



Measuring hotel performance: Using a balanced scorecard perspectives' approach

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ABSTRACT

This paper provides an examination of hotel performance research published in the seven leading hospitality and tourism journals from 1992 to 2011, through the lens of the balanced scorecard (BSC). The review seeks to answer three questions. What BSC perspectives are included in hotel performance research published in major hospitality and tourism journals? What are the trends and implications for future hotel performance research? What are the main geographical areas of publication outputs?

Eleven hypotheses were tested using a database of 138 articles that fully met the key word selection criteria of hotel, BSC and performance. The results suggest hotel performance attracts widespread attention from hospitality scholars, but significant gaps remain. Researchers have recognised the benefits of including financial and non-financial indicators. Yet, more research is required in this area to offer hotel organisations better approaches to the management of their performance. We conclude by identifying three research gaps.

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1. Introduction

Encouraging signs for the future of the global hotel sector remain uncertain, due to growing evidence of challenging times ahead. The World Travel and Tourism Council (2012) reinforce the importance of travel and tourism by highlighting that in 2011, travel and tourism accounts for 9% of global Gross Domestic Product (GDP), over US\$6 trillion, and 255 m jobs. The World Travel and Tourism Council using 4% growth projections forecast that by 2022 the corresponding figures will be 10% of global GDP, some US\$20 trillion, and over 328 m jobs. Hospitality, which includes hotels will be at the forefront of the growth in jobs due to employment in new hotels. Yet, despite these developments several hotel companies are buckling under mountains of debt, such as Travelodge (Britain, Ireland and Spain), and the Almond Hotel group (Barbados). Bloomberg cites Robert Sonnenblick, Chairman of Sonnenblick Development LLC who foresees huge increases in US foreclosures during 2012, as debts come due but with a paucity of available financing.

High level of fixed costs, interest expenses together with the inability to refinance debt will lead to some hotels companies going bankrupt. In these cases, hotel assets will be sold and the new

owner(s) will be less burden with debt and will seek to generate healthy operational profits. Academics, practitioners and consultants use a variety of operational metrics to gauge operational performance. These can include: Occupancy (Jeffrey and Barden, 2000), average room rate (ARR) (Israeli, 2002), revenue per available room (RevPar) (Namasivayam et al., 2007; Sainaghi, 2011), total revenue per available room (TrevPar) (Shang et al., 2008) and gross operating profit per available room (GOPPAR) (Claver-Cortés et al., 2007).

Traditional operational metrics provide a picture of profitability in terms of efficiency, but fail to provide a systematic depiction of effectiveness in terms of achievement of strategic objectives. Quantitative metrics are historical, while qualitative metrics look into the future and can help redefine strategy (Phillips, 2007). Defining the appropriate metrics for a corporate strategy can be as important as the actual content of the strategy. In the management literature Johnson and Kaplan (1987) note the need for better performance measurement systems. Since then, several authors postulate measurement models that provide a more integrated approach linking operations to corporate strategy (Chathoth and Olsen, 2007).

Recent approaches to performance measurement have identified the inadequacies of solely relying on quantitative and short-term indicators, and have led to the development of frameworks, such as: performance pyramids and hierarchies (Dixon et al., 1990), intangible asset scoreboard (Sveiby, 1997), SMART (Cross and Lynch, 1988), performance prism (Neely et al., 2002), success dimensions (Shenhar and Dvir, 1996) and balanced scorecard (Kaplan and Norton, 1992).

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These frameworks provide a way of capturing financial and non-financial performance measures. However, in today's economic and competitive environment achieving and sustaining competitive advantage necessitates explicit links between strategy and performance measures. Performance measurement frameworks now need to move beyond the mere collection of financial and non-financial measures and seek to identify causal links among measures, strategies and outcomes. The performance measurement literature emphasises the importance of these linkages between strategy and such measures (Otley, 1999; Ittner et al., 2003; Chenhall, 2008). According to Chenhall (2008) a distinctive feature of the BSC is that it identifies financial and non-financial measures covering different perspectives, which provides a way of translating strategy into action. Speckbacher et al. (2003) asserts that the BSC has evolved and can assist practitioners by providing three different types of performance measurement system, minimum standard, cause-and-effect and fully developed. The minimum standard combines financial and non-financial measures. The next evolution is the cause-and-effect, which illustrates the salient relationships between strategies and outcomes. The final evolution is the fully developed, which defines the objectives, outcomes and connecting incentives for the organisation. This indicates that the BSC can be used in organisations at different stages in the development of performance measurement systems, which broadens the appeal of this research to academics and practitioners.

Collectively, these three types of performance measurement systems provide assistance in strategy implementation (Otley, 1999; Ittner et al., 2003). Furthermore, the BSC has gained acceptance in the hospitality literature by being used to integrate performance measurement with other strategic issues. For example, McPhail et al. (2008) illustrate the importance of the alignment of the learning and growth perspective with performance measures. Chen, Hsu and Tzeng (2011) link the BSC with risk management and Phillips (2007) provides a hotel case study, which illustrates the BSC being used as an incentive scheme in a major UK hotel group.

The BSC is now a global management tool (Silk, 1998). Ittner and Larcker (2001) note the popularity for both practitioners and academics around the world. More recently, Qu, Cooper and Ezzamel's (2011) research findings found that the growth in use of the BSC is due to three main reasons. First, many users have taken the idea and adapted it to their own needs. Second, the BSC is generic theory and can be customised into local practices through customised templates. Third, customisation creates the needs for experts who use extensive exemplification through real cases, which make the BSC thrive as a product in the marketplace.

More than two decades after first BSC publication (Kaplan and Norton, 1992), the findings of Rigby and Bilodeau (2011) illustrate the enduring popularity of the BSC for practitioners. Empirical research is performed by the strategy consulting firm Bain & Co (Rigby and Bilodeau, 2011). Now in its 18th year with responses from more than 11,000 executives, the management tools survey shows that the BSC remains one of the most popular management tools. Executives in North America, Europe, Asia and Latin America were asked to rate their satisfaction with the management tools they use. In 2011, 1230 executives responded and the top five management tools were benchmarking, strategic planning, mission and vision, customer relationship management, and outsourcing. Executives ranked the BSC as the sixth most used tool (Rigby and Bilodeau, 2011).

In the academic arena, several benefits are proposed. Behn (2003) mentions the ability of the BSC framework to combine the needs of different stakeholders, such as clients, shareholders, financial institutions, employees. Prior to the BSC, previous models were mainly focused on a specific stakeholder (usually shareholders) and were not integrated into the strategy process (Wisniewski and

Dickson, 2001). Managers are able to make better decisions by using the four perspectives of the BSC (Lipe and Salterio, 2000) and like working for organisations with effective performance management systems (Malina and Selto, 2001). The BSC mixes different measures: financial and operational, qualitative and quantitative (Dess and Shaw, 2001; Ittner et al., 2003). The BSC framework enables managers to look both to the past (using financial indicators) and to the future (using learning and growth indicators) (Banker et al., 2004).

Given the generic and hospitality specific BSC literature, its benefits, practitioner popularity together with the need to build and extend prior hospitality knowledge and practice, the four perspectives of the BSC were used to guide this study. Also, the increasing influence of intangible assets in the hotel sector (Zigan and Zeglat, 2010) make the BSC with its tangible and intangible focus an appropriate management tool for this study.

The present study seeks to review existing work and to assess the depth and breadth of prior hotel performance work, with emphasis on BSC perspectives. Also given the global nature of the hotel sector, the study looks at the geographical spread of prior research. These led to the development of three research questions. What BSC perspectives are included in hotel performance research published in the major hospitality and tourism journals? What are the trends and implications for future hotel performance research? Given the global nature of the hotel sector what are the main geographical areas of publication outputs?

This study contributes to the literature in three areas. First, this paper deals with a topic that is timely and be of interest to both academics and practitioners. The study examines hotel performance research published in seven leading hospitality and tourism journals from 1992 to 2011, through the lens of the BSC. Second, this two-decade review will identify gaps in prior BSC perspective research. This will provide opportunities to develop a better understanding of hotel performance research, which can be used to help future theoretical investigations. Third, the study provides opportunities for practitioners to enhance the sophistication of their BSC frameworks, by broadening their use of perspectives, or even assisting in the creation of new hotel performance frameworks. The study contributes to both knowledge and practice by considering the academic scientific literature.

This study adopts the same journals used by Li (2008) in a review of entrepreneurship research published in leading hospitality and tourism management journals. These journals include: *Cornell Hotel and Restaurant Administration Quarterly* (CHRAQ), *International Journal of Hospitality Management* (IJHM), *Journal of Hospitality and Tourism Research* (JHTR), *International Journal of Contemporary Hospitality Management* (IJCHM), *Annals of Tourism Research* (ATR), *Tourism Management* (TM); *Journal of Travel Research* (JTR).

The remainder of this paper continues as follows. The next section provides the BSC theoretical background, which leads to the development of the hypotheses. The hypotheses relate to the four perspectives, the geographical scope and the research methodologies employed. Next, the review method is outlined. Followed by results. Finally, major themes are discussed; conclusions, managerial implications are drawn.

2. Theory and hypotheses

2.1. The balanced scorecard

Hotel performance measurement suffers from limitations including excessive focus on profit (Brander Brown and McDonnell, 1995), short-term (Denton and White, 2000), unbalanced (Harris and Mongiello, 2001), unsatisfactory for businesses seeking a competitive advantage (Evans, 2005), historical orientation (Atkinson

and Brander Brown, 2001), lack of market orientation (Phillips and Louvieris, 2005). Moreover, financial approaches reduce corporate stakeholders to mainly shareholders, ignoring the vital role played by other stakeholders such as customers (Mohsin and Lockyer, 2010) and employees (Clark et al., 2009).

The objectives and measures of the BSC derive from four perspectives: financial, customer, internal business process and learning and growth. These four perspectives provide the framework for the BSC (Kaplan and Norton, 1992). The BSC considers the tangible assets (financial) and three intangible assets and intellectual capital (customer, internal business process and learning and growth). This transforms practice from the sole use of lagging indicators to a balance of lagging and leading indicators.

The BSC emphasizes that financial and nonfinancial measures must be part of the information system for employees at all levels of the organization. Effective decision-making requires accountability of all staff. Front-line employees must understand the financial consequences of their decisions and actions; senior executives must understand the drivers of long-term financial success (Kaplan and Norton, 1996a). Organisational goals, objectives and metrics must be more than just a somewhat ad hoc collection of financial and nonfinancial performance measures; they should derive from a top-down process driven by the mission and strategy of the firm or of the business unit (Kaplan and Norton, 1996b).

In summary, the four perspectives enable organisations to gain a holistic view of performance measurement.

Financial perspective measures indicate whether a company's strategy, implementation and execution are contributing to bottom-line improvement. Financial objectives typically relate to profitability.

Customer perspective provides a way for managers to identify the customer and market segments in which the business unit will compete and the measures of the business unit's performance. The core outcome measures include customer satisfaction customer retention, new customer acquisition, customer profitability, and market and account share in targeted segments.

In the *internal business perspective*, executives identify the critical internal processes in which the organization must excel. These processes enable the business to deliver the value proposition and satisfy shareholder expectations of excellent financial returns. This perspective includes both innovation and operations.

Finally, *learning and growth* identifies the infrastructure that the organization must build to create long-term improvement. Businesses are unlikely to be able to meet their long-term targets for customers and internal processes using existing capabilities. To close these gaps, businesses will have to invest in reskilling employees, enhancing information technology and systems, and aligning organizational procedures and routines.

2.2. Hypotheses

To better understand prior hotel performance research with emphasis on BSC perspectives, the following are tested in the study.

2.2.1. Perspectives focus and empirical papers

Considering the scope of hotel performance, the number of contributions can be expected to increase. We name this as the first hypothesis given its fundamental relationship to this study.

HP1. The number of publications in leading hospitality and tourism journals focusing on *hotel performance* increase over time.

Several scholars highlight the prominence of financial indicators in hotel performance research. "Financial measures have been the traditional means of performance measurement" (Bergin-Seers and Jago, 2007, p. 146). Harris and Brander Brown note that the diffusion of Uniform System of Accounts for Hotels has increased the number

of indicators "based upon conventional cost oriented accounting methods" (1998, p. 163). Sainaghi (2010a) observes in his study that 23% of publications use financial performance dimensions to measure hotel results and 53% use financial ratios as a performance indicator.

HP2. The number of publications in leading hospitality and tourism journals using *financial indicators* increase over time.

Concerning the remaining three perspectives as a whole, executives and managers should use operational and organizational indicators (Venkatraman and Ramanujam, 1986) to measure the achieved results. "Empirical research carried out in the USA [...], indicates that hotel companies appear to utilize a wide range of measures – including not only traditional financial accounting measures, but also indicators of managerial behaviour as well as various other outcome measures of effectiveness" (Brander Brown and McDonnell, 1995, p. 7). Supporting Brander Brown and McDonnell (1995), Harris and Mongiello state: "interpretation of the findings suggests that general managers select indicators which directly represent their operations, human resources and marketing decisions, instead of simply waiting for the effects of the financial indicators" (2000, p. 125).

HP3. The number of publications in leading hospitality and tourism journals using *non-financial indicators* increase over time.

We now consider each perspective, starting with the customer perspective. Hotel firms are usually described as "market oriented companies" (Sin et al., 2005), operating in a highly competitive environment, disrupted by shocks (Baggio and Sainaghi, 2011) and strongly influenced by seasonality (Cuccia and Rizzo, 2011). In this context a clear focus on market orientation is a requisite to be competitive (Tse et al., 2005). The customer perspective is a natural area for research "because hotels operate in an oligopolistic market, in which small units compete to attract clients in order to be economically viable" (Barros, 2004, p. 177).

HP4. The number of publications in leading hospitality and tourism journals using *customer indicators* increase over time.

"Customer-based measures are important, but they must be translated into measures of what the company must do internally to meet its customers' expectations. After all, excellent customer performance derives from processes, decisions, and actions occurring throughout an organization" (Kaplan and Norton, 1992, p. 176). The internal business perspective plays an increasing importance in hotel research. Efficiency and productivity management is a growth area of importance, given the increase in competitive pressure. The oligopolistic features of the market (Phillips, 1999) have made the search for efficiency "become essential not only for profitability, but also for a hotel's survival" (Chen, 2007, p. 696). A stream of research use data envelopment analysis (DEA) to measure efficiency and productivity. "The DEA model computes the performance or efficiency index for DMU [Decision Making Unit] k as a ratio of multiple outputs to multiple inputs, subject to the constraint that all the efficiency indexes for other DMUs are equal to or smaller than one" (Neves and Lourenco, 2009, p. 4).

HP5. The number of publications in leading hospitality and tourism journals using *internal business process indicators* increase over time.

"The customer-based and internal business process measures on the BSC identify the parameters that the company considers most important for competitive success. But the targets for success keep changing" (Kaplan and Norton, 1992, p. 177). The fourth perspective, growth and learning, includes investments in people, systems and organizational procedures (Kaplan and Norton, 1996b). Human

resource management is considered a strategic asset in hospitality industry. Research has shown that human resource policies and practices can be an important source of a firm's competitive advantage in the marketplace, since they are difficult to trade or imitate (Namasivayam et al., 2007). Concerning systems and organizational procedures the hospitality sector is largely dominated by chain firms (Ingram, 1996), which increases the probability of survival (Ingram and Baum, 1997). The ability to introduce new organizational models, and to continuously adapt organizational variables to the changing environment, represents a prerequisite to become "competitive, global and technologically driven" (Assaf and Cvelbar, 2011, p. 391) and "highly sensitive to the state of the economy" (Chen, 2010, p. 665).

HP6. The number of publications in leading hospitality and tourism journals using *innovation and learning* indicators increase over time.

Based on Sainaghi's results (2010a) it is interesting to note that many papers focusing on hotel performance use more than one dimension to measure results. Operational and financial performance are mixed in 33% of the publications, operational, financial and organizational dimensions are used together in 5% of cases. Moreover, operational perspectives which is the most used dimension in the selected publications (36%), is often linked to the "customer and internal business perspectives". "In the last two decades, academics and practitioners have been claiming that performance management is only possible if the performance measurement system reflects the company's multidimensional nature [...], and a similar concern exists in the hospitality industry [...]" (Neves and Lourenco, 2009, p. 698). Translating these conclusions from performance dimensions to BSC, we can formulate the following hypothesis. The wide-scale adoption of the BSC by practitioners should influence the number of perspectives included in research studies.

HP7. The number of publications in leading hospitality and tourism journals using indicators for *more than one perspective* increase over time.

2.2.2. Geographical focus and empirical papers

Performance measurement is deeply linked to the specific context under which the hotel operates such as the economic environment (Tang and Jang, 2009), the degree of market concentration (Pan, 2005), the type of destination (Reichel and Haber, 2005) or the presence of external shocks that affect firm performance (Chen et al., 2007).

Harrington (2004) contends that the various hospitality industries operate in significantly different environments, raising the proposition that resulting managerial and organizational practices also differ. Geographical context is a synthesis of cultural, economic, political and social forces. Tourism and hospitality scholars note the salient differences in some countries macroeconomic variables (Tang and Jang, 2009). These include the economy's rate of growth and the contribution that tourism accounts for local GDP; and, on the other hand, to firm's differences in term of size (Nabawanuka and Lee, 2009), ownership structure (Ingram and Baum, 1997), relationships between hospitality firms and their context (Lee and Park, 2009).

In order to operationalize geographical context, some authors suggest the relevance in term of market share and the cultural differences between North America, Europe and Asiatic countries (Sainaghi, 2010a, 2010b). Jogaratnam and Tse observe "most if not all hospitality strategy related research has been conducted in relation to the North American context. Yet, research evidence suggests that western theories focusing on organizations and their environments are likely to suffer from a weak fit (Boyacigiller and Adler,

1991; Kiggundu et al., 1983) in terms of generalizability to a non-western context. Cultural differences may also limit the ability of management to transfer and operationalize some systems and procedures" (2006, p. 455).

Europe is the leading market destination. According to the 2011 UNWTO figures, it currently accounts for approximately 51% of international tourism arrivals. Tourism is increasingly being seen as a strategic activity for many European countries. Especially, given the ability of the sector to generate economic value and jobs (Balaguer and Cantavella-Jordá, 2001). Due to increasing international competition, there is growing interest on tourism competitiveness for both academicians and practitioners. These observations support the following hypothesis.

HP8. The number of publications in leading hospitality and tourism journals using *European data* increase over time.

According to recent UNWTO statistics, Asia obtained significant increases in tourism arrivals with sub-regions such as South East Asia recording a 10.4% increase during 2011. Nevertheless, despite the high growth rates, many articles describe an intensive rivalry, which generates high pressure to increase efficiency and productivity (Ooncharoen and Ussahawanitchakit, 2008; Tseng et al., 2008). In this context performance measurement plays a key strategic activity and for this reason the number of published papers is expected to increase.

HP9. The number of publications in leading hospitality and tourism journals using *Asia data* increase over time.

The North American context presents some traits similar to Europe: the tourism industry shows less growth; this sector has a long tradition (Baum and Haveman, 1997), high capillarity and attracts tourists with a higher spending capacity (WTO, 2008). As in the European style, the economic development of North America has not been tied to the tourism sector, but rather to manufacture and commercial industries. The USA ranks first in tourism receipts and second in international arrivals.

Some distinctive features of the American model are linked to the number of hospitality firms that usually present the traits of large firms (Lee and Jang, 2007). The chain affiliation model and more generally the use of organizational innovation have sprung up and become successful in this context (Chung and Kalnins, 2001). Most large companies are listed increasing the pressure for developing efficient performance measurement systems (Weinbaum, 2009). Furthermore, the abundance of publicly available data increases the number of studies focusing on North America.

HP10. The number of publications in leading hospitality and tourism journals using *North American data* increase over time.

In the field of performance research there are primarily two study streams: (i) quantitatively smaller approach focused on the analysis of performance measurement systems currently used by firms or, more rarely, proposing new index panels (Brander Brown and McDonnell, 1995); (ii) exploring the link between the performance of hotel businesses and various factors characterizing business strategy and its functions or the environment in which the business operates (Chathoth and Olsen, 2007). This latter seam of research is growing and is larger than the former seam. The majority of research studies in both seams are of an empirical nature.

HP11. The number of *empirical* publications in leading hospitality and tourism journals increase over time.

Table 1
Performance articles published in major tourism and hospitality journals.

Year	IJHM	CHRAQ	IJCHM	TM	JHTR	ATR	JTR	Total
1992	/22	/55	/23	/47	/12	/39	/41	/239
1993	/22	/42	/32	/32	/39	/43	/41	/251
1994	2/22	/35	/33	/37	/29	/43	/33	2/232
1995	/23	1/53	3/43	/59	/12	/49	/37	4/276
1996	5/21	1/48	/39	/55	/24	/46	/53	6/286
1997	/21	1/44	/39	/48	1/10	/45	/46	2/253
1998	/22	2/55	1/38	1/47	1/31	/40	/41	5/274
1999	/26	1/54	/46	/48	1/21	/39	/36	2/270
2000	1/23	4/47	3/53	2/46	/26	/45	/44	10/284
2001	/19	1/53	1/45	/51	/25	/44	/42	2/279
2002	1/22	1/55	/49	1/47	1/21	/50	/42	4/286
2003	2/23	2/34	2/61	2/52	/27	/46	/42	8/285
2004	1/30	1/26	2/54	/60	/29	/48	/42	4/289
2005	4/34	1/29	3/54	3/77	/22	1/51	1/42	13/309
2006	2/44	/28	3/50	3/108	1/25	/52	/48	9/355
2007	4/69	2/29	4/51	3/124	1/24	/50	/42	14/389
2008	3/65	3/31	/59	3/95	/22	/47	/44	9/363
2009	7/70	5/43	4/56	2/90	/27	/29	/40	18/355
2010	8/80	3/39	5/56	2/93	/53	/52	/41	18/414
2011	2/53	3/10	/31	2/92	1/11	/14	/18	8/229
Total	42/711	32/810	31/912	24/1308	7/490	1/872	1/815	138/5918
%	5.9%	4.0%	3.4%	1.8%	1.4%	0.1%	0.1%	2.3%

3. Review method

To identify studies for review, a set of articles published in leading hospitality and tourism management journals was identified. To ensure reliability, the sample selection is based on keywords. Articles were selected according to three criteria:

1. Journals: McKercher et al. (2006) adopted a peer assessment method to rank 70 tourism and hospitality journals by 314 tourism and 191 hospitality experts. Seven referred journals received the highest ranks. The rankings were based on their aggregate importance score. This was calculated by determining: the number of experts who assessed its quality; the awareness level as a percentage of the total cohort (n/N); the mean quality rating (m) given by those who rated the journal. The aggregate importance rating was the percentage of the maximum score possible if all experts had identified the journal and given it highest rating of five. For example, the aggregate score for IJHM of 67.4, which was ranked fourth was derived as follows: $(n \times m)/(N \times 5) \times 100 = (161 \times 4.0)/(191 \times 5) \times 100 = 67.4$. Following Li (2008) the top seven ranking journals were used in our study. This research design has also been used by Li (2008).
2. Keywords: The study adopts the following approach in creating its database. The research study was carried out at the end of March 2011 using three keywords of hotel, performance, and balanced scorecard. These keywords were researched in abstract, title and keywords in the following databases: Science Direct (ATR, TM, IJHM), Emerald (IJCHM), Sage (CHRAQ, JHTR), Business Source Elite (JTR).
3. Year of publication: The time horizon embraces 20 years, from 1992 to 2011.

A row sample of 261 articles was initially identified. After further analysis a sample of 138 were selected. The excluded articles applied the keywords to papers pertaining to different sub streams of research.

The analysis procedures include classifying and specifying the following information:

1. The nature of the study was identified by distinguishing between: (i) theoretical or methodological and (ii) empirical papers. Following Li (2008) literature reviews were defined

as theoretical studies and empirical studies were studies that include data or data analysis.

2. Descriptive information, such as the year of publication and type of journal, was collected in the manner of the work by Capon et al. (1990, p. 1145).
3. The indicators used to measure hotel performance were those of the traditional BSC perspectives.

4. Results

This section has been divided into two subparagraphs: the first reports the descriptive statistics of the sample and test the hypotheses introduced earlier. The second paragraph depicts some trends related to the BSC perspectives and geographical scope.

4.1. Descriptive statistics and regressive models

Of the original total of 5918 articles being published in the seven hospitality and tourism journals (see Table 1), 138 articles (2.3%) met the key word selection criteria of hotel, BSC and performance. The spread of publications over the seven journals ranged considerably. The IJHM had a high of 42 articles (5.9%) to a low in ATR and JTR, which both had one article each (0.9%) in 2005.

These results confirm the greater focus on hotel performance research by hospitality journals (IJHM, CHRAQ, IHCHM) compared to tourism-oriented journals (TM, JHTR, ATR, JTR).

In order to quantitatively test the hypotheses, a regression analysis was conducted, using the year of publication as a dependent variable. The independent variables include the specific item of each hypothesis (e.g. the total number of papers included in the sample in the case of HP1) and the total number of published articles as a control variable. Table 2 reports the results; the analysis was conducted using SPSS software, version 18.

Generally speaking, for all the six models the variance explained by the control variable (see the line "model R^2 control only") is 45.6% and this is significant. Furthermore, all the regressions present a value of variance inflation factor (VIF) that is always lower than the maximum level of five suggested by Hair et al. (2005); the maximum level of condition index is 22.223 (HP11) and also in this case it is lower than the critical value of 30 indicated by Belsley et al. (2004). These two indices suggest the absence of multicollinearity.

Table 2
Regression analysis.

Dependent variable: year of publication	Performance articles		Financial indicators		Non-financial indicators		Customer indicators		Internal business indicators		Innovation and learning indicators		More than one perspective indicators		Europe		Asia		America		Empirical		
	Value	Sig.	Value	Sig.	Value	Sig.	Value	Sig.	Value	Sig.	Value	Sig.	Value	Sig.	Value	Sig.	Value	Sig.	Value	Sig.	Value	Sig.	
(HP1)																							
Full model counts of performance articles	0.703	(0.013*)	0.353	(0.158)	0.639	(0.014*)	0.218	(0.342)	0.324	(0.158)	0.516	(0.037*)	0.340	(0.158)	0.269	(0.228)	0.599	(0.029*)	0.407	(0.018*)	0.742	(0.010*)	
Control variable																							
Count of all articles	0.105	(0.682)	0.425	(0.094)	0.183	(0.445)	0.539	(0.027)	0.468	(0.048)	0.300	(0.206)	0.444	(0.070)	0.512	(0.029)	0.203	(0.429)	0.578	(0.002)	0.068	(0.794)	
F (full model)	14.212		90.112		13.965		7991		9113		11.805		9120		8548		12.354		13.417		14.895		
Model R ² control only	0.456	(0.001)	0.456	(0.001)	0.456	(0.001)	0.456	(0.001)	0.456	(0.001)	0.456	(0.001)	0.456	(0.001)	0.456	(0.001)	0.456	(0.001)	0.456	(0.001)	0.456	(0.001)	
Full model R ²	0.626	(0.000)	0.517	(0.002)	0.622	(0.000)	0.485	(0.004)	0.517	(0.002)	0.581	(0.001)	0.518	(0.002)	0.501	(0.003)	0.592	(0.000)	0.612	(0.000)	0.637	(0.000)	
Change in R ² with independent variable	0.17		0.061		0.166		0.029		0.061		0.125		0.062		0.045		0.136		0.156		0.181		
VIF	2906		2013		2457		1635		1692		2115		1862		1579		2626		1060		3036		
Condition index	3439		3022		3327		3352		2314		3074		3107		2876		2651		3207		3234		
Control variable	21.758		18,199		20,058		16,543		16,482		18,643		17,549		16,196		20,588		13,776		22,223		

Beta (significant level).
* p < 0.05.

Heteroskedasticity was controlled using the White test, verifying the null hypothesis of the homoscedastic sequence. The obtained value is not statistically significant, so it is possible to affirm the validity of the model (White, 1980).

Focusing attention on the first regression model, the number of published hotel performance articles in seven leading hospitality and tourism management journals (HP1) presents a positive coefficient (0.703) which is significant (0.013), and confirm the first hypothesis.

The second model (financial indicators) shows a positive coefficient (0.353) but is not significant (0.158). The use of non-financial measures depicts both a higher beta (0.639) and is significant (0.014), which is able to increase the variance explained (0.622).

Focusing on the other BSC perspectives, customer and internal business process perspectives do not show a significant coefficient (0.342) and (0.158) respectively. Only the innovation and learning perspective shows both a positive coefficient (0.516) and a significant value (0.037), which is able to increase the R² by 12.5%. The use of more than one perspective (HP7) is not significant.

Focusing on geographic scope, both Asia (HP9) and America (HP10) research show a high positive (0.599) and (0.407) and significant coefficient (0.029) and (0.018) respectively. This suggests a clear geographical research focus. This is in contrast to Europe (HP8), where the coefficient is positive (0.269) but is not significant (0.228).

Finally, empirical studies (HP11) depict the highest coefficient, in term the coefficient (0.742) is significant (0.010) with a change in R² (18.1%).

4.2. Trends in tourism research

The regression analysis suggests some trends in performance research. These results are “past-oriented”, however, given the long period of analysis (20 years) this can support some hypotheses testing related to the future.

The field of performance is clearly attracting increasing attention by researchers, in terms of the absolute number of published studies (left side of Fig. 1) and the relative importance (right side of Fig. 1). This confirms the old adage in the field of strategic management: performance is a key outcome for any strategy and survival is a necessary condition.

Fig. 2 depicts four charts describing the research trends for each BSC perspective. In order to facilitate direct comparisons, all graphs use the same scales. Results suggest a relative stability in papers focusing on financial performance. This is not surprising given the synthetic nature of this performance, widely used from key stakeholders (debt holders, shareholders, suppliers) to evaluate firm performance.

Customer indicators represent the most researched area, attracting in some (few) years more than 50% of the sample. Results confirm that for firms with a high level of fixed assets and costs, revenue management represents a priority for linking decisions and results.

Internal business process indicators represent the least studied research area with less than 20% of the sample in many years. The graph does not reveal a clear trend, however in the past 10 years this perspective appears to be increasing its relative weight.

Innovation and learning indicators are widely used and in 2008 accounts for more than 50% of the sample. Peaks are often followed by a fall, however the trend is upwards, such as confirmed by the regressive coefficient.

The geographical scope is summarised in Fig. 3. Europe shows a stable trend, with a relative weight fluctuating between 30% and 40%; only in 2 years did European studies account for at least 50% of the total. Asia represents the most studied context, with many

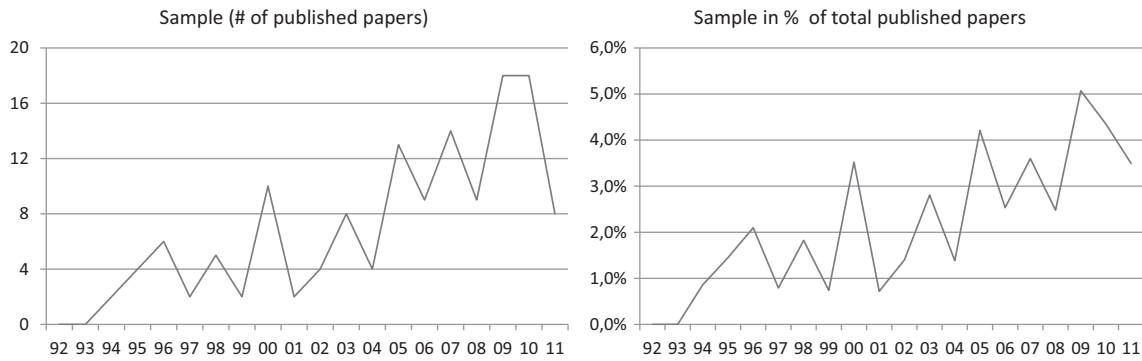


Fig. 1. Trends on performance articles.

years being in excess of 50%. North America contributes less than 20% in many years, but the trend is now upwards.

5. Discussion

Hotel performance measurement attracts widespread attention from hospitality scholars, and despite the overall upward trajectory significant gaps remain. The findings show that the keywords of hotel, BSC and performance generates only 2.3% of the total 5918 published articles. This observation is similar to Li (2008), who found that only 2% of the total 4917 published articles were entrepreneurship-related.

The need for hoteliers to consider quantitative and qualitative metrics remains a matter of intense debate. The results of the study provide evidence of the gap in the literature in intangible asset measurement. Despite the encouraging trend of the innovation and learning perspective, the hypotheses for the other intangible perspectives of customer and internal business process were not supported.

The multidimensional nature of performance measurement led to increasing attention being placed on the customer. Being market oriented in turbulent environments led to the initial growth in customer perspective research, but research on other perspectives has grown. In part, this could be attributed to the interrelationships that exist. Financial performance can be improved by generating strategies that enhance sales, customer satisfaction and customer loyalty. Internal business processes can correlate positively with customers and finance, and customers are positively correlated with finance (Kaplan and Norton, 2004). Internal business processes can enhance the value creation process, and innovation and learning is an important component of this.

Internal business processes was a popular area during the earlier stages of the review. New insights into perspectives were advocated in Brander Brown and McDonnell (1995). Phillips (1999) considers inputs, processes, environment, strategic orientation, and outputs. Denton and White (2000) states the relevance of non-financial performance measures and the need to balance internal and external perspectives. This research during the 1990s highlights a number of organizational implications such as the need to broaden staff



Fig. 2. Trends on balance scorecard perspectives.

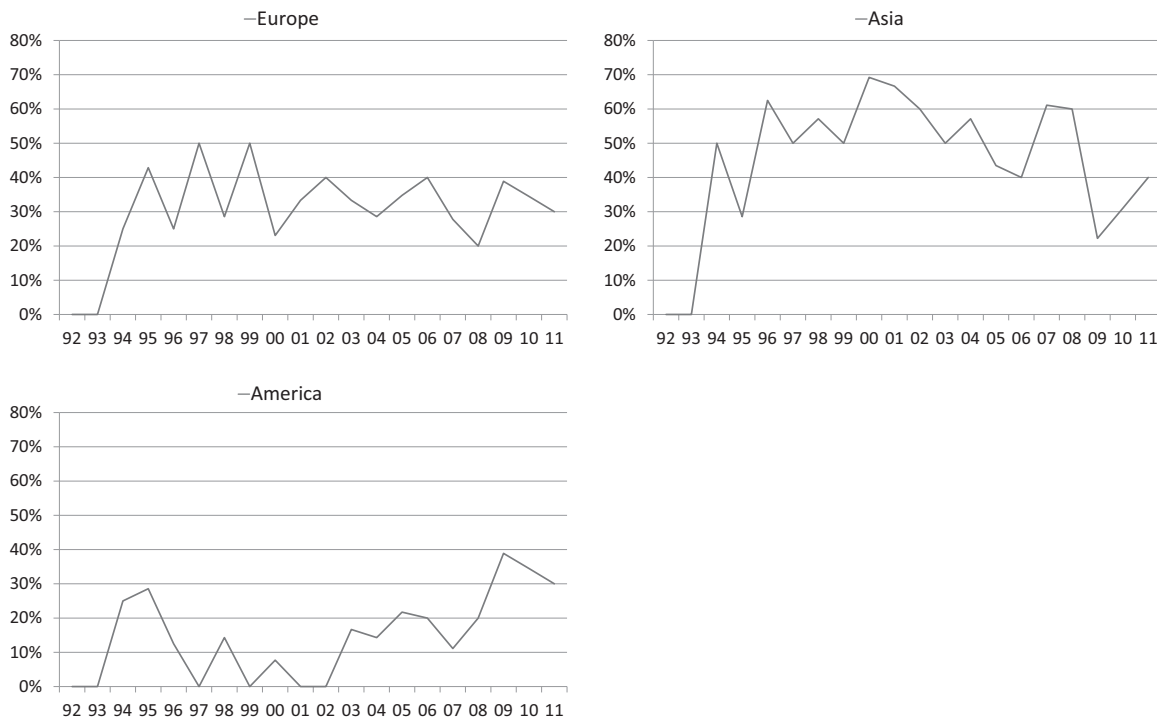


Fig. 3. Trends on geographical scope.

involvement beyond financial executives to a range of senior managers (Brander Brown and McDonnell, 1995), involving all levels of management (Phillips, 1999), need to motivate managers (Denton and White, 2000).

The industrial age led to the emergence of strong manufacturing models (Ford, 1922) and the specialization of labour (Taylor, 1911). After the Second World War, globalisation became an economic priority with the development of more sophisticated approaches to management (Bititci et al., 2011). During the past two decades the service economy has evolved to become the dominant contributor to Gross Domestic Product. Performance measurement has had to keep pace with developments from its earlier origins in cost accounting. Hotels too have had to keep pace. Hotel performance and management practices are now commonplace, but as the world as we know continues to change, innovation and learning takes on greater importance. The growth in the number of papers focusing on innovation and learning is evidence that research is trying to keep pace with economic developments.

The hotel sector follows economic cycles and during the period of review there has been boom and bust. During the boom periods hoteliers are seeking to get the maximum returns from their investments, and during bust periods survival is a priority. Instead of merely focusing on innovation in term of the hotel product, innovation needs to become part of everyday business. Hjalager (1998) asserts that the ability to deliver superior hotel service is usually a consequent of innovation made to the provision process.

Within the context of geographical scope, globalisation of education and academic research is evident. In Asia, with its huge population researchers are making a significant contribution to the hotel performance literature. America is increasing in its contribution, in contrast with Europe, which appears to have reached a plateau. A key observation is the influence of Asian studies in the theoretical development of hotel performance.

Overall, researchers have recognised the benefits of including financial and non-financial indicators. Yet, more research is required in this area in order to offer hotel organisations better approaches to the management of their performance.

6. Implication for research and practice

Concerning a future research agenda, the study identified three gaps. Some relatively unexplored BSC perspectives still exist, primarily the internal business perspective. This research area attracts less than one-fifth of total hotel performance papers, illustrating the relevance of revenues in an industry dominated by fixed cost and fixed capacity. However the current economic crisis and uncertain trends for some tourism areas, such as Europe and North America, suggest a possible integration between sales and costs. Efficiency could become of greater importance as a key driver for managers, both in the present and in the future.

The second gap is more focused on hotel performance research beyond any specific BSC perspective. Hotel performance scholars have found some important empirical results, but no broad theoretical frameworks have yet emerged. Without a broad theoretical framework, it will be difficult for hotel performance research to build on prior studies, or to highlight results, which are complementary or contradictory. This gap requires a movement from a single perspective to relationships that link all perspectives. If the hotel firm is a system that cannot be seen as a “simple” (linear) composition of the entities composing it (Baggio and Sainaghi, 2011; Zahra and Ryan, 2007), then researchers should understand the complexity of linking the perspectives. This is an unexplored research area.

The last gap relates with geographic scope. A firm is basically a community of people, profoundly deep with economic, social and cultural environment. If in the long run the firm’s survival is linked with its ability to generate revenues higher than costs and inflows larger than outflows, the alternative strategies to dynamically create equilibrium are many and different. The increasing volume of Asiatic case studies can help managers and academicians to understand the relevance placed by emerging economies, and to compare different “accents” characterizing European, American and Asiatic models to measure and manage hotel performance.

According to our research findings, some of the salient managerial implications are summarised as follows.

First, based on the BSC perspectives managers should be seeking to broaden the scope of perspectives that they use. Innovation and learning was the only perspective to increase significantly during the two-decade review period. Given the important role metrics can play in helping a hotel gain competitive advantage, some focus on innovation and learning will help managers focus on the key elements of their strategy. Rigby and Bilodeau (2011) highlight growth as the number one priority for respondents participating in the Bain & Company management tool survey. Sustaining profitable growth during economic downturns is difficult to achieve. Innovation processes with effective metrics properly managed can deliver profitable growth.

Second, the traditional focus on financial measures, which were the focus of earlier BSC studies and practice need updating. Non-financial measures dealing with intangible assets should be the focus of modern hotel performance measurement. Effective management of intangible assets can lead to the delivery of high quality services, which is a prerequisite for competitive advantage in the hotel sector.

Third, our review of measuring hotel performance highlights the complexity and challenges managers face in building and using hotel performance systems. Implementation may involve significant changes within the organisation. Effective performance systems can assist in facilitating organisational change. Management approaches will vary by market and our findings in Europe, North America and Asia will help respective managers understand key trends and keep them abreast of likely developments. Given the internationalisation of the hotel industry with geographically diverse units this is an important contribution.

7. Conclusions

This study examines hotel performance research published in the seven leading hospitality and tourism journals from 1992 to 2011, through the lens of the BSC. Researchers studied and described issues relating to various aspects of hotel performance, leading to improved understanding for future research and practitioners. Our results show the relevance of performance measurement. We also reveal which lines of enquiry need pursuing and highlight the need to continuously “renew” this important concept.

Since 2005, the number of published papers focusing on hotel performance has grown. During the 20 years period from 1992, 2.3% of articles were researching hotel performance. Interestingly, since 2005 the figure has increased to 3.7%. This figure should continue to increase due to the new challenges presented by the current economic crisis affecting Europe and North America. New tourism developments in Asia require changes to traditional performance indicators, which are embedded in the European and North America context. Research findings continue to depict the synthetic nature of financial indicators. Measures such as operating margins, cash flows, financial ratios, stock returns attract approximately, one-quarter of the published papers. This is hardly surprising, due to the relevance of these types of measures for some key stakeholders, such as shareholders and financial analysts.

One of the salient features of the BSC is that the non-financial and financial performance measures represent a chain of cause-effect linkages. If financial indicators are synthetic, modern hotel performance systems should be multidimensional. Operational and organizational measures should cover a broad area, strongly linked with the drivers of hotel strategy with supporting BSC perspectives. We have observed that if the final measure is financial, the managerial (and research) perspective is more focused on customer indicators (occupancy, prices, revpar, customer satisfaction), internal business measures (efficiency, productivity, new product and service development), or innovation and learning indices (human

and organisational capital, employee performance and satisfaction). An effective BSC will articulate the strategic direction of the hotel company, the motivation for that strategic direction and how it will address key stakeholders' needs. Ultimately, this should improve hotel performance.

Finally some remarks about limitations of this study. Our research is based on a sample identified by keywords applied to seven leading hospitality and tourism journals. Despite, the research methodology being used in prior studies, some relevant papers that did not match our criteria maybe omitted.

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