). Sustainability, competitive advantages and performance in the hotel industry: A synergistic relationship. *Journal of Tourism and Services*, *12*(23), 132–149. https://doi.org/10.29036/jots.v12i23.282

Petersen, J. A., McAlister, L., Reibstein, D. J., Winer, R. S., Kumar, V., & Atkinson, G. (2009). Choosing the right metrics to maximize profitability and shareholders value. *Journal of Retailing*, *85*(1), 95–111. https://doi.org/10.1016/j.jretai.2008.11.004

Phillips, P. A. (1999). Hotel performance and competitive advantage: A contingency approach. *International Journal of Contemporary Hospitality Management*, *11*(7), 359–365. https://doi.org/10.1108/09596119910293268

Phillips, P., & Louvieris, P. (2005). Performance measurement systems in tourism, hospitality, and leisure small medium-sized enterprises: A balanced scorecard perspective. *Journal of Travel Research*, 44(2), 201–211. https://doi.org/10.1177/0047287505278992

Pugna, I., Duīescu, A., & Stănilă, O. (2019). Corporate attitudes towards big data and its impact on performance management: A qualitative study. *Sustainability*, 11(3), 684. https://doi.org/10.3390/su11030684

Rejc Buhovac, A., & Zaman Groff, M. (2012). Contemporary performance measurement systems in Central and Eastern Europe: A synthesis of the empirical literature. *Journal of East European Management Studies*, 17(1), 68–103. https://doi.org/10.5771/0949-6181-2012-1-68

Rust, R. T., Ambler, T., Carpenter, G. S., Kumar, V., & Srivastava, R. K. (2004). Measuring marketing productivity: Current knowledge and future directions. *Journal of Marketing*, 68(4), 76–89. https://doi.org/10.1509/jmkg.68.4.76.42721

Sainaghi, R. (2010). Hotel performance: State of the art. *International Journal of Contemporary Hospitality Management*, 22(7), 920–952. https://doi.org/10.1108/09596111011066617

Sainaghi, R., Phillips, P., & Corti, V. (2013). Measuring hotel performance: Using a balanced scorecard perspectives' approach. *International Journal of Hospitality Management*, 34, 150–159. https://doi.org/10.1016/j.ijhm.2013.02.008

Vagneur, K., & Peiperl, M. (2000). Reconsidering performance evaluative style. *Accounting, Organizations and Society*, 25(4–5), 511–525. https://doi.org/10.1016/S0361-3682(98)00002-6

Vanat, L. (2019). *International Report on Snow & Mountain Tourism Overview of the key industry figures for ski resorts*. https://www.vanat.ch/RM-world-report-2019

Vrdoljak-Raguž, I., & Jelenc, L. (2010, May 26–29). *Performance measurement system in turbulent environment: The case of large Croatian enterprises* [Paper presentation]. 5th International Conference 'an Enterprise Odyssey: From Crisis to Prosperity – Challenges for Government and Business, Opatija.

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. https://doi.org/10.1108/14635771011089764

Walker, D. A. (2003). Converting Kendall's tau for correlational or meta-analytic analyses. *Journal of Modern Applied Statistical Methods*, 2(2), 525–530. https://doi.org/10.22237/jmasm/1067646360

Whittington, G. (1980). The profitability and size of United Kingdom companies, 1960-74. *The Journal of Industrial Economics*, 28(4), 335–352. https://doi.org/10.2307/2098066

Zigan, K., & Zeglat, D. (2010). Intangible resources in performance measurement systems of the hotel industry. *Facilities*, 28(13–14), 597–610. https://doi.org/10.1108/0263277101108366