



Organizational performance assessment in the hotel industry: a systematic review

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RESUMO

Objetivo: este estudo tem como objetivo analisar como a hotelaria utiliza dados quantitativos para avaliar seu desempenho organizacional.

Delineamento/Metodologia/Abordagem: uma revisão sistemática (RS), com análise descritiva e informações críticas, é conduzida para desenvolver uma visão holística do tema e oferecer direções futuras de pesquisa.

Resultados: a revisão apresentou dados descritivos e temáticos, abrangendo trabalhos de eficiência ambiental, desempenho financeiro, análise social e medida global de desempenho na indústria hoteleira. O artigo mostra os principais tópicos/indicadores de pesquisa sobre avaliação de desempenho hoteleiro e propõe um caminho de pesquisa mais abrangente.

Implicações de pesquisa, práticas e sociais: as descobertas contribuem para os gestores de hotéis com soluções presentes em estudos científicos relevantes e com pesquisadores que apresentam lacunas de pesquisa nas principais áreas.

Originalidade/Valor: a revisão mostra o potencial para novas pesquisas em três áreas principais (econômica, ambiental e social). Além disso, uma importante e promissora área de pesquisa é apresentada: entender o papel de cada potencial componente no desempenho global dos hotéis.

Palavras-chave: Hotéis; Desempenho Organizacional; Revisão sistemática.

ABSTRACT

Purpose: this study aims to analyze how the hotel industry uses quantitative data to assess its organizational performance.

Design/Methodology/Approach: a systematic review (SR), with a descriptive analysis and critical information, was carried out to develop a holistic view of the theme and offer guidance for future research.

Findings: the review presented information on the topic, covering studies in environmental efficiency, financial performance, social analysis, and the global details on performance in the hotel industry. The paper shows main research topics/indicators on hotel performance assessment and proposes a more comprehensive path for research.

Research, Practical & Social Implications: the findings contribute to the understanding of managers of hotels with solutions found in relevant scientific studies and with researchers identifying research gaps in main areas.

Originality/Value: the review demonstrates the potential for further research in three main areas (economic, environmental, and social). Besides this, an important and promising area of research is shown: to understand the role of each potential component in the global performance of hotels.

Keywords: Hotels; Organizational Performance; Systematic Review.

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1. INTRODUCTION

With the dynamics and market diversification, modern tourism, and its segments, obtained significant importance in economic development, generating employment and income. The hotel sector is of fundamental importance for the tourism industry and historically behaves as a highly innovative phenomenon, where its success depends mainly on the performance of small companies (JALILVAND, 2017; MACHADO *et al.*, 2019). Practice and performance range with a diversity of methods, measures, and approaches in this sector (WONG *et al.*, 2021).

It is fundamental to modern performance administration that the functional frontiers do not disturb the internal process efficiency. Cooperation among the functions of the company is primordial to achieve effective organizational performance (SLACK; BRANDON-JONES; JOHNSTON, 2018). Organizational performance is a multidimensional and complex construct that cannot be measured through a single dimension. The performance management has financial and non-financial dimensions, such as competitiveness, service quality, customer satisfaction, organizational flexibility, use of resources, and technology (HUANG & HUANG, 2020; OTOO, 2019).

In the hospitality sector, performance is usually related to the quality of services provided and is commonly measured by the customer's perception of their experiences and expectations regarding the service (GARCIA; ARDIGÓ, 2018; MACHADO *et al.*, 2019). The measurement of organizational performance in these companies has different methodological approaches with possibilities for correlation. Highlighted approaches in this area included indicators' analysis in three subjects: financial, social, and environmental (CVELBAR; DWYER, 2013; HOW; LEE, 2021; KIM; CHAE, 2018; LEE; HOW, 2019; MIHALIČ; ŽABKAR; CVELBAR, 2012; NALLEY; PARK; BUFQUIN, 2019; RIBEIRO; VASCONCELOS; ROCHA, 2019; WONG, A. K. F. *et al.*, 2021; YU; CHIU, 2021).

The studies on this topic, in specialized journals, have increased exponentially in the last 40 years (MULET-FORTEZA *et al.*, 2019). But the scientific works tend to observe the relationship between specific variables, with a lower exploration of holistic performance models (HUANG & HUANG, 2020). This study aims to analyze how the hotel industry assesses its organizational performance and if the use of the Triple Bottom Line concept is applicable for that, providing a systematic review with descriptive and critical information





and offering future research directions. The remainder of this article is as follows: Section 2 carry out a briefly literature review, with the theoretical foundation of the research, Section 3 details the method for the systematic review, Section 4 presents the results of the descriptive and thematic analysis, in Section 5 there is a discussion of the findings in specific topics, in Section 6 the paper is concluded, and the references are present in the last section.

2. THEORETICAL FOUNDATION

2.1 Hotel industry

Many hotels are operating in regions close to natural and cultural resources and this organizations receives several tourists because of the tourism appeal, which normally generates diversity problems, air, environmental and noise pollution (GÜRLEK; TUNA, 2019). Nowadays, the hotels are responsible for up to 21% of the carbon footprint generated by tourism sector (water and energy use, waste generation, carbon dioxide discharge) (BIANCO; SHANIEL; SINGAL, 2023).

Given the environmental issues facing the hotel industry, the need for sustainable strategies practices is growing pressure (DARVISHMOTEVALI; ALTINAY, 2022). The nature of tourism is changing, and tourist are demanding eco-friendly practices (KULARATNE *et al.*, 2019). However, the use of sustainable practices should not generate losses for companies. In this sense, studies are conducted to integrate financial, social and/or environmental issues (CVELBAR; DWYER, 2013; HOW; LEE, 2021; KIM; CHAE, 2018; SAINAGHI; PHILLIPS; CORTI, 2013; YU; CHIU, 2021).

Hotels are viewed as a cyclical business, being an industry that is very sensitive to the economy state because of its higher fixed costs (CHEN, 2010). This market logic leaves little room for sustainable implementations, requiring an in-depth study to ensure implementation and return. Managers need the certain that eco-friendly practices will be cost-effective and performance-improving in the long run because they are among the most vulnerable businesses to climate change due its high cost with fixed assets and limited flexibility to relocate their operations (DE GROSBOIS; FENNELL, 2022; KULARATNE *et al.*, 2019).

In this way, hotels that are embracing environmentally friendly activities are resulting in higher market share, profits, and customer satisfaction. Hotels can contribute to a sustainable future, build positive marketing, retain guests, and generate a long-run financial





return, but it is necessary to understand what leaders can do to ensure the success of sustainable practices in the sector (ABORAMADAN *et al.*, 2022; ARENHART; SOUZA; ZANINI, 2022). Thus, there is a need for more studies related to hotels, to understand their organizational dynamics and their possible contribution to a more sustainable future through practices that equalize economic, environmental, and social results.

2.2 Organizational performance assessment

The importance of organizational performance assessment lies in the need to monitor the results of organizations because without continuously monitoring the performance of operations, it is also not possible to identify the improvements implemented (SLACK; BRANDON-JONES; JOHNSTON, 2018). Tourism is known to have an higher importance in the economy, marked by its contribution to currency and the equilibrium of the trade balance (GUETAT; JARBOUI; BOUJELBENE, 2015).

With the expansion of the tourism sector, a highly competition is open in the hotel industry, and a result is that more attention is given to the evaluation of hotel performance (WALHEER; ZHANG, 2018). Multinational companies are now using the United Nations 2030 goals as a benchmark for their global CSR actions (ERTUNA; GU; YU, 2022; VAN NIEKERK, 2020). CSR practices are positively and significantly associated with hotel performance (GUETAT; JARBOUI; BOUJELBENE, 2015). This phenomenon can be explored in the hotel chain, incorporating good practices in the sector.

Global carbon reporting frameworks and guidelines were developed to facilitate measurement and reporting, like the Global Reporting Initiative (GRI), which together with a growing research number, result in a considerable quantity of companies reporting their climate change performance (DE GROSBOIS; FENNELL, 2022). As the data presented by the GRI framework is mostly reviewed by external parties, its adoption is gaining popularity and currently it may be the most adopted framework worldwide (ARENHART; SOUZA; ZANINI, 2022; BHATTACHARYYA; YANG, 2019). This contributes to the identification of the importance of studies in this economic area involving the assessment of the hotels organizational performance and globally accepted and standardized indices as representative of economic, social and environmental performance.



3. METHODOLOGICAL PROCEDURES

The systematic review (SR) aims to identify the main academic discussions on a topic. The main authors and the most relevant publications are identified, trends over time and possible gaps in the literature are highlighted (MORIOKA *et al.*, 2018). This SR is performed to answer: "how does the hotel industry uses quantitative data to assess its organizational performance?". The method to solve the question was based on (TRANFIELD; DENYER; SMART, 2003), with three stages: planning the review, conducting a review, and reporting and dissemination. Figure 1 shows the SR stages and phases.

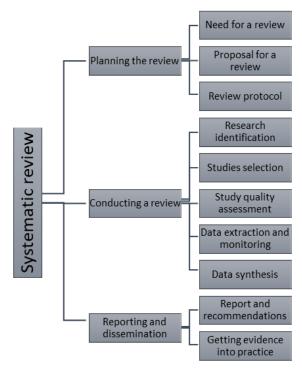


Figure 1 − SR stages and phases

Source: adapted from Tranfield; Denyer; Smart, 2003.

3.1 Planning the review

In the planning stage, a review panel is applied to include the opinion of experts, with the idea of assigning the research focus and defining topics that must be present. In this part, the relevance and size of the literature should be considered to delimit the subject area, considering the interdisciplinary perspectives that motivated previous research. At this stage,

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the research protocol is defined, containing the research question, population/sample, and the strategy used to include studies in the review. Figure 2 presents the research protocol.

Figure 2 – Research protocol



Source: Authors, 2022.

The research protocol elaboration and the definition of its results contribute to the assessment of the selected studies, presenting valuable data. This is verified in Tranfield et al. (2003) through the analysis of empirical and theoretical evidence to support decisions. The protocol steps include filters to select papers that have adherence to the topic and that are published in reputable journals, selecting only the articles relevant to the study.

3.2 Conducting a review

In conducting a review, a comprehensive and impartial search is managed through the determination of synchronized keywords in search operators, according to defined themes (TRANFIELD; DENYER; SMART, 2003). The aim is to find relevant publications using a search operator and keywords related to performance in hotels, focusing on the research question. The search period spans from 1960 to 2021, the 1960s chosen because it is the first year with two available research bases: Scopus and Web of Science (WoS). This choice's given by the scope in other scientific bases and by its world reputability.

Operationally, the conducting stage follows the research protocol defined in Figure 2. Steps one to three consist of defining the research question, keywords, and search operator. Step four carries out the operator search in the selected databases, where the initial selection filters are applied: language, document type, and search period. In the fifth step, the filter of articles published in journals related to statistics and hospitality is apply. A journal reputation filter and an article adherence filter are performed in step six. In the reputation one, articles from journals classified in the first quartile of the Scimago Journal & Country Rank (SJR,

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2020) are kept in the corpus. In the adherence, the papers' adequacy according to the research question is verified through the abstracts reading.

3.3 Reporting and dissemination

This stage aims to disseminate SR results by grouping data to generate knowledge (TRANFIELD; DENYER; SMART, 2003). The knowledge dissemination is conducted through two sub-phases: descriptive analysis and thematic analysis.

3.3.1 Descriptive analysis

The descriptive analysis evaluates articles characteristics of the textual corpus, covering: i) annual distribution; ii) institutional affiliation of authors and co-authors; iii) authorship composition; iv) research elite; v) relationship between authors; vi) citations received; vii) relationship between co-cited authors; viii) most relevant words; and ix) relationship between keywords. This analysis is performed using the following softwares/sites: HistCiteTM, VOSviewer, IRAMUTEQ (R), LibreOffice Calc, wordclouds.com, and mapchart.net/world.

3.3.2 Thematic analysis

Thematic analysis is an in-depth evaluation developed through clusters identification which represents similar themes found in the research corpus articles. There are potential gaps that can be used in future. The clusters creation is made from the detailed description of their contributions, highlighting the relevant parts based on the literature, as determined by Tranfield *et al.* (2003).



4. RESULTS

4.1 Conducting the review

How the hotel industry assesses its organizational performance is based on the methodology for planning and conducting the review. The defined keywords were performance, hospitality, and index/indicator. The search operator was: "TITLE-ABS-KEY ("Performance") AND ("Hospitality" OR "Hotel*") AND ("Index" OR "Indicator") AND DOCTYPE (ar) AND PUBYEAR > 1960 AND PUBYEAR < 2021".

The fourth step of the research protocol (operator execution) was applied. The filters used were language (English), document type (only articles), and search period (1960 to 2021). Were obtained 476 articles from Scopus and 326 from WoS (59 papers were found in both databases). Figure 3 shows the research protocol steps.

START **END** How does the hotel industry assess its performance? articles Filter 3: Subject Search on Search on Web adherence of Science Scopus 476 188 326 articles articles articles Filter 1: Journal area -Filter 2: Journal 395 hospitality and statistics articles reputation

Figure 3 – Research protocol steps

Source: Authors, 2022.



Classification of articles published in journals referring to hospitality and statistics was made in the fifth step, and 395 articles found in both databases showed adherence to these areas. The last step had the application of relevance and adherence filters. Only articles from journals classified in the first quartile of the Scimago Journal & Country Rank (SJR, 2020) were kept in the reputation filter, resulting in 188 papers between the databases. According to the research question, the remaining papers' adherence was verified by reading the abstracts, where 56 were kept for the research corpus composition. The protocol was applied between November 3, 2021, and December 07, 2021.

4.2 Reporting and dissemination

The research corpus was analyzed from the essential information of each study, where citation and content data were extracted.

4.2.1 Descriptive analysis

As in Tranfield *et al.* (2003), descriptive analysis was performed based on Lotka Law (LOTKA, 1926) which evaluates authors' productivity, Bradford Law (BRADFORD, 1953) which measures journals' productivity and Zipf Law (ZIPF, 1949) which checks words occurrence and co-occurrence frequency.

4.2.2 Annual distribution

The corpus papers are distributed in 23 journals with 137 authors and co-authors. Figure 4 identify how these works publication occurred over the years in terms of productions numbers and trends. There is a growing trend of publishing articles on the theme, followed by the average publication in different decades. In the 1990s (1989 to 1999) the average was one article published per 5 years, in the 2000s (2000 to 2010) was one article per thirteen months, and in the 2010s (2011 to 2021) was one article per eighty days. The years with highest productions' concentration were 2018, 2019, and 2021 (48.2% of total research corpus), which helps to highlight the theme's current representativeness.



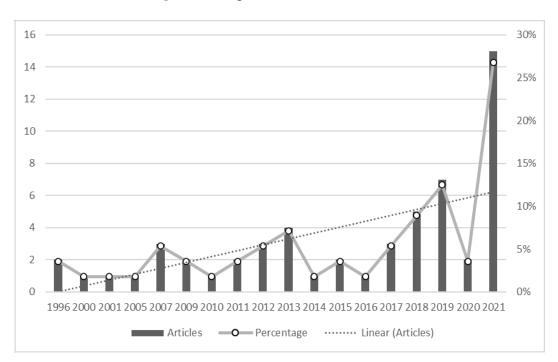


Figure 4 – Papers' annual distribution

4.2.3 Geographic distribution of authors and co-authors

This analysis was made by the authors' and co-authors' institutional links. The United States has the major participation in papers produced in the corpus, with 19 articles and 45 authors. United Kingdom has nine authors and four papers. China, Spain, Portugal, and Hong Kong close the top six most productive countries, each one with three articles published. Figure 5 shows the geographical distribution of authors and co-authors.



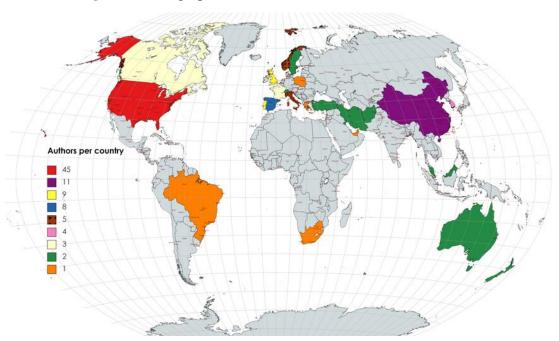


Figure 5 – Geographical distribution of authors and co-authors

Data analysis reveals that the first five countries represent 62.5% of the papers, and just the United States produces 33.9%. Among the authors, the same countries have 65.4% of the authors and the United States has 33.8%. This evidences the subject's mastery with an important emphasis on the research strength in the United States. United Kingdom, China, Spain, Portugal, and Hong Kong also show many researchers involved in this area.

4.2.4 Authorship composition and research elite

Authorship composition is made in temporal terms to understand the partnership intensity between authors. Most works have the collaboration between two and three authors since 20 articles were published by two researchers and 22 were published by three, resulting in 75% of the total publications. Figure 6 presents the authors' co-authoring profile.



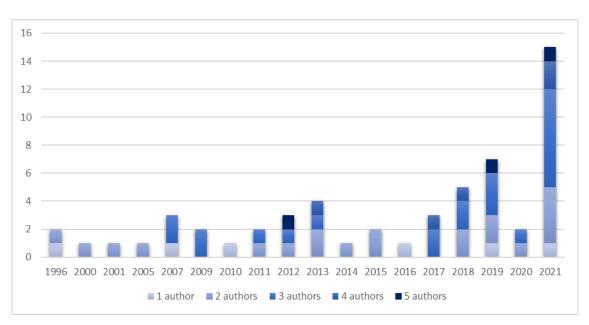


Figure 6 – Authors' co-authoring profile

Six articles were published individually (11% of the total publications), five times four authors participated (9%), and three works were collaborations of five authors (5%). The number of articles produced on this topic has increased more than ten times in 14 years. Between 1996 and 2006, five papers were published (9% of the corpus), while between 2007 and 2021, 51 more works were completed. The last five years represent 57.1% of the research corpus (32 publications). Regarding international cooperation, 37.5% of the articles were published with the participation of more than one country. Among the countries that stood out are the United States (38.1%), the United Kingdom (19%), China (14.3%), and Australia (9.5%).

To complete this analysis, Price (1976) sustains that the most productive authors' number is equal to the square root of the total authors. Thereby extracting the 137 authors' square root was obtained the value of 11.7. This result is accepted as 12 authors are in the research elite. These authors represent 8.5% of the total, and they had worked in 39% of the corpus publications (22 papers). Figure 7 shows the research elite.



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Figure 7 – Research elite

4.2.5 Authors' co-citation analysis

The authors' co-citation analysis was conducted as in (BIOLCHINI *et al.*, 2007), seeking to identify the frequency that two authors are cited simultaneously by the recent literature. Consequently, if more researchers cited the same publications, this may show a relationship between the subjects covered in this area. Figure 8 presents the authors' co-citation network.

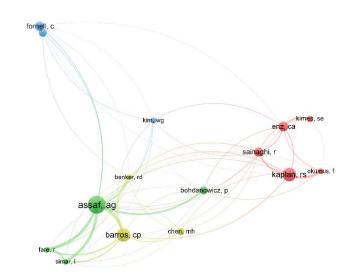


Figure 8 – Authors' co-citation network

Source: Authors, 2022.





The network was formed from the 2379 authors included in the articles' references of the research corpus. A minimum number of eight citations per author was defined, which resulted in a co-citation network with 15 items (Figure 8). It is possible to verify the formation of four clusters in which the main authors appear with larger nodes due to the citations' high number. Albert G. Assaf, Carlos P. Barros, and Robert S. Kaplan are the authors with the highest citations' number among the references. Furthermore, they are distributed in three different clusters, which indicates that the citations received within each of the groups may correspond to issues addressed by each of these authors. Table 1 shows the most co-cited authors from each group.

Table 1 – Most co-cited authors from each group

Cluster	Author	Citations	Link strength
1	Kaplan, R. S.	22	87
2	Assaf, A. G.	31	211
3	Fornell, C.	14	43
4	Barros, C. P.	22	133

Source: Authors, 2022.

Robert S. Kaplan appears in cluster 1 with 22 citations of 13 materials published between 1988 and 2004. His most cited work among the articles in the sample was his publication presenting the Balanced Scorecard (BSC) (KAPLAN; NORTON, 1992). In Cluster 2, A. G. Assaf worked with hotel performance's theme and the use of concepts such as Triple Bottom Line (TBL) and Customer Satisfaction in Hotel Efficiency. A recent point is attributed to two publications made in 2018. One is a performance measurement of tourist destinations (ASSAF & TSIONAS, 2018) and another is a new measurement of hotel performance in a large sample of regions and locations (ASSAF & TSIONAS, 2018a). This demonstrates the high relevance of this researcher, who can be reference for a project that aims to measure performance in hotel chains.

Claes Fornell (cluster 3) often works with Customer Satisfaction, and its most-cited publication was a model related to the calculation of structural equations with unobservable variables and measurement error (FORNELL; MORGESON; HULT, 2016). C. P. Barros, in cluster 4, produced articles related to the evaluation of the small hotels' efficiency and estimate productivity's factor. His last work verified in the citations was using an procedure to





assess determinants of efficiency in the Portuguese hotel industry (BARROS *et al.*, 2011). These four authors form an important group to the research in this theme. Assaf and Fornell bring the TBL and customer satisfaction approach while Kaplan presents the BSC concept and Barros works with efficiency and productivity. These subjects can be the research focus on hotels' performance.

4.2.6 Bibliographic coupling analysis

This analysis measures documents' similarity using citations shared by publications, where the link intensity is verified by the references in common between the papers (ZHAO; STROTMANN, 2008). So, two articles with high citations numbers in common have a strong theoretical or methodological familiarity. The analyzed data comprise 56 documents from the textual corpus with at least 20 citations per article, generating a network with 14 links. Figure 9 shows the bibliographic coupling network.

Figure 9 – Bibliographic coupling network



Source: Authors, 2022.

Clusters 1 and 2 received 64.7% and 22.7% of clusters' citations, respectively. Among the five authors in cluster 1, Sun *et al.* (2007) was cited 825 times until December 2021, if the publications per year are considered, the authors received 59 citations per year until the end of 2021. The objective of the paper was to examine processes linking high-performance human resource practices with productivity and turnover. In cluster 2, M. Chen published an article with an investigation into the economic impact and tourism growth on the corporate performance of hotels in Taiwan (CHEN, 2010). The publication was cited 122 times, with an average of 11 citations per year. Sainaghi conducted a review of hotel performance research using aspects of the balanced scorecard (SAINAGHI; PHILLIPS; CORTI, 2013), receiving 103 citations, with an average of 13 per year.





In cluster 3, Kularatne *et al.* (2019) presented a work that has 48 citations in two years, the paper investigates hotels' performance in the context of environmentally sustainable practice. Parte-esteban and Alberca-oliver (2015) examined the determinants of efficiency in the hospitality industry for a sample of 1385 Spanish hotel firms using DEA, receiving 36 citations since 2015. Mihalič *et al.* (2012), in cluster 4, published their study on a sustainable business model in Slovenian hotels based on the triple bottom line and existing sustainability analysis. The work received 63 citations, with an average of seven citations per year. Cvelbar and Dwyer (2013) explored the potential role of economic, environmental, and social reporting in hotels' long-term strategy planning, receiving 48 citations since 2013. Table 2 shows details of the most relevant coupled documents.

Table 2 – Details of the most relevant coupled documents

Document	Total citations	Citations per year	Cluster
Sun, L-Y.; Aryee, S.; Law, K. S. High-performance human resource practices, citizenship behavior, and organizational performance: a relational perspective. <i>Academy of Management Journal</i> , 50(3), 558-577, 2007.	825	59	1
Tajeddini, K.; Trueman, M. Managing Swiss Hospitality: How cultural antecedents of innovation and customer-oriented value systems can influence performance in the hotel industry. <i>International Journal of Hospitality Management</i> , 31, 1119-1129, 2012.	86	10	1
Chen, M-H. The economy, tourism growth and corporate performance in the Taiwanese hotel industry. <i>Tourism Management</i> , 31, 665-675, 2010.	122	11	2
Sainaghi, R.; Phillips, P.; Corti, V. Measuring hotel performance: using a balanced scorecard perspectives' approach. <i>International Journal of Hospitality Management</i> , 34, 150-159, 2013.	103	13	2
Kularatne, T.; Wilson, C.; Månsson, B.; Hoang, V.; Lee, B. Do environmentally sustainable practices make hotels more efficient? A study of major hotels in Sri Lanka. <i>Tourism Management</i> , 71, 213-225, 2019.		24	3
Parte-Esteban, L.; Alberca-Oliver, P. Determinants of technical efficiency in the Spanish hotel industry: regional and corporate performance factors. <i>Current Issues in Tourism</i> , 18(4), 391-411, 2015.	36	6	3
Mihalič, T.; Žabkar, V.; Cvelbar, L. K. A hotel sustainability business model: evidence from Slovenia. <i>Journal of Sustainable Tourism</i> , 20(5), 701-719, 2012.	63	7	4

Source: Authors, 2022.





4.2.7 Journals' productivity

The evaluation of journals' productivity, using the Bradford Law (BRADFORD, 1953), may estimate the degree of journals' relevance in specific areas of knowledge. Journals with more publications or productivity tend to have more quality and to be relevant to the subject. Table 3 presents the corpus' journals and indicators related to productivity and relevance.

A division by productivity zones was made to classify journals according to the number of publications. The first zone had two journals with 19 publications, representing 33.9% of the corpus. Zone two had six journals with 22 publications. The last zone presents 15 journals with one publication each (26.8% of the corpus). Regarding the relevance of journals, all of them are in the first quartile of citations according to the SJR (2020), which measures the journals' visibility and prestige.

Table 3 - Journals and indicators related to productivity and relevance

zone	Journal	Number of articles	Country	Publisher	H index	SJR (2020)	Impact factor (2020)
1	International Journal of Hospitality Management	10	United Kingdom	Elsevier Ltd.	122	2.32	6.70
1	International Journal of Contemporary Hospitality Management	9	United Kingdom	Emerald Group Publishing Ltd.	86	2.08	5.67
2	Journal of Hospitality and Tourism Research	5	United States	SAGE Publications Inc.	70	1.63	3.82
2	Tourism Management	5	United Kingdom	Elsevier Ltd.	199	3.33	7.43
2	Current Issues in Tourism	4	United Kingdom	Taylor and Francis Ltd.	74	1.73	4.15
2	Cornell Hospitality Quarterly	3	United States	SAGE Publications Inc.	75	1.07	2.80
2	Journal of Sustainable Tourism	3	United Kingdom	Taylor and Francis Ltd.	103	1.73	3.99
2	Tourism Management Perspectives	2	United States	Elsevier USA	43	1.45	3.65
3	Journal of Cleaner Production	1	United Kingdom	Elsevier Ltd.	200	1.94	7.25
3	Tourism Review	1	United Kingdom	Emerald Group	32	1.00	2.91

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				Publishing Ltd.			
3	Academy of Management Journal	1	United States	Academy of Management	318	11.19	7.57
3	Annals of Tourism Research	1	United Kingdom	Elsevier Ltd.	171	2.16	5.91
3	Building And Environment	1	United Kingdom	Elsevier BV	154	1.74	4.97
3	Entrepreneurship And Sustainability Issues	1	Lithuania	ESC	25	NA	NA
3	International Journal of Productivity and Performance Management	1	United Kingdom	Emerald Group Publishing Ltd.	61	0.42	NA
3	International Journal of Tourism Research	1	United Kingdom	John Wiley and Sons Ltd	58	1.16	2.58
3	Journal of Hospitality Marketing and Management	1	United States	Routledge	53	1.71	4.49
3	Journal of Travel Research	1	United Kingdom	SAGE Publications Ltd	132	3.40	7.03
3	Service Science	1	United States	INFORMS	14	0.62	1.62
3	Technovation	1	United Kingdom	Elsevier Ltd.	130	2.30	5.73
3	Business Research Quarterly	1	Netherlands	Elsevier BV	26	1.00	3.75
3	Tourism and Hospitality Research	1	United Kingdom	SAGE Publications Inc.	39	0.85	3.06
3	Tourism Economics	1	United States	SAGE Publications Inc.	58	0.81	4.44

Was used the H index to quantify the productivity and scientific impact of journals. The Academy of Management Journal (cluster 3) has the greater H index with the number 318, which indicates that 318 papers of this journal received at least 318 citations in other works. In cluster 1, the International Journal of Hospitality Management had an H index of 122, and, in cluster 2, the H index of Tourism Management is 199. These numbers reflect the relevance of the research corpus because of the replicability of publications.

The SJR index (2020) expresses the average number of weighted citations received in the selected year by the documents published in a journal in three previous years. Again, the most relevant journal is the Academy of Management Journal with 11.19, and Journal of Travel Research (3.40) and Tourism Management (3.33) closes the top three. The impact factor is a ratio between citations and recent citable items published, measuring the frequency that the "average article" in a journal has been cited in a year or period. Journal of Travel





Research is the first (7.57), Tourism Management appears in second place (7.43), and Journal of Cleaner Production is the third (7.25).

Even with the not appearance of the two journals of the first zone in the top three most relevant articles by the indexes' estimation, it can be noted that these journals' metrics have been adequate. The International Journal of Hospitality Management (10 publications) had an H index of 122, 2.32 of SJR (2020), and 9.24 of impact factor. The International Journal of Contemporary Hospitality Management (9 papers) had 86 of H index, 2.08 of SJR (2020), and 6.51 of impact factor.

The geographical distribution of the corpus journals is concentrated in two regions: The United Kingdom (14 journals, 61% of total) and the United States (seven journals, 30% of total). The two other countries are Netherlands and Lithuania, each one with one journal. As for publishers, two groups can be cited: Elsevier (eight journals) and SAGE (five). These publishers concentrated 56.5% of the corpus journals.

4.2.8 Word cloud

The word cloud is the organization and graphic grouping of words according to their occurrence in the corpus' abstract. This analysis facilitates the content's interpretation and delimits the textual corpus representation. Among the 56 papers, words with more than ten co-occurrences were selected for the cloud composition. From the statistics, it can be verified that the five most used words correspond to approximately 22.5% of the total. The words "Hotel"/"Hotels" and "Performance" were the highest citations, with 197 and 139 occurrences, respectively. "Study" and "Indicators" appear in the sequence with 77 and 59 occurrences. Figure 10 presents the word cloud.





Figure 10 – Word Cloud

An important highlight is given to words that represent some indicators and appear in the list: "REVPar" (26 occurrences), occupancy (14) and ADR (11). These three words represents economic and performance indicators highly used in the hotel industry. The words "financial" and "Management" correspond to 34 occurrences each, which support the analysis that these two themes are common in the assessment of performance in hotels. For an organizational point of view, there are words like "satisfaction", "efficiency", "environmental", "operational", "marketing" and "sustainability". This can represent the main approaches on hotels' performance.

4.2.9 Keywords cluster analysis

This analysis was made to map research themes related to the most used keywords. Was applied the grouping between words to visualize the relationship among corpus' keywords. The network was created presenting at least four occurrences per word, which result in 21 nodes distributed in three groups. Figure 12 shows the keyword network.



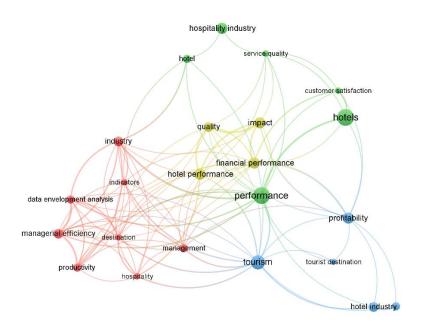


Figure 12 – Keyword network

The first cluster (red) is linked with managerial efficiency, relating performance indicators with data envelopment analysis and productivity issues. Cluster 2 (green) had a connection with hospitality industry service, which uses themes like service quality and customer satisfaction in the performance assessment. Issues related to the profitability in hotels and tourist destination are seen in the third Cluster (blue), and, in the fourth cluster, (yellow) there are aspects of quality and financial performance.

The keywords with more relational ties were identified to understand the most published topics. The ten words with more relational ties indicate that the most common issues are related to financial and operational performance of hotels. Likewise, the use of Data Envelopment Analysis (DEA) and some indicators like customer satisfaction and service quality had a significant frequency. Table 4 presents the ten keywords with more relational ties.



Table 4 – Keywords with more relational ties

Keyword	Relational ties	Total occurrences
Performance	23	10
Hotel(s)	14	14
Tourism	22	8
Financial performance	20	6
Impact	16	6
Hotel performance	14	6
Profitability	13	6
Hospitality industry	2	6
Managerial efficiency	19	5

4.3 Thematic analysis

The thematic analysis was conducted from the data generated in the descriptive analysis and from abstracts' reading. The papers were distributed in four thematic clusters, where Cluster 1 was related to issues in environmental efficiency, Cluster 2 brought the financial performance in hotels, cluster 3 developed a social analysis of performance, and cluster 4 present a relationship between two or more issues of the other perspectives.

Kularatne *et al.* (2019) investigate hotels' performance in the context of environmentally sustainable practice and is the most relevant work present in Cluster 1. The authors assess the technical efficiency and its determinants and examined the level of productivity in Sri Lanka hotels. The results showed that environmental responsibility enhances hotels' efficiency, specifically in terms of improving energy efficiency and waste management. Mihalič *et al.* (2012) published their study on a sustainable business model in Slovenian hotels based on the triple bottom line and sustainability analysis. Was seen, among hotels, strong importance to economic and marketing indicators, as well as the human resources, but environmental practices' importance are neglected.

In cluster 2, Chen (2010) evaluates that the effects of changes in the economy and the growth rate of foreign tourist arrivals are significant explanatory factors of occupancy rate. Cross *et al.* (2009) stands that while RevPAR is a good performance measure, a revenue generation index, which compares firms' RevPAR, is more useful. Findings from Hua *et al.* (2018) show that loyalty programs had a positive impact on RevPAR, ADR, occupancy, and gross operating profit (GOP).

The third cluster brings the work of Sun et al. (2007), which examines the linking of high-performance human resource practices with productivity and turnover. The findings





highlighted a partially mediating role for service-orientated organizational citizenship behavior in the relations between high-performance human resource practices and organizational performance indicators (turnover and productivity). Tajeddini and Trueman (2012) declared that cultural dimensions are positively associated with customer orientation, company performance, and innovativeness.

Wong *et al.* (2020) indicated that perceived value mediates the relationship between service quality and customer satisfaction. It identified that hotels should prioritize the quality of service, sleep quality, cleanliness, and rooms to improve customer satisfaction. Qi *et al.* (2017) identified that indoor quality environmental quality (IEQ) indirectly affected hotel business performance and that a higher IEQ complaint rate resulted in a lower online rating. Nicolau *et al.* (2020) investigated the differences between monetary and non-monetary components in hotels' satisfaction measures. Their work sustains that non-monetary components lead to higher values in satisfaction analysis.

In the last cluster, Sainaghi *et al.* (2013) suggest that researchers recognized the benefits of including financial and non-financial indicators in their studies. Kim and Chae (2018) study the relationships between the use of social networking sites and the return on resources and performance in hotels. The results indicated that is a positive association between a hotel's resources and Twitter use and between Twitter use and their RevPAR. Cvelbar and Dwyer (2013) explored the potential role of economic, environmental, and social reporting in hotels' long-term strategy planning.

Yu and Chiu (2021) inferred that volume of recyclable waste generated per capita is positively related to the average daily rate (ADR) of the Bed and Breakfast (B&Bs) industry. How and Lee (2021) found a relationship between customer satisfaction and a firm's financial performance in a U-shape. This shows that satisfaction levels need to be enhanced because of the benefits of improved financial performance beyond the threshold. Table 5 presents future research themes and topics on hotel performance.



Table 5 – Future research themes and topics on hotel performance

Key themes	Key topics
Economic	Does gross operating profit (GOP) can be used as an indicator of future hotel performance?
	How is the influence of consumer feedback metrics on consumer expenditure across markets?
	How electronic word of mouth (eWOM) can be integrated in revenue management?
Environmental	Can environmentally waste management have impacts on service quality? What is the relationship between corporate social responsibility (CSR) and environmental management?
	How do firms improve their CSR commitment? which specific guidelines can be provided?
	Can Environmentally sustainable practices increase tourist satisfaction? How can environmental activities change the performance of hotels?
	Does green entrepreneurial orientation affect innovation and quality in hotels?
Social	How do marketing activities influence consumer feedback metrics?
	Does social media use have relationships with hotels' innovativeness and size?
	Does Quality-of-life (QOL) indicators can estimate hotels' performance measurement in different destinations?
	Do better service performance increase team engagement and generate a high innovation climate?
Global	What factors may affect the connection between competitive sets distance and the RevPAR index?
	What is the cause-and-effect relationship between BSC's perspectives and
	hotels' performance indicators?
	What is the importance of food and beverage (F&B) business in the hotel
	industry?
	Which determinants are more efficient for measuring hotels' quality service?
	What are the qualitative and quantitative aspects of the impact of loyalty
	programs on hotel performance?
	Which are the organizational factors that affect the hotels' performance?

Source: authors' research corpus, 2022.

5. DISCUSSION

The systematic review presented several important aspects of the research theme, mainly regarding to the subject's conduction. Its division into descriptive and thematic analysis is important for the review's orientation. The state of research in the theme of hotels' organizational performance can be estimated from the analyzes conducted in this study, which was considered the triple bottom line (TBL) concept.

The evolution of publications on the subject is easily noticeable. Authors are highlighted for works relevant to the topic and a research base can be identified. A group of indicators used in each TBL perspective is assembled. Several Studies aimed at financial analysis using indicators such as RevPAR, ADR, MPI, occupancy, and GOP (ALTIN *et al.*, 2017; ANDERSON; LAWRENCE, 2014; CHEN, 2010; CROSS *et al.*, 2009; DAY *et al.*,

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2013; HARRIS; MONGIELLO, 2001; HUA et al., 2018; MUN et al., 2019; ORTEGA, 2016; SCAGLIONE et al., 2009; SCHWARTZ et al., 2021; SCHWARTZ; WEBB, 2021; SINGH; DEV, 2015; TAN et al., 2021).

Works focusing on environmental issues employed indicators related to eco-friendly practices and resources' use and waste (DE GROSBOIS; FENNELL, 2022; FATOKI, 2019; KOSEOGLU *et al.*, 2021; KULARATNE *et al.*, 2019). While studies in the social area presented aspects such as quality, turnover, training, equality, and evaluations rates (FERNÁNDEZ-BARCALA; GONZÁLEZ-DÍAZ; LÓPEZ-BAYÓN, 2021; GOMES; YASIN; LISBOA, 2007; LI-YUN; SAMUEL; KENNETH, 2007; NICOLAU; MELLINAS; MARTÍN-FUENTES, 2020; OZDEMIR; ERKMEN; BINESH, 2021; SUN; KIM, 2013; V DE SOUZA MEIRA *et al.*, 2021). Additionally, some works included the relationship between indicators in two or more TBL perspectives (CVELBAR; DWYER, 2013; HOW; LEE, 2021; KIM; CHAE, 2018; LEE; HOW, 2019; MIHALIČ; ŽABKAR; CVELBAR, 2012; NALLEY; PARK; BUFQUIN, 2019; RIBEIRO; VASCONCELOS; ROCHA, 2019; WONG, A. K. F. *et al.*, 2021; YU; CHIU, 2021).

There is a strong focus on the financial area of hotel performance. However, there is also an increase in publications targeting broader topics, such as sustainability and social areas, and it can be seen a growth of studies linking two or more of these three TBL areas. What makes this theme robust is the evolution of publications in recent years and the relevance of published works, together with received citations. All of this improve the process of choosing indicators that can represent the perspectives of organizational performance in hotels, which, in future research, can have their relationships verified for the development of an organizational improvement culture.

6. CONCLUSION

This paper derives descriptive and critical information into the hotels' performance area and offers future research directions by developing a holistic review of the theme. The evolution of publications on the subject is noticeable. From an academic standpoint, the results provide research gaps in four major areas: economic, environmental, social, and global. From a practical point of view, this work can be used as a guide to some solutions present in the scientific literature to improve hotels performance on a corporate basis.

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Descriptive analyses were conducted based on authors' and journals' productivity and the words' frequency. The systematic review presented the annual distribution of publications, which countries, authors, and journals are most influential in this research area, and the relationship among the studies. A formation of the thematic clusters among the papers was done with four groups, which delimited works in environmental efficiency, financial performance, social analysis, and global measure of performance in the hotel industry. The review presented important aspects of the research theme, mainly regarding the subject's conduction. To respond to the research question, we presented how hotels uses quantitative data to assess their organizational performance. The areas highlighted have great potential for future research and several gaps were identified. The search for understanding the role of each potential component in the global performance of hotels is also an important and promising area of research.

Was noticed a focus on the financial area, however there is an increase in research targeting broader topics, such as sustainability and social areas, including also a mixed between two or more of these areas. The financial area presented studies involving indicators like RevPAR, ADR, MPI, occupancy, and GOP and its relation to hotels performance. Environmental issues employed, in most studies, indicators of eco-friendly practices and resources use. The social area had mostly topics of quality, turnover, training, equality, and evaluations rates. So, the review can contribute to the scientific literature, by presenting the principal topics in the TBL areas and proposing a more comprehensive research path, not yet explored. It is expected to create a starting point for research and policies to reduce resource use and social inequalities in hotels and at the same time maintaining or upgrading financial returns.

Despite the contributions, this work does have some limitations. First, the review only considered papers published in journals in the first Scimago quartile indexed in WoS and/or Scopus databases. This may have failed to include relevant studies in the research corpus. Further studies may consider a more comprehensive range of scientific literature. Second, because review's delimitation in global performance, the adjacent areas verified were not explored with great intensity. Future works can look more closely at issues related exclusively to economic, social, or environmental performance in hotels. Finally, although the keywords were carefully selected, some relevant papers may have been omitted from the corpus. We suggest that revised keywords should be included in further reviews on this subject.

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