

BAM 2023 CONFERENCE

US
UNIVERSITY
OF SUSSEX

**BUSINESS
SCHOOL**

Exploring causality in a multi-dimensional performance framework for tourism: A sustainability perspective

Tahniyath Fatima
Qatar University
Said Elbanna
Qatar University

Exploring causality in a multi-dimensional performance framework for tourism: A sustainability perspective

Tahniyath Fatima

Case Study Analyst
Center for Entrepreneurship & Organizational Excellence,
College of Business and Economics, Qatar University
P.O.BOX 2713, Doha, Qatar
Email: tfatima@qu.edu.qa
Phone: + 974 4403 7142 (GMT+3)
ORCID: 0000-0003-2383-3390

Saïd Elbanna

Professor of Strategic Management & Director
Center for Entrepreneurship and Organizational Excellence,
College of Business and Economics, Qatar University
P.O.BOX 2713, Doha, Qatar
Email: salbanna@qu.edu.qa
Phone: + 974 4403 6478 (GMT+3)
ORCID: 0000-0002-5891-8258

Acknowledgements: This research study was supported by Qatar University Student Grants QUST-2-CBE-2019-4 and QUST-1-CBE-2019-5. The findings achieved herein are solely the responsibility of the authors.

ABSTRACT

Organizational performance has come to be conceptualized as a multi-faceted construct that does not rely only on financial metrics. In the stream of performance measurement, balanced scorecard has taken a strong foothold as researchers and practitioners continue to develop and implement scorecards customized to suit their strategies in place. As sustainability has become a topical issue for businesses operating in any industry, assessment of their sustainability performance has come of relevance. In light of this, we interview hotel managers and executives to devise a sustainability balanced scorecard (SBSC) based on the foundational characteristics of BSC along with an addition of a tenet of sustainability. We further investigate the causality amongst the six perspectives of the proposed SBSC by analyzing data collected from 200 managers in the hospitality industry of India. Our study contributes to the current research that has not dealt in depth with the causality characteristic of BSC and illustrates the presence of an integrated network architecture of SBSC that is exemplified by complex partially mediated relationships between its perspectives.

Keywords: Sustainability Balanced Scorecard, Performance measurement, Hospitality industry, BSC causality, Hotel performance

INTRODUCTION

In the context of business, organizations now, more than ever, are under higher scrutiny given the imposed transparency of corporate information to the public through web and media. Similar developments are seen across individuals, where, influenced by economic development, consumers' lifestyles are improving at a faster rate that has led to a faster realization of self-actualization in their lifecycles, thereby leading consumers to demand for a more socially responsible attitude from organizations. Therefore, organizations are now driven to direct their strategies towards sustainability, as along with governments, other external stakeholders such as consumers and investors are increasingly demanding for socially driven strategies (Jenkins and Yakovleva, 2006). The service industry practices corporate sustainability, where it is not limited to merely cause related marketing or sponsorship, but goes beyond (Pérez and Rodríguez Del Bosque, 2015). Tourism scholars have also understood the vitality of including various dimensions in their concept of sustainability, such as society, economy, geology, and ecology (Farrell and Twining-Ward, 2005, Quintana-García et al., 2018, Hojnik et al., 2020). In the travel and tourism industry, sustainability plays a more pivotal role for the hospitality industry given the “bidirectional” relation that exists amongst hotels with their respective society and environment (Rodríguez and Cruz, 2007). This “bidirectional” relationship is justified and exists such that a hotel significantly impacts the society and environment it operates in, and these natural and social environments in turn constitute a significant part of the service experience the hotel provides to its consumers (Rodríguez and Cruz, 2007, Serra-Cantallops et al., 2018, de Grosbois, 2012). Further, hospitality and tourism are strongly interlinked as traveling tourists have both accommodation needs and other hotel-based requirements (Khatter et al., 2019).

In this study, the Indian context is examined as organizations in India are actively engaging in corporate sustainability due to the enactment of Companies Act 2013 which mandates organizations with specific turnover, net profit or net worth to install a corporate sustainability committee (Dharmapala and Khanna, 2018). Further, India's tourism industry is identified as being amongst the most competitive travel and tourism industries in South Asia, while, globally, it is amongst the top 25 economies in terms of outperforming the global average performance (World Travel & Tourism Council, 2020). Within the tourism industry, the hospitality industry in India is encouraged to incorporate sustainability measures in their project development phases, where abidance to specific requirements enables the project approval process and categorization of hotels towards specific star categories (Ministry of Indian Tourism, 2020a). Further, a comprehensive sustainable tourism criterion is implemented to ensure sustainable practices throughout the tourism industry, which incorporates hotels and resorts, tour operators, transport sector, and tourism-related community and government organizations (Ministry of Indian Tourism, 2020a).

Academicians have emphasized on the relevance of adopting BSC to the tourism and hospitality industry given the focus of this service industry on operational metrics in addition to the financial ones (Elbanna et al., 2015, Kang et al., 2015, Sainaghi, 2010). we restrict our focus to the hospitality industry in India whose goals entail preserving the natural and cultural heritage of the country in question, asserting the need for this industry to ensure sustainable practices towards the community and environment (Ministry of Indian Tourism, 2020b). Hence, the SBSC framework is developed keeping in mind the hospitality industry, where the industry's growing workforce and dynamic engagement in sustainability strategies will serve this study's purpose.

From a scholarly purview, there is a need to examine the hospitality industry, which has been lacking in performance measurement literature in comparison to industrial and manufacturing

sectors (Sainaghi, 2010). In response to this research gap, scholars began developing scorecards based on the concept of balanced scorecard (BSC) that were better suited to the hospitality industry (Elbanna et al., 2015). The BSC is increasingly being studied by researchers in the service industry (Fatima and Elbanna, 2020) as it poses as an appropriate tool, given its multi-dimensional nature which enables organizations to provide much needed attention to various stakeholders (Feng et al., 2003, De Carlo et al., 2008). However, the traditional BSC overlooks significant stakeholders such as society and environment (Phillips, 2007), thereby leaving a research gap that was utilized by Hansen and Schaltegger (2016) to propose various sustainability BSC (SBSC) architectures which incorporate these neglected stakeholders in different manners. Further, as the nature of these scorecards varies across business units (Figge et al., 2002), a distinct need exists in designing a SBSC suited to the hospitality industry and exploring the causality amongst its perspectives (Fatima and Elbanna, 2020). This research study, hence, builds upon the above theoretical gap and develops an SBSC scale, based on the triple bottom line approach of economic, social and environmental performance, to enable hotels to assess their overall organizational performance. In addition to that, this research study conducts a causal analysis that probes into the underlying relationships amongst the traditional non-financial BSC perspectives, namely, learning and growth, internal business, and customer, and how these perspectives lead to the outcome of triple bottom line.

THEORETICAL BACKGROUND & HYPOTHESES DEVELOPMENT

Organizational performance: A balanced scorecard perspective

Performance management research has highlighted the prevailing limitations of measuring organizational performance using single constructs (Maltz et al., 2003) and focusing exclusively on financial indicators (Neely and Al Najjar, 2006). A renowned development in the field of

performance management, BSC, by Kaplan and Norton (1992), has gained prominence given the increasing promotion by its developers and adaptability by various industries. Given the focus of existing performance measurement systems on mere financial measures, BSC, that was more comprehensive in nature, attained higher adaptability with its inclusion of non-financial perspectives in addition to financial perspectives, along with a focus on leading and lagging or short-term and long-term measures. Despite the multidimensional nature of BSC, research focus seems to have been placed on lagged financial measures (Bartlett et al., 2014, Bento et al., 2017). Furthermore, the hierarchical nature of BSC is such that meeting the goals of the non-financial perspectives acts as a pre-requisite towards attaining the goals of the financial perspective, or in our case, the environmental, financial, and social perspectives. The SBSC, with its triple bottom line focus on the ecology, economy and society, resonates much with the multiple stakeholders that the tourism and travel industry is actively involved with (Kang et al., 2015, Vila et al., 2010).

Structuring the BSC defines the layout and how employee actions contribute to the overall attainment of financial goals (Ahn, 2001). Rather than focusing on mere operational indices, BSC ensures that these indices are reflective of current strategies in place within the organization (Ahn, 2001). Kang et al. (2015) indicate that for an organization to utilize a BSC, they first need to elaborate their visions and goals, followed by analyzing relevant factors required to meet the strategy. BSC, now professed as a strategic management system, has been devised by Kaplan and Norton (2001) to assist in operationalizing, communicating and delivering strategy. Kaplan and Norton (1996a) indicated how organizations need to customize the BSC to meet the needs of its strategy. Additionally, the various dimensions of BSC are interlinked in such a way that there exists causal relationships amongst the various dimensions of BSC (Kang et al., 2015).

Performance measurement systems in travel and tourism industry are primarily driven by budgetary control to build revenues, by customer relationship management to ensure high quality of service, by strategically managing internal business processes, and by collaborations to drive innovation and learning (Phillips and Louvieris, 2005). Further, due to the inter-reliability of employee and customer satisfaction in the travel and tourism industry, employee management is crucial and invested heavily in this industry. These multi-oriented motives of performance assessment where consideration is given to various stakeholders portray the importance of utilizing BSC in the industry. Majority of BSC research in the travel and tourism industry so far, has pertained to the trend of utilizing BSC as a framework, where most of the researchers analyzed the contemporary performance measures in the industry as per the BSC perspectives (Evans, 2005, Phillips and Louvieris, 2005, Ribeiro et al., 2019). However, one research study by Sainaghi et al. (2019) used BSC as a framework to guide their proposition of a scorecard designed specifically for new product development for ski resorts. Another prominent trend in travel and tourism researchers has been using BSC to evaluate sustainability through developing a sustainability BSC (Vila et al., 2010) and testing its impact on organizational vision (Kang et al., 2015). Lastly, given the scarce usage of BSC in the industry, a research study has looked into the third trend of BSC development for the hospitality industry (Elbanna et al., 2015). However, academicians have highlighted lack of BSC application and research in the hospitality industry (Elbanna et al., 2015, Ribeiro et al., 2019, Evans, 2005), as such, thereby, indicating a future research gap. Conspicuously, while most of the research in the hospitality industry studied the similarity of the prevailing performance metrics to that of BSC (Evans, 2005, Phillips and Louvieris, 2005, Ribeiro et al., 2019), a few studies have examined how the hospitality industry has incorporated sustainability in its performance measurement systems through utilizing a sustainability BSC that

assesses social and environmental performance along with economic performance (Kang et al., 2015, Vila et al., 2010). Pertaining to the increased engagement in sustainability by the hospitality industry and minimal usage by the industry of BSC concept towards performance assessment, we respond to call for future research by Fatima and Elbanna (2020) and take forth the concept of SBSC to examine its potential and serve to assist extant research.

Sustainability Balanced Scorecard (SBSC)

Irrespective of the similar theoretical background amongst the two concepts, sustainability and BSC, only one research study by Jamali (2008) stresses on this common ground. Nevertheless, extant research has managed to focus on a diverse set of industries indicating the prominence of BSC for assessing sustainability in the corporate world. The sampled industries, including banking (Bento et al., 2017), pharmaceutical (Hansen et al., 2010), food and clothing (Journeault, 2016), tourism (Vila et al., 2010), and hospitality (Kang et al., 2015) utilized BSC with at least four to six perspectives, where sustainability as an add-on perspective was more predominant in the SBSC design.

One such modified BSC is the sustainability balanced scorecard (SBSC) that aligns with the nature of hospitality industry, specifically its intangible assets, focus on human resources, inconsistency in service provision and type of activities (Ribeiro et al., 2019). Given the nature of the tourism and travel industry, i.e. service industry, employees play a crucial role in delivering value to customers and hence, this industry needs to ensure employees satisfaction and work performance exceeds expectations. Hansen and Schaltegger (2018) indicate that the appropriate SBSC architecture needs to be chosen based on pre-existing sustainability strategy. Accordingly, our research methodology has been split into two studies, where study one constitutes of interviews conducted to grasp a better understanding of how the hospitality industry and organizational

performance scholars assess the proposed SBSC architecture. Study one concluded with understanding what architecture to be used and is followed by study two, where 4-star and 5-star hotels were surveyed to indicate their performance on various indicators reflecting the six perspective of SBSC. The following section discusses the selected SBSC architecture, induced as per the interview findings and the typology of SBSC architectures provided by Hansen and Schaltegger (2016).

Study 1. In the first exploratory stage of interviews, a sample comprising five practitioners was selected using purposive sampling technique. Utilization of this non-probability sampling strategy allowed the researcher to guarantee relevant participants were selected whose consultation guided the research with justified improvements. The practitioners were well-informed of strategic activities, including corporate sustainability, in their hotels. The participants were presented with the scale developed for SBSC that assessed the six perspectives, namely learning and growth, internal business, customer, environmental, financial, and social. The practitioners were requested to fill out the survey and were prompted with further questions pertaining to their hotel's involvement in sustainability activities and the hotel's current strategy relating to sustainability. The interviews lasted for an average of 40 minutes. Table 1 lists the characteristics of the sample studied.

Insert Table 1 about here

The engagement of hotels towards sustainability seemed to be two-fold, where activities relating to preserving both 1) the society and 2) the environment were heavily invested in with time and monetary resources. Informants identified that their hotels engaged in a variety of

sustainability activities such as using eco-friendly amenities (respondent 1), recycling water, soap products and plastic (respondent 2), and donating to non-governmental organizations and charities (respondents 1-5). These sustainability activities related to achieving improvement in sustainability outcomes relating to the traditional BSC perspectives of financial performance, internal business processes, customer, and learning and growth. Moreover, some sustainability activities led to outcomes that were purely environmental or social in nature. These include building compost plants to reduce food wastage, taking preventive and corrective actions to reduce workplace accidents (respondent 1); providing safe transportation to female employees (respondent 2); training staff to elicit a healthy and eco-friendly behavior (respondents 1 and 2); and providing employment opportunities to a diverse local workforce (respondents 1, 2, and 3). In considering the nature of sustainability activities of the sampled organizations, the sustainability indicators are included both, in the traditional BSC perspectives, and as stand-alone sustainability perspectives. Hence, the proposed SBSC scale with six perspectives is in alignment with the nature of orientation of the hospitality industry. This SBSC, thus, adopted the extended layout of sustainability perspectives, such that sustainability indicators are incorporated throughout the traditional perspectives and additional perspectives, namely environmental and social, dedicated to sustainability are also proposed (Hansen and Schaltegger, 2016).

Additionally, the respondents also communicated the proactiveness of their organizations in communicating these sustainability initiatives internally across the organization through the use of intranet platforms and newsletters (respondents 1 – 5). The goals of hospitality industry now entail environment and socio-economic outcomes as well given the new changes in tourism development (Serra-Cantallops et al., 2018). Specific to the Indian context, with the local imposition of mandated corporate sustainability disclosure in India, organizations in India are

required by the government to partake in sustainability activities, form a sustainability committee, and disclose their sustainability expenditures, thereby, requiring them, in short, to be proactively responsible towards sustainability (Dharmapala and Khanna, 2018). Remarkably, hotels in India were not found to relinquish environmental and social objectives as observed from the following extracts:

“Our hotel chain has an established ethics and sustainability charter”

- Respondent 1

“Irrespective of government mandates, our hotel engages in sustainability activities”

- Respondent 2

Hence, the triple bottom line approach is applied to the SBSC architecture, where the stand-alone sustainability perspectives exist on the same hierarchical level as the financial perspective and hence, represent the triple bottom line concept in its truest form through allowing organizations to include environmental and social end goals along with the financial outcomes. Further, respondent 5 indicated that *“hotels are engaging in more pro-environmental behavior [and looking at ways on] how to increase business effectively”*. Accordingly, hotels have turned their attention towards corporate sustainability to enhance their service quality as pointed out by respondent 3:

“Once you convince the guests about your service quality, obviously the guests understand that this is what the hotel gives [in terms of sustainable options], but not the other hotel. This way we are planning to convince our customers.”

Further, given the service nature of the hospitality industry, the emphasis one needs to place on employees who deliver the service is also realized in practice, where practitioners such as respondent 4 asserted that *“employee engagement in sustainability has a spillover effect on*

organizational performance as well". Thus, pertaining to the inter-relations across the various perspectives of the SBSC, we focused on the non-hierarchical structure with the characteristics of a network layout that indicates the presence of interlinkages amongst the various perspectives in the scorecard (Hansen and Schaltegger, 2016, Hansen and Schaltegger, 2018). Additionally, this type of fully integrated and non-hierarchical SBSC has received limited scholarly attention due to the inherent difficulties in making trade-offs and in ensuring it is driven by focus and commitment (Hansen and Schaltegger, 2016). However, as supported by our study one findings, we profess for the existence of a network structure amongst the six perspectives of SBSC. The succeeding section hypothesizes the supposed causal relationships amongst the various perspectives of the SBSC as per the extant literature.

Causal perspectives of BSC

Researchers have focused on the usage of strategy maps along with BSC and its impact on effective performance measurement (Bartlett et al., 2014, Cheng and Humphreys, 2012, Humphreys et al., 2016). Strategy maps enable managers to understand how their organizations function (Neely and Al Najjar, 2006). Bartlett et al. (2014) suggest the use of strategy maps to visually aid in understanding the relationship between the leading non-financial measures and lagged financial performance. In a traditional BSC, the non-financial perspectives are perceived as lead indicators whose effects can then be calculated by evaluating the financial perspective, i.e. a lag indicator (Kang et al., 2015). Additionally, the various dimensions of BSC are interlinked in such a way that there exists causal relationships amongst the various dimensions of BSC (ibid.). Hence, an organization needs to ensure proper management of these various indicators in order to improve its overall performance (Hansen and Schaltegger, 2016). However, there is a need for research to examine the mediating relationships of the BSC perspectives (Kang et al., 2015). While

the scant amount of research that has examined the cause and effect relationships between the BSC perspectives utilized managerial perceptions and judgements to develop strategy maps (Lucianetti et al., 2019), we direct our attention to extant literature that can assist us in justifying the network of relationships existing in the SBSC. We then test the developed research model against survey data collected from hotel managers to test the relevancy and applicability of our proposed model in the hospitality industry (see Figure 1). The below sub-sections now develop the direct relationships that exist amongst the BSC perspectives followed by the mediating relationships.

Learning and growth perspective. The nature of the hospitality and tourism industry places much focus on the service aspect, where employees form the core part of the service provision and hence, this industry needs to ensure that employee satisfaction and work performance exceed expectations (Cvelbar and Dwyer, 2013, Serra-Cantallops et al., 2018). Phillips (2007) asserted the need for hotels to develop employee skills, which can be successfully accomplished through a feedback loop to ascertain employees' current level of skill development, and accordingly plan from thereon. In developing employee capabilities and making them more competent, organizations can ensure more efficiency in their operations (Moraga et al., 2020). Employees, when provided opportunity to grow, through the means of training and development are found to contribute to enhancement of organizational performance (Guest, 2017).

Additionally, organizations can also enhance internal processes by being up to par on technical developments in processes through establishing and maintaining associations with external bodies and stakeholders (Slapničar and Buhovac, 2014). In doing so, organizational growth births innovation which has been identified to hold the strongest interaction power in the network of BSC perspectives (Tsai et al., 2020). Organizations have found to consistently maintain relationships with its stakeholders in an effort to maintain the image of organization's engagement

in sustainability (de Villiers et al., 2016). Furthermore, customers' evaluation of service quality was found to be highly based on hotel employees' eco-friendly behavior (Bastič and Gojčič, 2012). Hence, a learning and growth perspective serves as the foundation of the SBSC, where organizations emphasize building their sustainable capabilities through investing in their employees and the accompanying systems and procedures (Kaplan and Norton, 1996a). Accordingly, we hypothesize:

Hypothesis 1: An increase in the performance of the learning and growth perspective leads to an increase in the performance of the internal business perspective.

Hypothesis 2: An increase in the performance of the learning and growth perspective leads to an increase in the performance of the customer perspective.

Hypothesis 3: An increase in the performance of the learning and growth perspective leads to an increase in the performance of the **a)** environmental, **b)** financial, and **c)** social perspectives.

Internal business perspective. This perspective focuses on primary processes pertaining to the core business that allows service organizations to ensure adherence by front-line employees to a streamlined process for improved productivity levels (Park and Gagnon, 2006). Additionally, tourism research indicates that employees need to be flexible when responding to customer needs (Myung et al., 2005, Aureli and Del Baldo, 2019), and this is further pronounced in the hospitality industry where hotel employees deal directly with customers and need to operate in a flexible environment which allows them to meet customers' changing needs (Nazarian et al., 2017). When organizations engage in better resource usage to reduce environmental impact, they also experience decreased costs that leads to higher financial returns (Price and Sun, 2017). Thus, through developing innovative work processes that are not only efficient in nature, but flexible as well, organizations can improve their profits along with delivering high levels of sustainable

performance as they find ways to work sustainably and ethically (Cho and Lee, 2017, Francoeur et al., 2017).

Hypothesis 4: An increase in the performance of the internal business perspective leads to an increase in the performance of the customer perspective.

Hypothesis 5: An increase in the performance of the internal business perspective leads to an increase in the performance of the **a)** environmental, **b)** financial, and **c)** social perspectives.

Customer perspective. Customers play an inherently crucial role in service organizations where they impact service performance through their direct participation in delivery of service experiences (Jääskeläinen et al., 2014). Thereby, customer performance measures need to go beyond satisfaction (ibid.). In doing so, organizations can assess various indicators from the customer perspective relating to service received and customer relationship, among other factors (Kaplan and Norton, 1996a). Corporate sustainability has gained tremendous popularity amongst the customer base as customers have become concerned about using sustainable products and services (Chernev and Blair, 2015, Cordeiro and Tewari, 2015). In addition to being environmentally-friendly, customer perceptions have also been found to be effected by how ethically oriented the organization is towards society in producing the product or delivering the service (Chernev & Blair, 2015). Thereby, through satisfying customers, organizations are now able to improve their financial performance (Francioli and Cinquini, 2014, Moraga et al., 2020, Bénet et al., 2022) and alongside accomplish the environmental and society-oriented goals.

Hypothesis 6: An increase in the performance of the customer perspective leads to an increase in the performance of the **a)** environmental, **b)** financial, and **c)** social perspectives.

Insert Figure 1 about here

Mediating roles of customer and internal business perspectives

As formulated by Kaplan and Norton (1996), the four perspectives are linked in a hierarchical fashion such that they eventually lead to the fulfillment of the strategic goals of the organization. However, BSC perspectives are not necessarily related in a simple linear fashion, rather elicit a network like relationship, where perspectives placed at a lower hierarchical level can impact all the other perspectives at a level higher than their own, indicating presence of a potential partially mediated model (Bryant et al., 2004). Therefore, based on the above discussion the mediating hypotheses are formulated below.

Internal business perspective. In service industries, this perspective involves processes pertaining to effective and efficient service delivery that can be made possible through innovation (McPhail et al., 2008). Furthermore, development of staff capabilities, in addition to improving the level of service delivery and efficiency, can also provide motivation to employees to exhibit pro-social and environmental behavior that are in alignment with achieving the sustainability goals of organizations (Story and Neves, 2015, Rupp et al., 2013). Further, upon improving work processes, organizations can enhance their productivity levels and reduce production costs which has a cascading effect on market share growth and increases profits (Tsai et al., 2020, Lucianetti et al., 2019). This impact is also observed in organization's environmental performance upon using resource efficient work processes that reduce usage. However, establishment of such processes and infrastructure requires provision of continuous long-term training and development to employees (Tsai et al., 2020, Slapničar and Buhovac, 2014). Accordingly, we hypothesize:

Hypothesis 7: The internal business perspective mediates the relationship between learning and growth and customer perspectives.

Hypothesis 8: The internal business perspective mediates the relationships of learning and growth with **a)** environmental, **b)** financial, and **c)** social perspectives.

Customer perspective. In the context of service industries, customer satisfaction is primarily driven by employee satisfaction as employees are the forefront of service organization when performing service delivery (Slapničar and Buhovac, 2014). In the case of hospitality industry, the need to manage quality of service received by customers is pronounced given their direct interactions with customers (Wu and Lu, 2012). Further, consumers are being socially-aware and are actively evaluating sustainability activities and strategies of organizations when making purchase decisions (Choi, 2017). Thus, when organizations invest in the betterment of employees such as providing them with trainings and incentive plans, they signal themselves as an ethical organization to both employees and customers, where they attract prospective employees and retain current ones (Zerbini, 2017). Further, with a better working environment in place, employees in service industries can provide improved service quality to their customers (Moraga et al., 2020). Customer management can also be improved through developing more efficient operations that unlock the potential for organizations to reach a more diverse base of customers (Moraga et al., 2020). Further, as customers form the crux of service organizations, delivering on customer's expectations and satisfying their service and sustainability needs can lead to increases in organizational performance (Quintana-García et al., 2018, Saeidi et al., 2015).

Hypothesis 9: The customer perspective mediates the relationships of learning and growth with **a)** environmental, **b)** financial, and **c)** social perspectives.

Hypothesis 10: The customer perspective mediates the relationships of internal business with **a)** environmental, **b)** financial, and **c)** social perspectives.

METHODOLOGY

Sample selection

In the second stage of our research methodology, we conducted industry-wide surveys. A purposive sampling approach was utilized to target relevant respondents from the Indian hospitality industry, and in doing so, we added to the extant service literature, where so far, little research has utilized large representative samples in this industry (Serra-Cantallops et al., 2018). We targeted hotels with a rating of 4-star or 5-star who are required to actively engage in sustainability activities as per the star category classification imposed by the Hotel and Restaurant Approval Classification Committee (HRACC) in India (Ministry of Indian Tourism, 2020a). Accordingly, the questionnaire was administered to a sample of hotel employees selected through purposive sampling by imposing the following criteria of: 1) having a managerial position and 2) possessing knowledge of corporate sustainability activities. Further, in surveying managers, a significant research gap is filled, where academicians have stressed the importance of conducting future research with a high focus on internal stakeholders (Story and Neves, 2015), given the difference that exists in the perceptions of internal stakeholders (employees) and external stakeholders (consumers and investors) due to the familiarity the former has with the organization.

Taking into account a realistic response rate, for the second stage of survey research, a total of 256 managers were approached by a professional market research agency based in India. From the targeted 256 managers, we received 200 complete responses (78% response rate). The incomplete responses were removed for two reasons: first, the respondents did not respond to the questionnaire at all, leading to no response, and second, the missing or incomplete data of a

questionnaire response was beyond the acceptable criterion of 15% (Hair et al., 2014b). Thus, the final sample consisted of 200 hotel managers and executives from the qualifying hotels.

Scale selection and validation

The SBSC was theorized to consist of six perspectives, namely learning and growth, internal business, customer, environmental, financial, and social. To date, an established and pre-tested perceptual scale for the SBSC does not exist in the organizational performance literature. However, the extant literature on the balanced scorecard has, to some extent, measured specific perspectives on a stand-alone basis or developed an industry-specific traditional BSC perceptual scale. This literature was then utilized to generate a pool of items by selecting relevant items to constitute an altogether new scale for the SBSC. Hence, in order to effectively measure the SBSC, pre-established measures were extracted from different sources for each of the six perspectives such that, overall 37 items were adapted from extant literature (Chuang and Huang, 2018, Elbanna et al., 2015, Lisi, 2018, Journeault, 2016, van der Woerd and van den Brink, 2004, Dias-Sardinha and Reijnders, 2005). The items used to assess organizational performance in the form of BSC have been listed out in the Appendix.

We included four control variables in our model to account for endogeneity and to ensure our hypothesis are accurately tested. These control variables include hotel size (measured as number of employees), hotel age (date of establishment), hotel's star category (4-star or 5-star), and hotel ownership (private, public or joint). Based on our understanding of literature, these variables were found to have a confounding impact on hotel performance and were accordingly, controlled for.

ANALYSIS & RESULTS

The proposed research model (see Figure 1) is tested using a structural equation modeling (SEM) technique that tests cause-effect relationships for latent variables (Hair et al., 2014b). SEM is preferred given the complex nature of this conceptual model as it enables simultaneous analysis of all the variables, where SEM also accounts for variations observed in the data due to unobserved exogenous variables termed as “errors” which are not included in the model, rather their existence is acknowledged and their relations to the other variables are assessed qualitatively (Pearl, 2009). Additionally, in this research study, partial least square structural equation modeling (PLS-SEM) was utilized given that the study’s aim is to empirically validate the SBSC research model. Thus, given that the research objective pertains to theory development and predicting constructs, PLS-SEM is the preferable choice (Hair et al., 2014a). With respect to path model estimation or analysis, the first step of the PLS-SEM method comprises the measurement model, followed by the second step of estimating the path coefficients in the structural model (Vinzi et al., 2010), and is detailed individually below in each section.

Measurement model

In analyzing the measurement model, the involved constructs need to be tested for their reliability and validity before moving on to the second step of structural model analysis (Hair et al., 2014b). Given that all the latent constructs in this conceptual model are reflective in nature, the evaluation approach to assess reflective measurement models is carried out. Hair et al. (2014a) explain that one needs to assess the internal consistency, convergent and discriminant validity of reflective measurement models through assessing their values of composite reliability, average variance extracted (AVE), and executing the Fornell-Larcker criterion, respectively.

First, the convergent validity of the six perspectives was tested by looking at the outer loadings of each perspective's indicators. We removed indicators with outer loadings lower than 0.4 and indicators with outer loadings between 0.4 and 0.7, if their removal increased the corresponding SBSC perspective's composite reliability or AVE value (Hair et al., 2014a). This resulted in an overall of 16 indicators being removed to improve the AVE values for all the six perspectives of the SBSC. Second, the internal consistency of the perspectives was tested by examining their composite reliability values. Table 2 lists the reliability and validity values of the six perspectives with acceptable values for composite reliability (≥ 0.7) and AVE (≥ 0.5) (Nunnally and Bernstein, 1994, Fornell and Larcker, 1981).

Insert Table 2 about here

Third, the discriminant validity is tested using the Fornell-Larcker criterion which states that the square root of the AVE values (highlighted in bold) for each latent variable should be higher than the correlation with the other latent variables. As depicted in Table 3, the six perspectives exhibit acceptable discriminant validity. As our measurement model was able to meet the various criteria of internal consistency, reliability, and validity, we were able to test our structural model in the next section.

Insert Table 3 about here

Structural model

Robustness tests. Through testing the structural model or inner model, the presence or absence of paths amongst the constructs or variables is accounted for. In other words, the structural models allow for hypotheses testing. Prior to testing the relationships, we first need to carry out a test for collinearity, non-response bias, common method bias, and endogeneity.

First, we tested for multicollinearity by examining the variance inflation factor (VIF) values, where values above 5 showed presence of multicollinearity (Vinzi et al., 2010, Hair et al., 2017). None of the VIF values for any of the six perspective was above 5. Thus, our model did not suffer from multicollinearity. Second, non-response bias was tested by comparing late responses with early responses, where late respondents are expected to be similar to non-respondents, and hence are used as proxies for non-respondents (Armstrong and Overton, 1977, Iacobucci and Churchill, 2010). We used the permutation-based approach and found that the two groups of early and late responses did not have significant differences between them for the relationships between the focal constructs under study, thereby indicating absence of non-response bias (Chin and Dibbern, 2010, Hair et al., 2017). Third, we checked for common method bias through using the unmeasured latent method construct (ULMC) test as per the instructions put forth by Liang et al. (2007) for PLS. Our results indicated that all the loadings on the method construct were insignificant and the average variance of the substantive construct (0.52) was significantly higher than the method construct (0.34), thus, implying absence of common method bias in our model.

Fourth, presence of endogeneity was tested for using the Gaussian Copula method, where individual copulas were developed for every endogenous variable to capture its correlation with the error term (Park and Gupta, 2012). As the three predicting perspectives of learning and growth, internal business, and customer, may be affected by other constructs that have not been controlled

for in our model, such as organizational risk (Erhemjamts et al., 2013), past organizational performance (Soytas et al., 2019), management and organizational culture (Surroca et al., 2010, Garcia-Castro et al., 2010), therefore, we copulate these three perspectives for individual and simultaneous endogeneity, when predicting their impact on the three triple bottom line perspectives of environmental, financial, and social. In doing so, we developed around twenty-four regression models which included individual and multiple copulas. Upon running the Gaussian Copula test, the copulas for all the twenty-four models regressed models depicted p-values above 0.5, illustrating absence of endogeneity in our research model (Hult et al., 2018). As the proposed research model is devoid of issues pertaining collinearity, non-response bias, common method bias, and endogeneity, we now test the hypotheses by assessing their path coefficients in the structural model analysis.

Hypothesis testing. We first begin with testing the hypotheses illustrated in our research model (see Figure 1) that test the direct relationships of the traditional non-financial perspectives, namely learning and growth, internal business, and customer with the triple bottom line. In general, using bootstrapping technique, we found strong support for our proposed model (see Table 4). With respect to the learning and growth perspective, we found significant support in alignment with our first three hypotheses that relayed an increase in the performance of learning and growth perspective would lead to an increase in the performance internal business perspective (H1, $\beta = 0.531$, $p = 0.00$), customer perspective (H2, $\beta = 0.331$, $p = 0.00$), and triple bottom line, depicted by environmental perspective (H3a, $\beta = 0.194$, $p = 0.01$) financial perspective (H3b, $\beta = 0.209$, $p = 0.00$), and social perspective (H3c, $\beta = 0.288$, $p = 0.001$).

Hypotheses 4 ($\beta = 0.361$, $p = 0.00$), 5a ($\beta = 0.316$, $p = 0.00$), 5b ($\beta = 0.216$, $p = 0.001$), and 5c ($\beta = 0.161$, $p = 0.04$) that examine the relationship of internal business perspective with

customer perspective and triple bottom line were also strongly supported. Thus, it was found that in the presence of an increase in the performance of internal business processes, organizations experienced an increase in the performance levels of customer perspective (H4), environmental perspective (H5a), financial perspective (H5b), and social perspective (H5c).

Lastly, the direct impact of customer perspective yielded positive path coefficients of 0.290 on environmental perspective (H6a), 0.416 on financial perspective (H6b), and 0.346 on social perspective (H6c) at p-values of 0.00 each. Therefore, the direct hypothesis which posited that an increase in customer performance leads to an increase in the performance levels of triple bottom line was accepted, thereby indicating an overall support for Hypothesis 6.

Insert Table 4 about here

With respect to the control variables, learning and growth perspective was impacted by all of the controls positively, except for hotel ownership. Internal business perspective was found to be positively affected by star category and customer perspective was impacted by both star category (positively) and hotel size (negatively). Lastly, financial perspective was also found to be negatively affected by hotel size.

We now test the mediating hypotheses, hypothesis 7 to hypothesis 10 using the same bootstrapping approach (see Table 5). However, the three-step mediation analysis posited by Hair et al. (2017) are followed, where 1) the indirect relationship between the independent variable and the dependent variables via the mediator is tested, followed by 2) testing the direct relationship without the mediator, and lastly, 3) inferring the type of mediation, namely, competitive, complementary, or non mediation.

Upon running the bootstrap test, we found presence of complementary partial mediation for both the mediating perspectives, internal business and customer. We first tested for the mediating role of internal business perspective in two relationships 1) learning and growth perspective with customer perspective (H7), and 2) learning and growth with triple bottom line (H8). With respect to hypothesis 7, step 1 was carried out and internal business perspective was found to mediate the relationship between learning and growth and customer perspectives ($p = 0.00$). This was followed by step 2, where learning and growth was found to directly effect customer perspective ($p = 0.00$). As per step 3, the type of mediation was computed by finding the product of the path coefficients of the indirect effect (0.192) and the direct effect (0.331) (Hair et al., 2017). The resulting path coefficient (0.063) retained its original positive sign illustrating a complementary partial mediation by internal business perspective, thereby lending support to hypothesis 7. Similarly, hypothesis 8 was tested using the above method, where the indirect effects of learning and growth with triple bottom line via internal business and direct effects of learning and growth with triple bottom line were found to be significant. The type of mediation was complementary with the following path coefficients (H8a, $\beta = 0.033$; H8b, $\beta = 0.024$; H8c, $\beta = 0.025$). Therefore, hypothesis 8 was supported.

Insert Table 5 about here

Next, we tested for the mediating impact of customer perspective for two relationships: 1) learning and growth and triple bottom line, and 2) internal business perspective and triple bottom line. Hypothesis 9 was tested by assessing the significance values of both the indirect effects and direct effects between learning and growth and the triple bottom line perspectives (environmental,

financial, and social). Both the indirect and direct effects were highly significant at p-values below 0.01. The nature of mediation was complementary partial mediation with path coefficients of 0.012 (H9a), 0.023 (H9b), and 0.033 (H9c). Hypothesis 9 was supported. Lastly, we tested for hypothesis 10, where significant results were found for the indirect relationship between internal business perspective and triple bottom line through customer perspective as well as the direct relationship. The products of their path coefficients illustrated partial and complementary mediation (H10a, $\beta = 0.033$; H10b, $\beta = 0.033$; H10c, $\beta = 0.020$). Therefore, hypothesis 10 was also supported, such that customer perspective partially mediated the relationship between internal business perspective and triple bottom line. Conclusively, the overall research model showed a significant predictability with R^2 values of 0.46, 0.58, and 0.45 for environmental, financial, and social perspectives respectively that comprise the triple bottom line.

DISCUSSION & CONCLUSION

While the need to consider causal linkages amongst the BSC perspectives has been agreed upon normatively by researchers, however, so far extant literature has lacked empirical support of statistical links between the BSC perspectives (Malina et al., 2007, Francioli and Cinquini, 2014). Rather, some studies, through the use of qualitative research methods and secondary data, found that organizations were able to successfully implement scorecards in spite of the organization's failure to assess potential causality amongst the perspectives. In response to the absence of academic and practitioner focus on causality in BSC perspectives, we made use of a subjective SBSC scale designed exclusively for the hospitality industry to better identify the existing relationships between the BSC perspectives. Upon analyzing the SBSC, we found statistical support in alignment with our hypothesized model of partially mediating relationships amongst the SBSC perspectives.

In order to enhance our understanding of how sustainability is incorporated into the organizational strategy, we proposed a SBSC framework that suits the nature of the hospitality industry and their active involvement in sustainability. Through understanding the specific needs of the hospitality industry, we developed an integrated network architectural framework of SBSC that led to the construction of a multi-faceted triple bottom line end-goal and also motivated our hypotheses development of direct and partially mediating relationships between the SBSC perspectives. In subsuming the triple bottom line as the resultant perspective of SBSC, we overcome the sheer focus that has been placed on financial performance that inherently limits organization's performance evaluation (Park and Gagnon, 2006). Moreover, fortifying the organization's social and environmental performance along with its financial performance need not be viewed as being mutually exclusive since business and society are interdependent beings or crucial stakeholders, where actions beneficial for the society may not necessarily hinder the financial sustenance of an organization (Carroll and Shabana, 2010). Studies that have examined causality in BSC perspectives and found statistical significance have mostly looked at linear relationships where improved innovation and employee management (learning and growth) led to higher efficiency in work processes (internal business processes) that had a cascading effect on growth in revenues, utilization of assets, and reduction of costs (financial) through improving customer satisfaction and loyalty and attracting new customers (customer) (Perramon et al., 2016, Francioli and Cinquini, 2014, García-Valderrama et al., 2009, Quezada and López-Ospina, 2014). On the other hand, relatively fewer research studies have tested and found the existence of partially mediated BSC models (Bryant et al., 2004, Chen et al., 2011). Thus, we contribute to the sustainability performance, balanced scorecard, and hospitality literature through the development

of a SBSC scale suited for the hospitality industry and by testing the causality amongst the SBSC perspectives.

While the traditional non-financial perspectives, i.e. learning and growth, internal business, and customer perspectives, were found to have a direct and positive impact on the triple bottom line, however, we also found that the higher-level perspectives partially mediated the lower-level perspectives towards attaining a higher performance for the triple bottom line perspectives (environmental, financial, and social). For instance, while any improvement in the performance of learning and growth perspective was found to replicate in the improvement of triple bottom line perspectives directly, however, this relationship was found to mediate through two other perspectives that are higher in level than learning and growth perspective, namely customer perspective and internal business perspective. Interestingly, this result is in contrast to the findings of Park and Gagnon (2006), where they failed to find an absence of direct relationship for learning and growth with financial perspective and found customer perspective to fully mediate this relationship. This result could be attributed to the inadequate operationalization of learning and growth perspective which was measured with solely two indicators, “Employee training & education” and “Manual equipment utilization”. Moreover, Chen et al. (2011) who operationalized learning and growth perspective from a broader purview found existence of a direct relationship between learning and growth and financial perspective, and Moraga et al. (2020) discovered the mediating aspects of customer perspective and internal business perspective in the relationship between learning and growth and financial perspective, thereby providing support to our findings.

The nature of scorecards that have been investigated for causality by researchers are mostly in harmony with the traditional BSC design proposed by Kaplan and Norton (1996b) comprising four perspectives, however, the research study by Tsai et al. (2020) incorporated the sustainability

phenomenon in their balanced scorecard and in doing so, tested for causality amongst a four-perspectives SBSC comprising learning and growth, sustainable internal processes, stakeholder involvement, and financial inducement, where they found learning and growth perspective to be on the same hierarchical level as stakeholder involvement perspective, where these perspectives then led to the higher level perspectives of financial inducement and sustainable internal processes. While, Tsai et al. (2020) were able to identify sustainable internal process as the final lagging perspective in their SBSC design post data analysis, however, the architecture of SBSC proposed in this study recognized the need to add perspectives dedicated to sustainability and place them at the same hierarchical level as financial perspective, thereby forming the triple bottom line, prior to data analysis. In short, our proposed SBSC makes a theoretical contribution as it adds to the dearth of literature on SBSC and performance measurement literature in the hospitality industry, specifically through testing for the causality amongst its perspectives and by professing the empirical support that indicates presence of a complex partially mediated model. Given that BSC research in the hospitality and tourism industry is still in its early stages, future research can further examine the differential implementation of BSCs in this industry as compared to other service industries.

Limitations and Future Research

We undertook various measures to ensure our study delivers quality results that can be applied to a wider horizon of contexts. With one of the research objectives focused on advancing performance measurement research in the hospitality and tourism industry, the findings of this study are quite limited to this particular industry. Further, with the study's restrictive focus on hotels in India, the results may have limited generalizability, where the study results can be applied to hospitality industries in similar contexts such as Sri Lanka, Nepal, and Pakistan. Accordingly,

in this study, the focus was on ascertaining internal validity prior to external validity as the research focus was to test causality based on theory (Taylor and Asmundson, 2007). The external validity can be extended in future research through testing the developed scale and conceptual model in other geographical and industry settings.

Due to the inherent limitations imposed with any study that utilizes cross-sectional data, the non-experimental descriptive method utilized in conducting this study limits the causal inferences one can make of the study findings. While, we controlled for endogeneity and found our model was unaffected by it, however, future research needs to tentatively ascertain the applicability of the causal nature of the study's findings in other research settings. Incisively, future research can look into the prospect of collecting longitudinal to and validate the research model developed in this study and further advance research on BSC causality (Podsakoff et al., 2000).

Practical implications

From a practical point of view, understanding causal linkages in a performance measurement model can allow organizations to transparently view the impact of every constituent (individuals, processes, or systems) on the resulting performance (environmental, financial, and social), easily communicate this knowledge throughout the organization, learn to explore other ways to improve performance, and make appropriate strategic decisions (Malina et al., 2007). Therefore, relating the causal links between the SBSC perspectives will aid the organizational members in understanding how their performance towards managing customers, employees, and, processes has an effect on the organization's triple bottom line. Given the nascent nature of the SBSC in the hospitality industry, hotels can actively collaborate with researchers to test and further enhance this scale through field studies. To expand on this line of thought, the different sectors in the hospitality and tourism industry can collaborate with scholars to understand how the BSC can

be adopted in their organizations, given its high relevance as a performance metric to the service nature of their industry. This would create a learning and growth experience for both academicians and practitioners.

Through the means of this study, we intended to add to the extant sustainability and hospitality literature by focusing on the hospitality industry where sustainability literature concentrating on the hospitality industry has not been as prevalent (Serra-Cantalops et al., 2018, Fatima and Elbanna, 2020). While this study proposed several implications for organizations and scholars, the study's results are anticipated to assist hotels and related organizations within the hospitality and tourism industry to improve their sustainability engagement, which has far-reaching consequences towards the development of the country's socio-economic and environmental performance, thereby, enabling India to meet its sustainable development goals. In proposing a scale for the SBSC to measure organizational performance for hotels this study embarked upon a journey of promoting a sustainable culture for organizations, in the hope that both managers and scholars will use it as a stepping stone towards the organizations' evolution into an outlook for a sustainable future, given that sustainability is here to stay.

Table 1: Study 1 practitioner sample characteristics

Identifier	Designation	Department	Hotel rating
Respondent 1	Associate Director	Learning and Development	5-star
Respondent 2	Director	Sales and Marketing	4-star
Respondent 3	Manager	Human Resources	4-star
Respondent 4	Manager	Human Resources	5-star
Respondent 5	Director	Human Resources	5-star

Table 2: Construct reliability and validity

Coding	Construct	Composite Reliability	AVE
ENV	Environmental perspective	0.836	0.506
FIN	Financial perspective	0.807	0.512
SOC	Social perspective	0.771	0.531
CUS	Customer perspective	0.772	0.533
IB	Internal business perspective	0.776	0.536
G	Learning and growth perspective	0.781	0.543

Table 3. Discriminant validity

SBSC perspectives	ENV	FIN	SOC	CUS	IB	LG
ENV	0.711					
FIN	0.580	0.715				
SOC	0.609	0.580	0.729			
CUS	0.579	0.691	0.603	0.730		
IB	0.590	0.600	0.525	0.600	0.732	
LG	0.541	0.590	0.569	0.583	0.571	0.737

Table 4: Bootstrapping results: Direct relationships

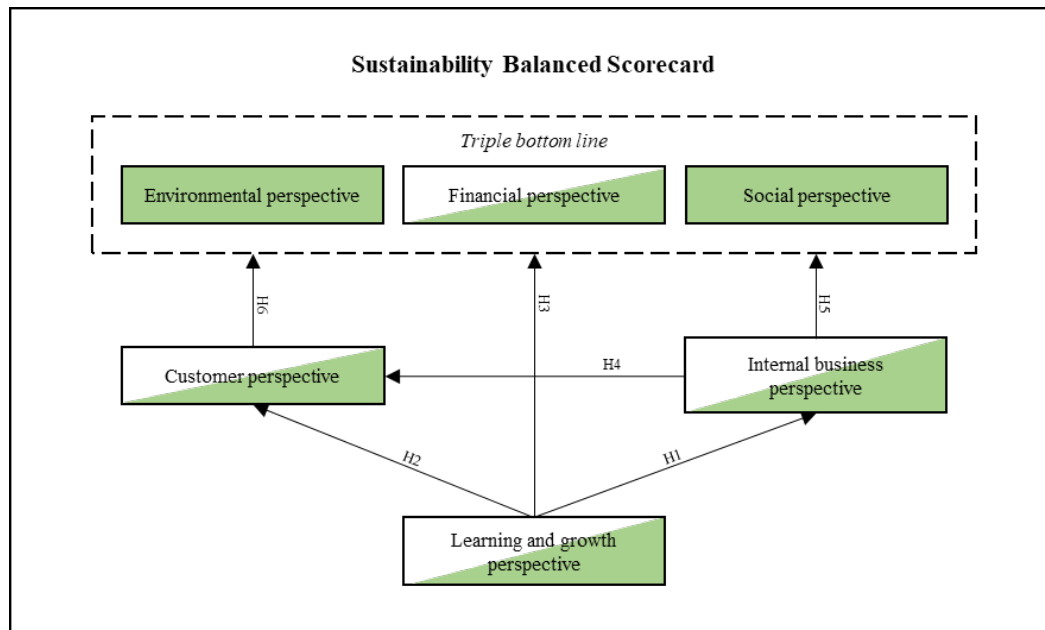
Hypothesized relations	Coefficient value (β)	t-statistic
H1: Learning & Growth $\rightarrow$ Internal Business	0.531***	9.91
H2: Learning & Growth $\rightarrow$ Customer	0.331***	4.65
H3a: Learning & Growth $\rightarrow$ Environmental	0.194**	2.65
H3b: Learning & Growth $\rightarrow$ Financial	0.209***	3.70
H3c: Learning & Growth $\rightarrow$ Social	0.288***	3.47
H4: Internal Business $\rightarrow$ Customer	0.361***	5.67
H5a: Internal Business $\rightarrow$ Environmental	0.316***	3.84
H5b: Internal Business $\rightarrow$ Financial	0.216***	3.29
H5c: Internal Business $\rightarrow$ Social	0.161*	2.06
H6a: Customer $\rightarrow$ Environmental	0.290***	3.91
H6a: Customer $\rightarrow$ Financial	0.416***	6.32
H6a: Customer $\rightarrow$ Social	0.346***	4.59

* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$

Table 5: Bootstrapping results: Indirect relationships

Hypothesized relations	Coefficient value (β)	t-statistic
<i>Step 1: Indirect effects</i>		
Learning & Growth $\rightarrow$ Internal Business $\rightarrow$ Customer	0.192***	4.72
Learning & Growth $\rightarrow$ Internal Business $\rightarrow$ Environmental	0.169***	3.24
Learning & Growth $\rightarrow$ Internal Business $\rightarrow$ Financial	0.115**	2.94
Learning & Growth $\rightarrow$ Internal Business $\rightarrow$ Social	0.086*	1.97
Learning & Growth $\rightarrow$ Customer $\rightarrow$ Environmental	0.096**	2.88
Learning & Growth $\rightarrow$ Customer $\rightarrow$ Financial	0.138***	3.75
Learning & Growth $\rightarrow$ Customer $\rightarrow$ Social	0.115**	3.02
Internal Business $\rightarrow$ Customer $\rightarrow$ Environmental	0.105**	3.17
Internal Business $\rightarrow$ Customer $\rightarrow$ Financial	0.151***	4.06
Internal Business $\rightarrow$ Customer $\rightarrow$ Social	0.125***	3.55
<i>Step 2: Direct effects</i>		
Learning & Growth $\rightarrow$ Customer	0.331***	4.65
Learning & Growth $\rightarrow$ Environmental	0.194**	2.65
Learning & Growth $\rightarrow$ Financial	0.209***	3.70
Learning & Growth $\rightarrow$ Social	0.288***	3.47
Internal Business $\rightarrow$ Environmental	0.316***	3.84
Internal Business $\rightarrow$ Financial	0.216***	3.29
Internal Business $\rightarrow$ Social	0.161*	2.06

* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$



Legend:

-  *Sustainability related perspective*
-  *Integration of sustainability-oriented indicators into traditional BSC perspective*

Figure 1: Research model

APPENDIX

Measurement item	Reference
<i>Financial perspective</i>	
Gross operating profit	Elbanna et al. (2015)
Return on sale	
Revenue per available room	
Liquidity ratio	
Environmental, health and safety spending	Dias-Sardinha and Reijnders (2005)
Donations to local society	Journeault (2016)
<i>Social perspective</i>	
Complying with social regulations	Lisi (2018)
Limiting negative social impact beyond compliance	
Preventing and mitigating social crises (i.e., work-related fatal injuries, incidents of discrimination, incidents of human rights violations across the supply chain)	
Educating employees and the public about social issues (i.e., health and safety, human rights, preservation and promotion of local cultural identity)	
Creation of new job opportunities	Journeault (2016)
<i>Environmental perspective</i>	
Reduced pollution and service costs	Chuang and Huang (2018)
Reduced environmental fines	
Increased image in environmental protection	
Increases in products with environmentally friendly design	
Strengthened internal environmental management and communication	
Awareness and understanding of current trends in environmental regulations	
<i>Customer perspective</i>	
Verbal/anecdotal customer feedback via staff	Elbanna et al. (2015)
Average spend of customer	van der Woerd and van den Brink (2004)
Market share	
Market share growth	
Market share of green services (i.e., provision of eco-friendly amenities, reduce, reuse and recycle options for hotel amenities etc.)	
Customer satisfaction	

Measurement item	Reference
<i>Internal business perspective</i>	
Productivity levels, e.g., labor productivity	Elbanna et al. (2015)
Efficiency of operations, e.g., booking, room service	
Proper completion of planned projects/initiatives	
Serving customers on time	Chuang and Huang (2018) Dias-Sardinha and Reijnders (2005)
Reduction in workplace accidents	
Programmes to monitor and reduce use of resources and prevent pollution	
<i>Learning and growth perspective</i>	
Number of new ‘green’ services (i.e., provision of eco-friendly amenities, reduce, reuse and recycle options for hotel amenities, energy saving initiatives etc.)	Elbanna et al. (2015)
Process improvement initiatives	
Building network of relationships with stakeholders	
Membership of trade/professional bodies	
Staff capabilities	
Staff satisfaction	
Staff development	
Staff retention rate	

REFERENCES

- AHN, H. 2001. Applying the Balanced Scorecard Concept: An Experience Report. *Long Range Planning*, 34, 441-461.
- ARMSTRONG, J. & OVERTON, T. 1977. Estimating Non Response Bias Mail Surveys. *Journal of Marketing Research*, 14, 396-402.
- AURELI, S. & DEL BALDO, M. 2019. Performance measurement in the networked context of convention and visitors bureaus (CVBs). *Annals of Tourism Research*, 75, 92-105.
- BARTLETT, G., JOHNSON, E. & RECKERS, P. 2014. Accountability and Role Effects in Balanced Scorecard Performance Evaluations When Strategy Timeline Is Specified. *European Accounting Review*, 23, 143-165.
- BASTIČ, M. & GOJČIČ, S. 2012. Measurement scale for eco-component of hotel service quality. *International Journal of Hospitality Management*, 31, 1012-1020.
- BÉNET, N., DEVILLE, A., RAÏES, K. & VALETTE-FLORENCE, P. 2022. Turning non-financial performance measurements into financial performance: The usefulness of front-office staff incentive systems in hotels. *Journal of Business Research*, 142, 317-327.
- BENTO, R., MERTINS, L. & WHITE, L. 2017. Ideology and the Balanced Scorecard: An Empirical Exploration of the Tension Between Shareholder Value Maximization and Corporate Social Responsibility. *Journal of Business Ethics*, 142, 769-789.
- BRYANT, L., JONES, D. A. & WIDENER, S. K. 2004. Managing Value Creation within the Firm: An Examination of Multiple Performance Measures. *Journal of Management Accounting Research*, 16, 107-131.
- CARROLL, A. B. & SHABANA, K. M. 2010. The Business Case for Corporate Social Responsibility: A Review of Concepts, Research and Practice. *International Journal of Management Reviews*, 12, 85-105.
- CHEN, F.-H., HSU, T.-S. & TZENG, G.-H. 2011. A balanced scorecard approach to establish a performance evaluation and relationship model for hot spring hotels based on a hybrid MCDM model combining DEMATEL and ANP. *International Journal of Hospitality Management*, 30, 908-932.
- CHENG, M. M. & HUMPHREYS, K. A. 2012. The Differential Improvement Effects of the Strategy Map and Scorecard Perspectives on Managers' Strategic Judgments. *Accounting Review*, 87, 899-924.
- CHERNEV, A. & BLAIR, S. 2015. Doing Well by Doing Good: The Benevolent Halo of Corporate Social Responsibility. *Journal of Consumer Research*, 41, 1412-1425.
- CHIN, W. W. & DIBBERN, J. 2010. An Introduction to a Permutation Based Procedure for Multi-Group PLS Analysis: Results of Tests of Differences on Simulated Data and a Cross Cultural Analysis of the Sourcing of Information System Services Between Germany and the USA. In: VINZI, V. E., CHIN, W. W., HENSELER, J. & WANG, H. (eds.) *Handbook of Partial Least Squares: Concepts, Methods and Applications*. Springer Publishing Company, Incorporated.
- CHO, S. Y. & LEE, C. 2017. Managerial Efficiency, Corporate Social Performance, and Corporate Financial Performance. *Journal of Business Ethics*, 1-20.
- CHOI, J. 2017. The effectiveness of nutritional information on foodservice companies' corporate social responsibility. *Asia Pacific Business Review*, 23, 44-62.
- CHUANG, S.-P. & HUANG, S.-J. 2018. The Effect of Environmental Corporate Social Responsibility on Environmental Performance and Business Competitiveness: The Mediation of Green Information Technology Capital. *Journal of Business Ethics*, 150, 991-1009.
- CORDEIRO, J. J. & TEWARI, M. 2015. Firm Characteristics, Industry Context, and Investor Reactions to Environmental CSR: A Stakeholder Theory Approach. *Journal of Business Ethics*, 130, 833-849.
- CVELBAR, L. K. & DWYER, L. 2013. An importance–performance analysis of sustainability factors for long-term strategy planning in Slovenian hotels. *Journal of Sustainable Tourism*, 21, 487-504.

- DE CARLO, M., CUGINI, A. & ZERBINI, F. 2008. Assessment of destination performance: a strategy map approach. *Tourism Review of AIEST - International Association of Scientific Experts in Tourism*, 63, 25-37.
- DE GROSOIS, D. 2012. Corporate social responsibility reporting by the global hotel industry: Commitment, initiatives and performance. *International Journal of Hospitality Management*, 31, 896-905.
- DE VILLIERS, C., ROUSE, P. & KERR, J. 2016. A new conceptual model of influences driving sustainability based on case evidence of the integration of corporate sustainability management control and reporting. *Journal of Cleaner Production*, 136, 78-85.
- DHARMAPALA, D. & KHANNA, V. 2018. The impact of mandated corporate social responsibility: Evidence from India's Companies Act of 2013. *International Review of Law and Economics*, 56, 92-104.
- DIAS-SARDINHA, I. & REIJNDERS, L. 2005. Evaluating environmental and social performance of large Portuguese companies: a balanced scorecard approach. *Business Strategy & the Environment*, 14, 73-91.
- ELBANNA, S., EID, R. & KAMEL, H. 2015. Measuring hotel performance using the balanced scorecard: A theoretical construct development and its empirical validation. *International Journal of Hospitality Management*, 51, 105-114.
- ERHEMAMTS, O., LI, Q. & VENKATESWARAN, A. 2013. Corporate Social Responsibility and Its Impact on Firms' Investment Policy, Organizational Structure, and Performance. *Journal of Business Ethics*, 118, 395-412.
- EVANS, N. 2005. Assessing the balanced scorecard as a management tool for hotels. *International Journal of Contemporary Hospitality Management*, 17, 376-390.
- FARRELL, B. & TWINING-WARD, L. 2005. Seven Steps Towards Sustainability: Tourism in the Context of New Knowledge. *Journal of Sustainable Tourism*, 13, 109-122.
- FATIMA, T. & ELBANNA, S. 2020. Balanced scorecard in the hospitality and tourism industry: Past, present and future. *International Journal of Hospitality Management*, 91, 102656.
- FENG, R., MORRISON, A. M. & ISMAIL, J. A. 2003. East versus West: A comparison of online destination marketing in China and the USA. *Journal of Vacation Marketing*, 10, 43-56.
- FIGGE, F., HAHN, T., SCHALTEGGER, S. & WAGNER, M. 2002. The Sustainability Balanced Scorecard – linking sustainability management to business strategy. *Business Strategy & the Environment*, 11, 269-284.
- FORNELL, C. & LARCKER, D. F. 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18, 39-50.
- FRANCIOLI, F. & CINQUINI, L. 2014. Exploring the blurred nature of strategic linkages across the BSC: The relevance of “loose” causal relationships. *Journal of Accounting and Organizational Change*, 10, 486-515.
- FRANCOEUR, C., MELIS, A., GAIA, S. & ARESU, S. 2017. Green or Greed? An Alternative Look at CEO Compensation and Corporate Environmental Commitment. *Journal of Business Ethics*, 140, 439-453.
- GARCIA-CASTRO, R., ARIÑO, M. A. & CANELA, M. A. 2010. Does Social Performance Really Lead to Financial Performance? Accounting for Endogeneity. *Journal of Business Ethics*, 92, 107-126.
- GARCÍA-VALDERRAMA, T., MULERO-MENDIGORRI, E. & REVUELTA-BORDOY, D. 2009. Relating the perspectives of the balanced scorecard for R&D by means of DEA. *European Journal of Operational Research*, 196, 1177-1189.
- GUEST, D. E. 2017. Human resource management and employee well-being: towards a new analytic framework. *Human Resource Management Journal*, 27, 22-38.
- HAIR, J. F., HULT, G. T. M., RINGLE, C. & SARSTEDT, M. 2017. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (2 ed.)*, Sage.

- HAIR, J. F., HULT, G. T. M., RINGLE, C. M. & SARSTEDT, M. 2014a. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Thousand Oaks, CA, Sage.
- HAIR, J. F., SARSTEDT, M., HOPKINS, L. & VOLKER, G. K. 2014b. Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26, 106-121.
- HANSEN, E. G. & SCHALTEGGER, S. 2016. The Sustainability Balanced Scorecard: A Systematic Review of Architectures. *Journal of Business Ethics*, 133, 193-221.
- HANSEN, E. G. & SCHALTEGGER, S. 2018. Sustainability Balanced Scorecards and their Architectures: Irrelevant or Misunderstood? *Journal of Business Ethics*, 150, 937-952.
- HANSEN, E. G., SEXTL, M. & REICHWALD, R. 2010. Managing strategic alliances through a community-enabled balanced scorecard: The case of Merck Ltd, Thailand. *Business Strategy and the Environment*, 19, 387-n/a.
- HOJNIK, J., BILOSLAVO, R., CICERO, L. & CAGNINA, M. R. 2020. Sustainability indicators for the yachting industry: Empirical conceptualization. *Journal of Cleaner Production*, 249, N.PAG-N.PAG.
- HULT, G. T. M., HAIR, F., PROKSCH, D., SARSTEDT, M., PINKWART, A. & RINGLE, C. 2018. Addressing Endogeneity in International Marketing Applications of Partial Least Squares Structural Equation Modeling. *Journal of International Marketing*, 26.
- HUMPHREYS, K. A., GARY, M. S. & TROTMAN, K. T. 2016. Dynamic Decision Making Using the Balanced Scorecard Framework. *Accounting Review*, 91, 1441-1465.
- IACOBUCCI, D. & CHURCHILL, G. A. 2010. *Marketing Research: Methodological Foundations*, Mason, South-Western Cengage Learning.
- JÄÄSKELÄINEN, A., LAIHONEN, H. & LÖNNQVIST, A. 2014. Distinctive features of service performance measurement. *International Journal of Operations & Production Management*, 34, 1466-1486.
- JAMALI, D. 2008. A Stakeholder Approach to Corporate Social Responsibility: A Fresh Perspective into Theory and Practice. *Journal of Business Ethics*, 82, 213-231.
- JENKINS, H. & YAKOVLEVA, N. 2006. Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, 14, 271-284.
- JOURNEAULT, M. 2016. The Integrated Scorecard in support of corporate sustainability strategies. *Journal of environmental management*, 182, 214-229.
- KANG, J.-S., CHIANG, C.-F., HUANGTHANAPAN, K. & DOWNING, S. 2015. Corporate social responsibility and sustainability balanced scorecard: The case study of family-owned hotels. *International Journal of Hospitality Management*, 48, 124-134.
- KAPLAN, R. S. & NORTON, D. P. 1992. The balanced scorecard-measures that drive performance. *Harvard Business Review*, 70, 71-79.
- KAPLAN, R. S. & NORTON, D. P. 1996a. Linking the balanced scorecard to strategy. *California Management Review*, 39, 53-79.
- KAPLAN, R. S. & NORTON, D. P. 1996b. Using the Balanced Scorecard as a Strategic Management System. *Harvard Business Review*, 74, 75-85.
- KAPLAN, R. S. & NORTON, D. P. 2001. Transforming the Balanced Scorecard From Performance Measurement to Strategic Management: Part II. *Accounting Horizons*, 15, 147-160.
- KHATTER, A., MCGRATH, M., PYKE, J., WHITE, L. & LOCKSTONE-BINNEY, L. 2019. Analysis of hotels' environmentally sustainable policies and practices: Sustainability and corporate social responsibility in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 31, 2394-2410.
- LIANG, H., SARAF, N., HU, Q. & XUE, Y. 2007. Assimilation of Enterprise Systems: The Effect of Institutional Pressures and the Mediating Role of Top Management. *MIS Quarterly*, 31, 59-87.
- LISI, I. E. 2018. Determinants and Performance Effects of Social Performance Measurement Systems. *Journal of Business Ethics*, 152, 225-251.

- LUCIANETTI, L., BATTISTA, V. & KOUFTEROS, X. 2019. Comprehensive performance measurement systems design and organizational effectiveness. *International Journal of Operations & Production Management*, 39, 326-356.
- MALINA, M. A., NØRREKLIT, H. S. O. & SELTO, F. H. 2007. Relations among Measures, Climate of Control, and Performance Measurement Models. *Contemporary Accounting Research*, 24, 935-982.
- MALTZ, A. C., SHENHAR, A. J. & REILLY, R. R. 2003. Beyond the balanced scorecard: Refining the search for organizational success measures. *Long Range Planning*, 36, 187-204.
- MCPHAIL, R., HERINGTON, C. & GUILDING, C. 2008. Human resource managers' perceptions of the applications and merit of the balanced scorecard in hotels. *International Journal of Hospitality Management*, 27, 623-631.
- MINISTRY OF INDIAN TOURISM, G. O. I. 2020a. Annual Report 2019-20. In: TOURISM, M. O. (ed.). Government of India.
- MINISTRY OF INDIAN TOURISM, G. O. I. 2020b. Sustainable Tourism for India. Government of India.
- MORAGA, J. A., QUEZADA, L. E., PALOMINOS, P. I., ODDERSHEDE, A. M. & SILVA, H. A. 2020. A quantitative methodology to enhance a strategy map. *International Journal of Production Economics*, 219, 43-53.
- MYUNG, S., MORRISON, A. M. & TAYLOR, J. S. 2005. The Effectiveness of Convention and Exhibition Websites A Transatlantic Comparison and Future Scenario. *Tourism Recreation Research*, 30, 49-59.
- NAZARIAN, A., ATKINSON, P. & FOROUDI, P. 2017. Influence of national culture and balanced organizational culture on the hotel industry's performance. *International Journal of Hospitality Management*, 63, 22-32.
- NEELY, A. & AL NAJJAR, M. 2006. Management Learning Not Management Control: The True Role of Performance Measurement? *California Management Review*, 48, 101-114.
- NUNNALLY, J. & BERNSTEIN, I. H. 1994. *Psychometric Theory*, New York, McGraw-Hill.
- PARK, J. A. & GAGNON, G. B. 2006. A Causal Relationship Between the Balanced Scorecard Perspectives. *Journal of Human Resources in Hospitality & Tourism*, 5, 91-116.
- PARK, S. & GUPTA, S. 2012. Handling Endogenous Regressors by Joint Estimation Using Copulas. *Marketing Science*, 31, 567-586.
- PEARL, J. 2009. Causal inference in statistics: An overview. *Statist. Surv.*, 3, 96-146.
- PÉREZ, A. & RODRÍGUEZ DEL BOSQUE, I. 2015. An Integrative Framework to Understand How CSR Affects Customer Loyalty through Identification, Emotions and Satisfaction. *Journal of Business Ethics*, 129, 571-584.
- PERRAMON, J., ROCAFORT, A., BAGUR-FEMENIAS, L. & LLACH, J. 2016. Learning to create value through the 'balanced scorecard' model: an empirical study. *Total Quality Management & Business Excellence*, 27, 1121-1139.
- PHILLIPS, P. & LOUVIERIS, P. 2005. Performance Measurement Systems in Tourism, Hospitality, and Leisure Small Medium-Sized Enterprises: A Balanced Scorecard Perspective. *Journal of Travel Research*, 44, 201-211.
- PHILLIPS, P. A. 2007. The Balanced Scorecard and Strategic Control: A Hotel Case Study Analysis. *The Service Industries Journal*, 27, 731-746.
- PODSAKOFF, P. M., MACKENZIE, S. B., PAINE, J. B. & BACHRACH, D. G. 2000. Organizational citizenship behaviors: a critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26, 513-563.
- PRICE, J. M. & SUN, W. 2017. Doing good and doing bad: The impact of corporate social responsibility and irresponsibility on firm performance. *Journal of Business Research*, 80, 82-97.
- QUEZADA, L. E. & LÓPEZ-OSPINA, H. A. 2014. A method for designing a strategy map using AHP and linear programming. *International Journal of Production Economics*, 158, 244-255.

- QUINTANA-GARCÍA, C., MARCHANTE-LARA, M. & BENAVIDES-CHICÓN, C. G. 2018. Social responsibility and total quality in the hospitality industry: does gender matter? *Journal of Sustainable Tourism*, 26, 722-739.
- RIBEIRO, M. L., VASCONCELOS, M. L. & ROCHA, F. 2019. Monitoring performance indicators in the Portuguese hospitality sector. *International Journal of Contemporary Hospitality Management*, 31, 790-811.
- RODRÍGUEZ, F. J. G. & CRUZ, Y. D. M. A. 2007. Relation between social-environmental responsibility and performance in hotel firms. *International Journal of Hospitality Management*, 26, 824-839.
- RUPP, D. E., SHAO, R., THORNTON, M. A. & SKARLICKI, D. P. 2013. Applicants' and Employees' Reactions to Corporate Social Responsibility: The Moderating Effects of First-Party Justice Perceptions and Moral Identity. *Personnel Psychology*, 66, 895-933.
- SAEIDI, S. P., SOFIAN, S., SAEIDI, P., SAEIDI, S. P. & SAAEIDI, S. A. 2015. How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68, 341-350.
- SAINAGHI, R. 2010. Hotel performance: state of the art. *International Journal of Contemporary Hospitality Management*, 22, 920-952.
- SAINAGHI, R., PHILLIPS, P. & D'ANGELLA, F. 2019. The balanced scorecard of a new destination product: Implications for lodging and skiing firms. *International Journal of Hospitality Management*, 76, 216-230.
- SERRA-CANTALLOPS, A., PEÑA-MIRANDA, D. D., RAMÓN-CARDONA, J. & MARTORELL-CUNILL, O. 2018. Progress in Research on CSR and the Hotel Industry (2006-2015). *Cornell Hospitality Quarterly*, 59, 15-38.
- SLAPNIČAR, S. & BUHOVAC, A. R. 2014. Identifying temporal relationships within multidimensional performance measurement. *Journal of Business Economics & Management*, 15, 978-993.
- SOYTAS, M., DENIZEL, M. & UŞAR, D. 2019. Addressing endogeneity in the causal relationship between sustainability and financial performance. *International Journal of Production Economics*, 210, 56-71.
- STORY, J. & NEVES, P. 2015. When corporate social responsibility (CSR) increases performance: exploring the role of intrinsic and extrinsic CSR attribution. *Business Ethics: A European Review*, 24, 111-124.
- SURROCA, J., TRIBÓ, J. A. & WADDOCK, S. 2010. Corporate responsibility and financial performance: the role of intangible resources. *Strategic Management Journal*, 31, 463-490.
- TAYLOR, S. & ASMUNDSON, G. 2007. Internal and external validity in clinical research. In: MCKAY, D. (ed.) *Handbook of research methods in abnormal and clinical psychology*. Los Angeles: Sage Publications.
- TSAI, F. M., BUI, T.-D., TSENG, M.-L., WU, K.-J. & CHIU, A. S. F. 2020. A performance assessment approach for integrated solid waste management using a sustainable balanced scorecard approach. *Journal of Cleaner Production*, 251, 119740.
- VAN DER WOERD, F. & VAN DEN BRINK, T. 2004. Feasibility of a Responsive Business Scorecard--a pilot study. *Journal of Business Ethics*, 55, 173-186.
- VILA, M., COSTA, G. & ROVIRA, X. 2010. The creation and use of scorecards in tourism planning: A Spanish example. *Tourism Management*, 31, 232-239.
- VINZI, V. E., CHIN, W. W., HENSELER, J. & WANG, H. 2010. *Handbook of Partial Least Squares: Concepts, Methods and Applications*, Springer Publishing Company, Incorporated.
- WORLD TRAVEL & TOURISM COUNCIL 2020. Travel and Tourism: Economic Impact.
- WU, S.-I. & LU, C.-L. 2012. The relationship between CRM, RM, and business performance: A study of the hotel industry in Taiwan. *International Journal of Hospitality Management*, 31, 276-285.

ZERBINI, F. 2017. CSR Initiatives as Market Signals: A Review and Research Agenda. *Journal of Business Ethics*, 146, 1-23.