Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

Growing the pie: an examination of coopetition benefits in the US lodging industry

Timothy Webb, Srikanth Beldona and Zvi Schwartz
Department of Hospitality and Sport Business Management,
University of Delaware, Newark, Delaware, USA, and

Simone Bianco
Department of Hospitality and Tourism Management, Virginia Tech,
Blacksburg, Virginia, USA

Abstract

Purpose – Coopetition is the simultaneous cooperation and competition among firms operating in a specific market. It is particularly relevant in tourism where many competing suppliers (hotels in this case) contribute to the facilitation and delivery of the tourism product, i.e. the destination. By engaging in cooperative arrangements, firms can increase the attractiveness and competitiveness of the tourism product and subsequently demand for individual firms. This study aims to explore the three types of benefits derived from cooperative relationships in the context of the hotel industry, as well as the link between coopetition and market performance.

Design/methodology/approach – This study adopts several scales from prior research to survey 475 hotels in the USA. Specifically, respondents were asked to evaluate their performance with regard to the three benefits of coopetition. The responses were used to model the benefits of coopetition as a higher-order construct in a two-stage partial least squares model. In the second stage, the higher-order construct was linked to perceived hotel performance and the respondents' RevPAR index.

Findings – The results show that perceived benefits from coopetition are positively associated with hotel performance. Specifically, the model depicts positive links between the coopetition construct and the hotels' perceived performance, as well as their RevPAR index. Interestingly, the results were not as strong for index performance and may be due to the relative nature of the measure.

Research limitations/implications – This study supports the notion that coopetition alliances between hotels provide a viable avenue for performance growth. Specifically, managers should consider working together to allocate resources strategically to grow the pie. It is important that managers measure the benefits of cooperative relationships outside of competitive index scores as these metrics may be relative to the cooperative arrangement.

Originality/value – The study is the first to investigate the three benefits of coopetition in the context of the hotel industry. Specifically, it is the first to establish a positive link between firm coopetition and perceived performance in the hotel industry at the firm level.

Keywords - Hotels, Strategy, Coopetition, Market performance

Introduction

The strategic management concepts of competition and alliances have been extensively investigated (Chen, 1996; Das and Teng, 2000; Okumus *et al.*, 2019). Competition often dictates the structure of the industry wherein firms operate by offering similar products targeted at similar customers (Chen, 1996, p. 104). Correspondingly, strategic alliances focus on relationships that allow for advantageous cooperation between competitors that can be

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

used in competition (Bengtosson and Kock, 2000). Historically, the two concepts were studied separately, as the competition was thought to lower prices and create innovation, while cooperation mitigated this process and suggested collusion (Walley, 2007). However, Nalebluff and Brandenburger (1996) demonstrated that relationships between firms can exhibit both cooperation and competition, leading to the term coopetition. Research has suggested that these relationships are quite prevalent and continue to be a major component in the growth of the global economy (Gynawali and Park, 2011; Köseoğlu *et al.*, 2019; Luo, 2007).

The application of coopetition in hospitality and tourism has received increased attention in recent years (Czernek and Czakon, 2016; Dambiski Gomes de Carvalho *et al.*, 2020; Della Corte and Aria, 2016; Fong *et al.*, 2018; Köseoglu *et al.*, 2021; Rusko, 2018; Wang and Karkcover, 2008; Webb and Schwartz, 2017). By definition, coopetition involves a joint effort toward the mutual gain of all stakeholders, while also increasing value for the customer. The success of a destination is considered crucial to the viability of firms in the hospitality sector. For these reasons, coopetition may occur naturally as the tourism product is spread across a variety of firms and industry segments. While many of these firms operate under direct competition, cooperative alliances can enhance the tourism product, supporting each firm's success collaboratively.

Hospitality research on coopetition has focused predominantly on factors that are conducive to collaborative arrangements (Czernek and Czakon, 2016; Della Corte and Aria, 2016; Fong *et al.*, 2018). These investigations provide the necessary building blocks for coopetition to prevail, with the broader agreement that benefits serve both the mutual cause (destination) and participating entities, i.e. hotels. Put differently, the benefits from coopetition can be partitioned into three categories, namely, combined benefits for all stakeholders, as well as private benefits (PB) from cooperation and PB from the competition (Khanna *et al.*, 1998; Rai, 2016). The PB from cooperation is derived from developing new ideas, acquiring knowledge of processes and improving organizational efficiency from the alliance. Similarly, PB from the competition includes higher levels of profitability, greater brand equity and improved differentiation of offerings.

This study explores a key gap in the literature by examining coopetition benefits in the hotel industry at the firm level. Prior research has explored factors inducing cooperative relationships and firm performance from a macro level (Della Corte and Aria, 2016), however, no studies have directly explored the property level benefits of cooperative strategies and their subsequent performance. The study explores the distinct benefits of coopetition, outlined by Rai (2016), in the context of hotels. These benefits are empirically evaluated with a survey of 479 hotel industry professionals. Next, the relation between coopetition and performance in the hotel industry is tested using a two-stage partial least squares (PLS) approach. The article has several contributions to the hospitality coopetition literature. Major among them is that it is first to empirically establish the three types of benefits in the context of hotels and to show that these benefits are positively associated with hotels' performance.

Literature review

Coopetition

Coopetition is defined as "simultaneous competition and cooperation among firms with value creation intent" (Gnyawali and Charleton, 2018, p. 2513). The concept of coopetition inherently involves a paradox as the two terms composing the construct may refer to two opposing behaviors. This paradox is mitigated by the opportunity to create increased value by exploring new technologies, increase the size of the market or share risks (Gynawali and

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

Park, 2011; Luo, 2007). Notable examples include the simultaneous cooperation and competition between Samsung and Sony in the development of LCD TV panel technology (Gnyawali and Park, 2011) and the presence of coopetition in the brewing, lining and dairy industries of Sweden and Finland (Bengtosson and Kock, 2000).

The main differentiator between coopetition and traditional strategic alliances is the presence of an explicit competitive behavior that is expected in the relationship. In a strategic alliance, firms emphasize the aspect of cooperation with the intent of deriving common benefits (Khanna *et al.*, 1998; Lavie, 2006) and to excerpt PB by acquiring knowledge to apply in a context, which is outside alliance boundaries. Firms can act opportunistically and try to gather PB in ways that were not agreed upon in the stipulation of the alliance (Lavie, 2006). This type of behavior is seen as detrimental to alliance success, and thus must be avoided (Das and Teng, 2000). This is because there is not a pre-emptive reliance on competition logic in strategic alliances as there is in a coopetition alliance. Consequently, a coopetition alliance requires a balance between cooperative and competitive behaviors and a capability to manage the resulting tensions that arise from competitive behaviors.

So why do firms decide to adopt coopetition strategies? Ritala (2012) outlines three specific motives for coopetition alliances:

(1) increasing the size of the current market or creating a new one;

(2) protect a firm's current market share while obtaining a larger share of what remains; and

(3) use fewer resources or use current resources more efficiently.

The general motivational outcomes discussed by Ritala (2012) include not only PB that firms can extract from strategic alliances but also PB derived from competition, which allows firms to use knowledge, skills and products obtained from collaboration to compete more efficiently. Rai (2016) broadly alludes to it as value created by partnering firms in an alliance that initiates a more competitive market in areas outside the scope and terms of the alliance boundary.

In summary, firms choose to cooperate based on the mutual goal of creating value that they would not be able to create by themselves and consequently compete among themselves to acquire that additional value. PB may materialize as the acquired knowledge can be applied to other business products, applications and efficiencies (PB cooperation). Similarly, the acquired benefits can be used to compete more effectively in the marketplace (PB competition) for greater brand equity, stronger differentiation and increased profitability (Gnyawali and Park, 2011; Ritala, 2012; Rai, 2016). While the benefits of coopetition have been discussed in the general management literature (Khanna *et al.*, 1998; Gnyawali and Park, 2011; Rai, 2016), the hospitality and tourism literature has yet to investigate these benefits at the property level. Moreover, while the construct has been investigated as a dyadic relationship focusing on relationships between a focal firm and a rival firm, this study investigates coopetition in the hospitality context focusing on the less common network view of coopetition, maintaining its analysis at the firm level. Different from the dyadic view, the network view focuses more on the collective effort to create additional value and on the links between firms in the network (Czakon, 2018; Gnyawali *et al.*, 2006; Majid *et al.*, 2019). The network model is more adequate in the context of the hospitality sector because of the importance of increasing the attractiveness of a destination in which a hotel firm operates (and hence, engage in an alliance with an entire group of competitors). This market-level outcome outweighs the benefits that could be created by two single hotel firms engaging in a coopetitive relationship alone. The subsequent sections

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

review the role of coopetition in the travel industry and discuss the three benefits of coopetition among hotels.

Coopetition in hospitality and tourism

The application of cooperative strategy in hospitality and tourism has become more prevalent in recent years (Almeida-Santana and Moreno-Gil, 2018; Damayanti *et al.*, 2017; Della Corte and Aria, 2016; Fong *et al.*, 2018). This is due to the nature of the tourism product and its many complimentary resources such as transportation, hotels, airlines, restaurants and attractions. A tourist enterprise can only influence a tourist via its own product (Von Von Friedrichs Grangsjo, 2003). However, when considering what destinations to visit, the traveler is not buying a single product, but a multitude of products that may be spread across several small enterprises, each of which is dependent on the other to provide an attractive and quality experience (Von Von Friedrichs Grangsjo, 2003; Wang and Krakcover, 2008). Thus, firms may adopt a holistic approach to attract a tourist for the benefit of all firms, while simultaneously competing for tourist dollars during planning and arrival. Tourism entities that work together to make a destination more appealing may be able to compete more effectively with other destinations, growing the total number of travelers. The resulting growth leads to an increase in demand for a range of travel products, allowing each entity to compete for their portion of the tourist's budget, ultimately establishing a natural environment of coopetition.

Research on coopetitive dynamics in the hotel industry underscores the role of agglomeration, that is, industry clusters. This is because hotels need to compete and collaborate with each other when located within geographical proximity and also when they are considered part of the same cluster. The distance that determines cluster membership often depends on the quality of the hotel (Lee, 2015). Previous research has focused on the dynamics of agglomeration in a destination, regarded as an industrial cluster. The possibility to engage in coopetitive arrangements and the consequent possibility to increase common demand could be among the advantages for hotel firms to co-locate in the same industrial cluster. Similar to hotels, advantages have also manifested in competing for accommodation services such as Airbnb (Yi *et al.*, 2021). Benefits deriving from co-location, are heterogeneously distributed among players in the market that shows that agglomeration provides more benefits to independent hotels (Chung and Kalnins, 2001) and lower-level hotels (Canina *et al.*, 2005). Consequently, hotel firms choose to locate in a specific industrial cluster in an attempt to benefit from or avoid the disadvantages associated with co-location (Kalnins and Chung, 2004; Baum and Haverman, 1997). While coopetition could be a beneficial outcome of agglomeration, agglomeration research is focused on other reasons for firms co-locating in the same industrial cluster. They include the potential for hotels to diminish search costs (Marshall, 1920), share resources (Kalnins and Chung, 2004) and, eventually to collude (Gan and Hernandez, 2013). These dynamics are not necessarily coopetitive arrangements as the sharing of resources implies a cooperative agreement but not a coopetitive one, while collusion is completely different from the phenomenon of coopetition given the difference in fundamental assumptions and legality. Moreover, agglomeration research has the cluster as the level of analysis, while coopetition literature focuses on a dyadic or on a firm level of analysis. Accordingly, this study, relies mainly on the coopetition framework and less on agglomeration, investigating the motivations of single hotels to enter coopetitive agreements with other hotels in the same destination.

The majority of coopetition research has focused on strategic factors that induce cooperation through various mechanisms. Chim-Miki and Batista-Canino's model (2018) identify critical indicators in the measurement of tourism coopetition that highlights how a

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

tourism destination is in comparative terms a more complex cooperative network than other industries. Similarly, Della Corte and Aria (2018) show that coopetition levels vary across destinations due to several factors at a macro level (tourist flows, investment and occupancy) while Damayanti *et al.* (2017) show evidence of coopetition at a micro, informal level. Most recently, Fong *et al.* (2018) document how coopetition may adapt over time with changes in the surrounding institutional environment. They identify how coopetition strategies evolve due to the liberalization of gambling in Macau, which subsequently influenced organizational norms and values. Ultimately, these studies reveal that coopetition is dependent on a number of factors, is prevalent at all levels of the hospitality industry and may change over time.

There are many types of relational arrangements where coopetition prevails, each dependent upon the mutual goals and interests of the stakeholders. The diversity and dependence between stakeholders highlight complex networks that incorporate vertical, horizontal and diagonal relationships, all with the similar goal of growing, developing and enhancing the offerings of a destination (Almeida-Santana and Moreno-Gil, 2018; Chim-Miki and Batista-Canino, 2017; Fong, 2021). Wang and Krakcover (2008) characterize four types of relationships (affiliation, coordination, collaboration and strategic networks) defined by the leadership, maturity and focus of the organization. For instance, cooperation may take an affiliation role such as recommendations to hotel guests regarding where to eat or shifting demand to competitors when a hotel reaches capacity. These informal relationships can progress to coordination or collaboration through travel packages between meals, accommodations and attractions. Finally, strategic relationships, the highest level of cooperation, may include memberships of local, national and international associations or include a range of programs operating between firms in a destination. In all cases, these relationships can be found in the hotel industry and demonstrate how easy it is for cooperative relationships to manifest.

Prior studies focus on the construction and structure of collaborative relationships and they all agree that a win-win relationship is a premise of any strategic alliance (Wang and Krakcover, 2008; Chim-Miki and Batista-Canino, 2018; Della Corte and Aria, 2016). While mutual benefits are required, PB also exists at the firm level and is integral in the decision to collaborate. In the proceeding sections, the three benefits of coopetition are discussed in the context of hotels to highlight their importance when determining an appropriate measure of coopetition at the property level.

Combined benefits

Hotels benefit considerably from a destination's economic growth, stability and community (Tsai *et al.*, 2009). Their mutual benefits for engaging in coopetition are similar to those outlined for the destination, as they would also benefit from a general increase in demand. Hotels require visitors to maintain and grow their business; however, they are just one element of the traveler experience. In most cases, a destination is competing with other destinations and only after a destination is chosen do the hotels compete individually (Von Von Friedrichs Grangsjo, 2003; Wang and Krakcover, 2008). Arguably then, it would appear favorable for hotels to pursue a coopetition strategy to make the destination as appealing as possible. While the mutual goal is relatively straightforward, coopetition by nature is risk-intensive and may require significant resources.

Destination-based associations such as convention and visitor bureaus or destination marketing organizations (DMO) help organize and coordinate members to promote the destination (Wang and Krakcover, 2008). Their centrality in the larger ecosystem of stakeholders involved in the marketing of a destination is well documented (Beldona, Morrison and Anderson, 2003). In this instance, all firms participating in the association

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

network cooperate to achieve the common goal of promoting the destination to make it more attractive. When the goal is achieved, travel demand increases across the destination and allows individual firms to extract PB by competing for the incremental business, aligning with Ritala's (2012) first motivation for coopetition.

Associations are also prominent within industry segments such as the National Restaurant Association and the American Hotel and Lodging Association (AHLA) in the USA. From the lodging perspective, these groups fulfill a variety of needs for the accommodation industry on both a local and national level. They provide advocacy with respect to policy decisions and community efforts (taxes, wages, development) to ensure the prosperity of hospitality organizations (Osario, 2019; AHLA, 2020). They also provide opportunities for training and education. For example, operational improvements may require hiring consultants or purchasing expensive training courses to gain these required skills. By joining associations, these costs may be reduced or eliminated, allowing employees to receive training that would have been unobtainable otherwise. Finally, these associations also provide many cost-reduction benefits regarding supplies or third-party vendors to increase profitability (Della Corte and Aria, 2016). In all cases, the collaboration leads to higher levels of knowledge and efficiency fulfilling Ritala's (2012) third motivational premise for collaboration.

The effectiveness of associations is clear given their prevalence in the industry; however, hotel firms may also collaborate independently. For example, two hotel firms may share best practices to increase their overall efficiency. Collaborating in a coopetition network increases the common value created (Czakon, 2018) and ensures hotels that activities stimulating travel demand are sustained and continue to adapt to changes in consumer preferences. For this reason, mutual benefits are the first fundamental component in adequately measuring the benefits of coopetition-based strategies.

Private benefits from cooperation

While benefits to the destination result in increased destination attractiveness and subsequently overall demand, coopetition also enables participating hotels to derive direct benefits that can translate to improved organizational effectiveness. When the collaboration results in skills, knowledge or innovations that are applied to other business domains, these are considered positive spillovers. The first type is PB has been termed PB from cooperation. These benefits are derived within the alliance boundary and are input-focused relating directly to enhanced competencies for participating hotels. These benefits allow hotels to independently develop new ideas, improve their performance and foster greater innovation. For example, associations may provide participating hotels with employee training courses to improve operational efficiency. However, these efficiencies may translate to other areas of operation outside the initial training that can be applied individually.

Property-level benefits for organizational effectiveness from coopetition enable hotels to become more efficient by using resources more adequately and cost-effectively. These benefits should be viewed favorably by hotel companies and should increase the likelihood of engagement in coopetition arrangements at a destination. Therefore, PB derived from cooperation constitute the second major component in adequately measuring the benefits of coopetition-based strategies.

Private benefits from competition

PB can also be derived by competing more effectively against an alliance partner to outperform it in activities (Rai, 2016). Put differently, coopetition enables a participating hotel to derive direct benefits that enable it to be more competitive in the destination network. These benefits are characterized by knowledge gained from the alliance by

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

portraying a competitive behavior. Specifically, the cooperative environment can generate a deeper understanding of competition at the partner level, which, in turn, can result in activities seeking greater brand equity and stronger differentiation that potentially leads to higher profitability (Ritala, 2012). For example, hotel properties could collaborate on sales or revenue management training. These activities may allow participating firms to learn about the pricing strategies of their competitors and accordingly adjust their policies to take advantage of the new knowledge. These skills are acquired outside the stated alliance boundary (constituted in the example by joint training only) and can help hotel firms to achieve a competitive advantage. This type of benefit extraction is allowed and tolerated as a competitive behavior is expected in a coopetition alliance. Moreover, a higher level of competitiveness has been connected to a more central position in the network structure and, consequently, a higher possibility to reap a bigger share of the accumulated value created by the coopetition alliance (Gnyawali *et al.*, 2006).

In general, property-level benefits leading to greater competitiveness are output-focused and provide firms with greater ability to compete in their market. Furthermore, these benefits present the possibility of reaping a larger share of the value created. Therefore, the prospect of these benefits establishes the third element required to adequately measure the benefits of coopetition-based strategies for the hospitality industry.

Coopetition and competitive performance

Research has shown that participating in cooperative alliances can be beneficial for all firms involved (Lee, 2007; Lin *et al.*, 2009; Park *et al.*, 2004; Ritala, 2012; Sampson, 2007). Firms participating in coopetition have higher levels of performance and innovation than those that do not (Park *et al.*, 2004; Sampson, 2007). This is due to faster innovation, greater differentiation, better market skills and the possibility of extracting PB from the alliance. Similarly in hospitality, the more a hotel engages in coopetition, the greater the opportunity of success for that destination and subsequently that individual property. The benefits of coopetition have yet to be specifically linked to the property-level performance of hotels. Properties operating with a coopetition perspective are striving to gain competitive advantages over competing hotels and destinations. This argument coupled with previous findings regarding the success of coopetition and performance would suggest that hotels who exhibit higher levels of benefits from cooperative alliances should have higher performance than hotels that do not:

H1. The level of a hotel's cooperative benefits is positively associated with their perceived performance.

In the hotel industry, market performance is a key performance indicator as the operating environment of each hotel is unique. Hotel companies have traditionally relied on metrics from third-party service providers such as STR to obtain market index reports to assess performance. The most popular metric is the RevPAR index as it reflects both the price and quantity of rooms sold, is standardized by hotel size and is readily computable for all hotels. The premise of the valuable benefits of coopetition would suggest that the more a hotel benefits from coopetition the higher their RevPAR index scores, leading to our second hypothesis:

H2. The level of a hotel's cooperative benefits is positively associated with their RevPAR index performance.

When evaluating performance, reality drives perception and market performance feedback from STR should assist in shaping perceptions of individual performance. Accordingly, the

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

hotel's RevPAR index should have a positive association with the perceived performance of the property. Furthermore, a positive relationship is expected as both items should agree regarding the overall performance of the property:

H3. A hotel's RevPAR index is positively associated with its perceived performance (Figure 1).

In summary, prior research has documented the various conditions for engaging in cooperative alliances through qualitative investigation. These studies agree that mutual benefits are required for coopetition to occur. While mutual benefits are critical, coopetition research suggests that other benefits exist in the form of PB. Prior research in tourism has studied coopetition at a macro level but does not account for PB of coopetition that is firm-specific. Similarly, the macro benefits may not depict the differences in mutual benefits shared across firms. Therefore, an empirical study based on scales from prior research is proposed to adequately assess coopetition based on the three benefits and explore coopetition's impact on hotel performance.

Methodology

To accurately depict the benefits of coopetition, scales for measuring combined benefits, PB cooperation and PB competition were adapted from Rai (2016). Specifically, the scale follows Rai's (2016) abbreviated version with 11 total items, including 4 items for benefits to the destination (combined benefits), 3 items for PB from cooperation and 4 items for PB from the competition. Perceived performance was measured using the four-item scale suggested by Ritala (2012). The scale was chosen because it is multi-dimensional and provides an overarching measure of performance encompassing profitability, prospects of current and future growth, as well as the current competitive landscape. Please see the Appendix for more details regarding the scales and measures.

Data were collected using a randomly drawn database of hotels in the Continental US provided by STR in January of 2019. After accounting for bounced emails, replicative addresses for the same properties, attrition and related issues, the collection generated 479 responses from a pool of approximately 5,000 reliable addresses at a response rate of 9.56%. Tests were conducted to determine if earlier respondents were different in their responses compared to later ones. The results were insignificant, reducing concerns of non-response bias.

The distribution of the respondents is provided in Table 1 and has representation from all property categories in STR's database. The location is predominantly Suburban,

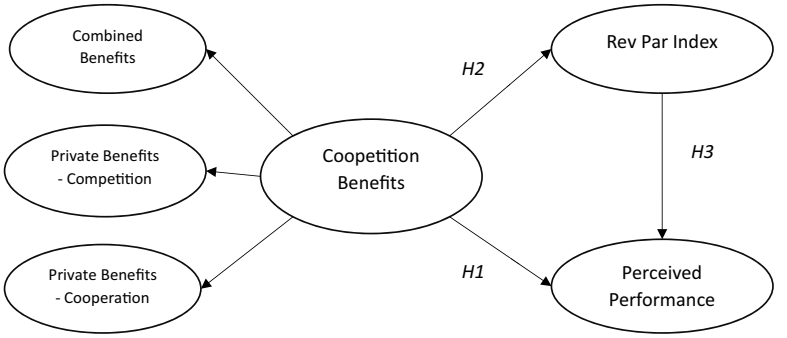


Figure 1.
Conceptual model

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

Interstate and Small Metro with the majority of respondents in the mid-tier class. The survey respondent's job demographics spanned all organizational levels but predominantly focused on the general management level. This is appropriate, as the general manager is familiar with the overarching strategies of senior-level management that may include cooperative arrangements while also overseeing day-to-day activities that are more likely to convey the hotel-specific PB derived from coopetition.

Establishing coopetition benefits as a second-order construct

A two-stage PLS model was used to measure the impact of coopetition benefits on performance. The two-stage design is valuable when variables include higher-order constructs (Alnawas and Hemsley-Brown, 2019; Sarstedt *et al.*, 2019) such as the benefits of coopetition, which is dependent on the lower order components represented by the three exclusive benefits. Construct level correlations between the three dimensions of coopetition benefits were first determined and found to be strong, ranging from 0.4 to 0.6 and highly significant. A reflective-reflective design was used in Stage 1 to produce loadings for the higher-order construct in Stage 2 that allows for evaluation of the structural model and the impact of coopetition on performance. The repeated indicators approach was used to estimate the higher-order component.

The first stage involves the evaluation of the measurement model that comprises the relationship between higher and lower-order components. This is done by applying parameters and criteria consistent with the expectations of reflective measurement models. Table 2 highlights the indicator loadings for each construct. In all cases, the values exceeded the expected

Category	Subcategory	*n*	(%)
Location	Urban	31	6.5
	Suburban	174	36.3
	Airport	19	4.0
	Interstate	109	22.8
	Resort	16	3.3
	Small Metro	130	27.1
Class	Luxury	4	0.8
	Upper-upscale	21	4.4
	Upscale	90	18.8
	Upper-midscale	189	39.5
	Midscale	76	15.9
	Economy	99	20.7
Operation	Chain owned	30	6.3
	Franchised	428	89.4
	Independent	21	4.4
Size	0–75	192	40.1
	75–150	242	50.5
	150–300	38	7.9
	300–500	7	1.5
Position	President/CEO	30	6.3
	Vice president	3	0.6
	Director+	54	11.3
	General manager	334	69.7
	Manager*	38	7.9
	Other	20	4.2

Notes: + (Director of operations, revenue, sales), *(Manager of accommodations, revenue)

Table 1.
Descriptive statistics

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

threshold of 0.7 (Hair *et al.*, 2016). Table 3 demonstrates the consistency of measurement as the constructs surpass recommended thresholds in reliability (higher than 0.70) and average variance extracted or AVE (greater than 0.50) (Ali *et al.*, 2018; Hair *et al.*, 2012). Discriminant validity results are reported in Table 4 via the heterotrait-monotrait ratios of the lower-order constructs, which are lesser than 0.85 as suggested by Henseler *et al.* (2015). The ratios between coopetition benefits and the lower-order constructs are not reported because values above 0.85 are expected. This is because the same indicators (in lower-order constructs) are repeated in the higher-order constructs (Sarstedt *et al.*, 2019). More importantly, the ratios are satisfactory (<0.85) between coopetition benefits and the performance indicators. Finally, the multicollinearity of all items was assessed using variance inflation factors (VIF) that were all less than the commonly accepted threshold of 5 (Ali *et al.*, 2018; Hair *et al.*, 2012).

The result of the analysis produces loadings to be used in the second stage. Specifically, the loadings were 0.715, 0.905 and 0.790 for combined benefits, PB competition and PB cooperation as shown in Figure 2. The strength of the relationships provides strong support for indicator reliability. The results of the reliability and validity assessments for Stage 2 are

Table 2.
Stage 1 – factor loadings

Factor loadings	Combined benefit	Private benefits cooperation	Private benefits competition
Combined benefits			
Provide more offerings for visitors	0.849		
Enhance organizational effectiveness	0.900		
Identify and attract new markets	0.910		
Respond effectively to changes in the operating environment	0.884		
Private benefits cooperation			
Developed new ideas and skills		0.893	
Improved its performance		0.893	
Acquired knowledge of systems and processes		0.891	
Fostered greater innovation		0.895	
Private benefits competition			
Been more profitable than the competition			0.886
Greater brand equity in the marketplace compared to competition			0.908
Differentiated itself better than the competition			0.882

Table 3.
Stage 1 construct reliability and validity assessment results

Construct	Cronbach's alpha	Composite reliability	Average variance extracted
Combined benefit	0.909	0.936	0.785
Private benefits cooperation	0.915	0.940	0.798
Private benefits competition	0.872	0.921	0.796

Table 4.
Stage 1 discriminant validity – heterotrait monotrait ratios

Construct	Combined benefit	Private benefits competition
Combined benefit		
Private benefits competition	0.487	
Private benefits cooperation	0.603	0.601

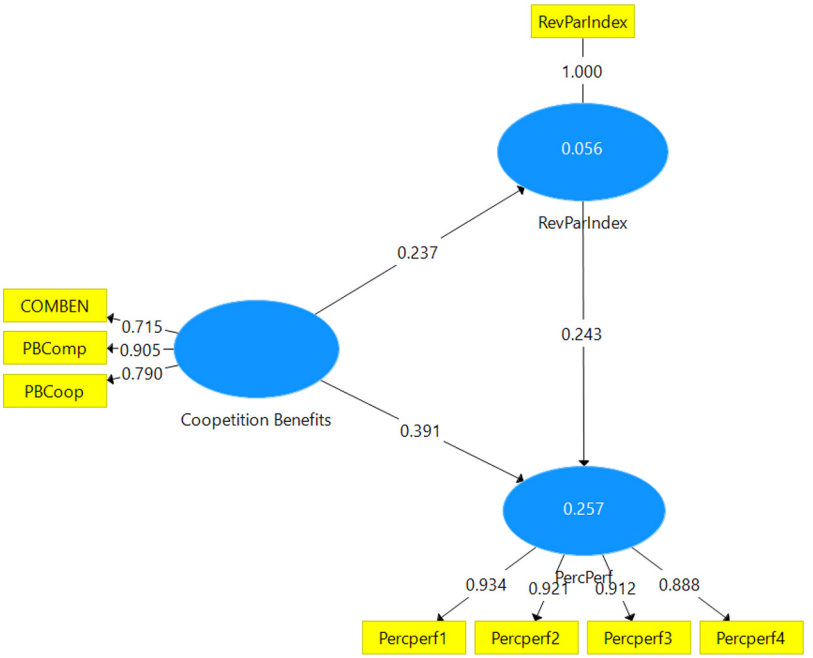
Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

shown in Table 5, with composite reliability scores greater than 0.7 and average variance extracted greater than 0.5 (Ali *et al.*, 2018; Hair *et al.*, 2012). Similarly, discriminant validity (Table 6) was confirmed with values less than 0.85 in all cases.

Results

The first stage of the model focused on the reflective measurement models of the lower-order components. Each of the components satisfied all relevant criteria for consistency, validity and reliability as noted in the prior section. In the second stage, the results of the loadings for the three lower-order components were saved and used as values to estimate coopetition benefits as a second-order reflective construct. The results of the structural model in Stage 2 are presented in Table 7 and discussed below in detail.

The relationship between the benefits of coopetition and perceived performance was significantly positive with a standardized path coefficient of 0.391. The results provide



Notes: *COMBEN = Combined Benefits; PBComp = Private Benefits for Competition; PBCoop = Private Benefits for Cooperation; PercPerf = Perceived Performance

Figure 2. Structural model results

Table 5. Stage 2 construct reliability and validity assessment results

Construct	Cronbach's alpha	Composite reliability	Average variance extracted
Coopetition benefits	0.756	0.848	0.652
Perceived performance	0.934	0.953	0.835

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

support for *H1*, confirming that the benefits derived from coopetition lead to increases in hotel performance. The coefficients effect size was 0.19 indicating a moderate effect as documented by Ali *et al.* (2018). The result agrees with prior research that has found a positive association between coopetition and tourism performance at a macro level (Della Corte and Aria, 2016). The findings of this study empirically support this relationship at the property level, indicating a positive association between the perceived benefits of coopetition and perceived performance. The findings highlight the powerful impact coopetition-based strategies may have on firm success.

The relationship between coopetition benefits and the hotel's RevPAR index had a significant path coefficient of 0.237. It indicates a positive relationship between coopetition benefits and the firm's RevPAR index, providing support for *H2*. While a significant relationship exists, the effect size ($f^2 = 0.06$) and variance explained ($R^2 = 5.6\%$) were very low. This finding is interesting and may be due to a variety of reasons. First, the RevPAR index score is a top-line measure of performance and is dependent only on price and occupancy. The perceived performance construct used in our study is multi-dimensional, covering items such as growth, market share and profitability, which may be a more valid indicator of performance. Second, index scores are relative measures. That is, each measure is dependent on the performance of other members of the competitive set. Theoretically, hotels that are participating in cooperative strategies should jointly benefit from the strategy (e.g. increased tourism demand). Therefore, while performance may increase for the individual property, the RevPAR index score may not necessarily increase because the benchmarked competitors (competitive set members) also perform better. This relationship is discussed in detail by Webb and Schwartz (2017) depicting that RevPAR index scores could be lower in a cooperative environment compared to markets with no cooperative relationship or in a zero-sum game. At this point, we are unable to determine what proportion of the competitive set was included in cooperative strategies. Therefore, even though the results of *H1* suggest that coopetition may increase hotel performance, it may not be readily visible via competitive benchmarks such as the RevPAR index.

The index also had a significant positive effect on perceived performance with a path coefficient of 0.243. Reality drives perception and the positive relationship indicates that higher RevPAR index scores result in higher perceptions of perceived performance, supporting *H3*. Ultimately, the benefits of coopetition and RevPAR index scores explain 26% of the variance in perceived performance. While the overall value appears low, these

Table 6.
Stage 2 discriminant validity – heterotrait monotrait ratios

Construct	Coopetition benefits	Perceived performance
Coopetition benefits		
Perceived performance	0.484	
RevPAR index	0.214	0.346

Table 7.
Structural model path coefficients and effect sizes

Path	Standardized coefficient (SD)	*t*-statistics	f^2
Coopetition benefits → RevPAR index	0.237 *(0.04)*	5.331*	0.060
Coopetition benefits → perceived performance	0.391 *(0.04)*	9.170*	0.194
RevPAR index → perceived performance	0.243 *(0.04)*	6.186*	0.075

Note: $p < 0.01$

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

constructs represent only two elements of the performance landscape. The overall performance of a hotel is dependent on the functions of all departments (sales, marketing, operations) among several macro and micro factors that may influence the overall market. Importantly, the model reveals that coopetition plays a role in hotel performance evaluation and should be incorporated in future research measuring hotel evaluation.

Discussion and conclusions

Conclusions

Coopetition is a valuable strategy for the tourism industry as each firm is just one component of a shared product i.e. the destination. Prior research has shown that coopetition in hospitality occurs under the presence of mutual benefits (Wang and Krakover, 2008) and can increase overall performance (Della Corte and Aria, 2018). This study expands on these findings by exploring coopetition at the firm level, rather than a destination, using scales established in the coopetition literature and expanding the paradigm by investigating relations between each firm and a group (Rai, 2016; Ritala, 2012). The structure allowed for an empirical investigation that expands outside mutual benefits and into PB that occur only at the firm level. In addition, the benefits from engaging in cooperative alliances are unlikely to be equal among all participants and may be positive, negative or neutral (Ritala, 2012). The firm-specific approach allows for a more accurate assessment of coopetition on hotel performance.

The results build upon prior research (Bengtosson and Kock, 2000; Morris *et al.*, 2007; Gnyawali and Park, 2011) indicating that higher levels of coopetition benefits are associated with higher levels of perceived and actual performance at the property level. Hotel operators must consider working together to allocate resources strategically to grow the pie. The findings suggest that hotels should consider the overall benefits that these strategies provide for the viability and growth of firms and the destination. While the structure of the collaboration is critical to a successful alliance (Von Von Friedrichs Grangsjo, 2003; Czernek and Czakon, 2016; Chim-Miki and Batista-Canino, 2018) working with an association that provides a voice for all firms, with a common message, may be beneficial for the destination as a whole.

The benefits of coopetition may increase tourist demand and the success of hotel firms; however, these results may not be apparent through typical benchmark measures such as RevPAR indices. Competitive sets that include hotels that participate in cooperative strategies are also likely to see increases in performance, thus neutralizing the overall gains of the performance metric. Hotel owners that value cooperative arrangements should not use index metrics to assess the success of these strategies but rather focus on metrics such as revenue or profitability growth that may be more reflective of cooperative alliance success.

Theoretical implications

Results from this study allow us to draw important theoretical implications. First, this paper adds to the hospitality literature on coopetition by expanding the current body of knowledge with the consideration of PB from coopetition. By finding that coopetition increases perceived performance, it demonstrates the presence of firm-specific PB derived from coopetition alliances. Second, the presence of PB entails the presence of heterogeneity in the distribution of benefits among hotel firms engaging in coopetitive alliances. This extends prior coopetition research in hospitality by expanding beyond the assumption of homogeneously distributed benefits from coopetition, which are implied by only focusing on macro benefits. Third, the current study offers a quantitative methodology to test the presence of and the benefits derived from coopetitive behaviors. This is an important addition to prior research, that has investigated the phenomenon using qualitative methods, as it shows how coopetitive behavior can directly affect firm performance. Finally, the current research adds to the general

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

management literature on coopetition by investigating PB from coopetition in the new context of hotel alliances. The importance of adding this new context to current research underpins the fundamental role that coopetitive behaviors play for hotel firms and how multi-level coopetitive relations can be constructed.

Practical implications

A destination's attractiveness and eventual success depend on the efforts of its tourism ecosystem and its individual suppliers such as hotels who play a very important role in this regard. This study empirically confirms the importance of coopetition between hotels in a destination that DMOs can effectively leverage in their collaboration efforts. Golnam *et al.* (2014) suggest viewing network arrangements typical of tourism stakeholders in a destination to envisage coopetition from a "value network" perspective. Value networks prevail when groups of actors engage in creating value for the end-customer and subsequently compete with other networks (Golnam *et al.*, 2014). This means that DMOs can lead more focused initiatives to bolster coopetition in their ecosystems that directly result in creating value for visitors. Creative initiatives that effectively differentiate the destination from competing ones to gain competitive advantage will be imperative here.

A more nuanced breakdown through qualitative inquiry is warranted to study network dynamics as it relates to the three dimensions of coopetition benefits. Destinations need to be understood at the operational level through a coopetition lens in granular detail. This can provide the pros and cons of coopetition arrangements and how they can be effectively leveraged or be avoided. For instance, mutual benefits are necessary for cooperative relationships to manifest but PB may have differing effects on cooperation that are industry-specific. Research has shown that firms are more likely to cooperate in activities far from the customer and compete in activities close to the customer (Koza and Lewin, 1998; Bengtsson and Kock, 2000). For this reason, hotel firms may be more likely to collaborate on strategies that lead to mutual gain or PB of cooperation. It will be important to understand if PB of competition may deter cooperative strategies between hotels in a network stemming from greater competition for a share of travelers' budgets.

Limitations and future research

The study has several limitations to consider; first, the sample is restricted to hotels that are subscribers to STR located in the USA. While the sample represented properties with various classes, sizes and locations, the level of coopetition and derived benefits may vary across each of these subgroups. Future research could investigate these granular relationships in more detail or compare and contrast them with other travel industries (transportation, restaurants and attractions) and countries. A second limitation is that every market and cooperative alliance is unique with our observations limited to the respondents. Future research should consider market effects that may influence the role of coopetition on firm performance. Several studies have found negative, neutral and positive impacts of coopetition on performance and Ritala (2012) emphasizes that this may be due to the business and competitive environments in which each firm operates. Accounting for these measures may provide greater insights into industry-specific factors and competitive environments that may impact hotel performance. Building upon market effects, future research should consider the various benefits and challenges of cooperative alliances during the COVID-19 pandemic.

Furthermore, future research could explore firm-level collaborative arrangements in more detail and measure their impact on outcomes over time. In addition, it would be beneficial to identify best practices for implementing a coopetition strategy. One may consider the formulation suggested by Okumus (2001) which highlights the interrelated relationships between strategic content, context, process and outcome. Furthermore,

cooperative arrangements in hospitality could be further investigated to identify the best structure for success (firm to firm; firm to the association; horizontal vs vertical).

References

AHLA (2020), "Who we are. American hotel and lodging association", available at: www.ahla.com/who-we-are

Ali, F., Rasoolimanesh, S.M., Sarstedt, M., Ringle, C.M. and Ryu, K. (2018), "An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research", *International Journal of Contemporary Hospitality Management*, Vol. 30 No. 1, pp. 514-538.

Almeida-Santana, A. and Moreno-Gil, S. (2018), "Understanding tourism loyalty: horizontal vs destination loyalty", *Tourism Management*, Vol. 65, pp. 245-255.

Alnawas, I. and Hemsley-Brown, J. (2019), "Market orientation and hotel performance: investigating the role of high-order marketing capabilities", *International Journal of Contemporary Hospitality Management*, Vol. 31 No. 4, pp. 1885-1905, doi: 10.1108/IJCHM-07-2018-0564.

Baum, J. and Haverman, H. (1997), "Love thy neighbor? Differentiation and agglomeration in the manhattan hotel industry, 1898-1990", *Administrative Science Quarterly*, Vol. 42 No. 2, pp. 304-338.

Bengtsson, M. and Kock, S. (2000), "Coopetition in business networks – to cooperate and compete simultaneously", *Industrial Marketing Management*, Vol. 29 No. 5, pp. 411-426.

Beldona, S., Morrison, A.M. and Anderson, D.J. (2003), "January. Information exchange between convention and visitor bureaus and hotels in destination marketing: a proposed model", In *Journal of Convention & Exhibition Management*, Taylor & Francis Group, Vol. 5 No. 1, pp. 41-56.

Canina, L., Enz, C.A. and Harrison, J.S. (2005), "Agglomeration effects and strategic orientations: evidence from the US lodging industry", *Academy of Management Journal*, Vol. 48 No. 4, pp. 565-581.

Chen, M.J. (1996), "Competitor analysis and interfirm rivalry: toward a theoretical integration", *Academy of Management Review*, Vol. 21 No. 1, pp. 100-134.

Chim-Miki, A.F. and Batista-Canino, R.M. (2017), "Tourism coopetition: an introduction to the subject and a research agenda", *International Business Review*, Vol. 26 No. 6, pp. 1208-1217.

Chim-Miki, A.F. and Batista-Canino, R.M. (2018), "Development of a tourism coopetition model: a preliminary delphi study", *Journal of Hospitality and Tourism Management*, Vol. 37, pp. 78-88.

Chung, W. and Kalnins, A. (2001), "Agglomeration effects and performance: a test of the Texas lodging industry", *Strategic Management Journal*, Vol. 22 No. 10, pp. 969-988.

Czakon, W. (2018), "Network coopetition", *The Routledge Companion to Coopetition Strategies*, pp. 47-57.

Czernek, K. and Czakon, W. (2016), "Trust-building processes in tourist coopetition: the case of a Polish region", *Tourism Management*, Vol. 52, pp. 380-394.

Damayanti, M., Scott, N. and Ruhanen, L. (2017), "Coopetitive behaviours in an informal tourism economy", *Annals of Tourism Research*, Vol. 65, pp. 25-35.

Dambiski Gomes de Carvalho, G., Alisson Westarb Cruz, J., Gomes de Carvalho, H., Carlos Duclós, L. and Oliveira Corrêa, R. (2020), "Innovativeness and coopetition in tourism SMEs: comparing two coopetitive networks in Brazil", *Journal of Hospitality and Tourism Insights*, Vol. 3 No. 4, pp. 469-488, doi: 10.1108/JHTI-12-2019-0134.

Das, T.K. and Teng, B.S. (2000), "A resource-based theory of strategic alliances", *Journal of Management*, Vol. 26 No. 1, pp. 31-61.

Della Corte, V. and Aria, M. (2016), "Coopetition and sustainable competitive advantage. The case of tourist destinations", *Tourism Management*, Vol. 54, pp. 524-540.

Fong, V.H.I., Hong, J.F.L. and Wong, I.A. (2021), "The evolution of triadic relationships in a tourism supply chain through coopetition", *Tourism Management*, Vol. 84, p. 84.

Fong, V.H.I., Wong, I.A. and Hong, J.F.L. (2018), "Developing institutional logics in the tourism industry through coopetition", *Tourism Management*, Vol. 66, pp. 244-262.

Gan, L. and Hernandez, M.A. (2013), "Making friends with your neighbors? Agglomeration and tacit collusion in the lodging industry", *Review of Economics and Statistics*, Vol. 95 No. 3, pp. 1002-1017.

Gnyawali, D.R. and Charleton, R.T. (2018), "Nuances in the interplay of competition and cooperation: towards a theory of coopetition", *Journal of Management*, Vol. 44 No. 7, pp. 2511-2534.

Gnyawali, D.R. and Park, B.J.R. (2011), "Co-opetition between giants: collaboration with competitors for technological innovation", *Research Policy*, Vol. 40 No. 5, pp. 650-663.

Gnyawali, D.R., He, J. and Madhavan, R. (2006), "Impact of co-opetition on firm competitive behavior: an empirical examination", *Journal of Management*, Vol. 32 No. 4, pp. 507-530.

Golnam, A., Ritala, P. and Wegmann, A. (2014), "Coopetition within and between value networks – a typology and a modelling framework", *International Journal of Business Environment*, Vol. 6 No. 1, pp. 47-68.

Hair, J.F., Jr, Hult, G.T.M., Ringle, C. and Sarstedt, M. (2016), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage Publications.

Hair, J.F., Sarstedt, M., Ringle, C.M. and Mena, J.A. (2012), "An assessment of the use of partial least squares structural equation modeling in marketing research", *Journal of the Academy of Marketing Science*, Vol. 40 No. 3, pp. 414-433.

Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.

Kalnins, A. and Chung, W. (2004), "Resource-seeking agglomeration: a study of market entry in the lodging industry", *Strategic Management Journal*, Vol. 25 No. 7, pp. 689-699.

Khanna, T., Gulati, R. and Nohria, N. (1998), "The dynamics of learning alliances: competition, cooperation, and relative scope", *Strategic Management Journal*, Vol. 19 No. 3, pp. 193-210.

Köseoglu, M.A., Yick, M.Y.Y. and Okumus, F. (2021), "Coopetition strategies for competitive intelligence practices-evidence from full-service hotels", *International Journal of Hospitality Management*, Vol. 99, p. 103049.

Köseoğlu, M.A., Yildiz, M., Okumus, F. and Barca, M. (2019), "The intellectual structure of coopetition: past, present and future", *Journal of Strategy and Management*, Vol. 12 No. 1, pp. 2-29.

Koza, M.P. and Lewin, A.Y. (1998), "The co-evolution of strategic alliances", *Organization Science*, Vol. 9 No. 3, pp. 255-264.

Lavie, D. (2006), "The competitive advantage of interconnected firms: an extension of the resource-based view", *Academy of Management Review*, Vol. 31 No. 3, pp. 638-658.

Lee, C.W. (2007), "Strategic alliances influence on small and medium firm performance", *Journal of Business Research*, Vol. 60 No. 7, pp. 731-741.

Lee, S.K. (2015), "Quality differentiation and conditional spatial price competition among hotels", *Tourism Management*, Vol. 46, pp. 114-122.

Lin, Z., Yang, H. and Arya, B. (2009), "Alliance partners and firm performance: resource complementarity and status association", *Strategic Management Journal*, Vol. 30 No. 9, pp. 921-940.

Luo, Y. (2007), "A coopetition perspective of global competition", *Journal of World Business*, Vol. 42 No. 2, pp. 129-144.

Majid, A., Yasir, M., Yousaf, Z. and Qudratullah, H. (2019), "Role of network capability, structural flexibility and management commitment in defining strategic performance in hospitality industry", *International Journal of Contemporary Hospitality Management*, Vol. 31 No. 8, pp. 3077-3096, doi: 10.1108/IJCHM-04-2018-0277.

Marshall, A. (1920), *Industry and Trade*, Macmillan and Co., London, New York, NY.

Morris, M.H., Koçak, A. and Ozer, A. (2007), "Coopetition as a small business strategy: implications for performance", *Journal of Small Business Strategy*, Vol. 18 No. 1, pp. 35-56.

Nalebuff, B.J., Brandenburger, A. (1996), *Co-opetition*, London: HarperCollinsBusiness.

Okumus, F. (2001), "Towards a strategy implementation framework", *International Journal of Contemporary Hospitality Management*, Vol. 13 No. 7, pp. 327-338.

Okumus, F., Altinay, L., Chathoth, P. and Koseoglu, M.A. (2019), *Strategic Management for Hospitality and Tourism*, Routledge.

Osorio, P. (2019), "5 Reasons Hoteliers Should Join Hospitality Associations.", *Travel Media Group*, Viewed on August 24, 2020, available at: https://www.travelmediagroup.com/5-reasons-hoteliers-should-join-hospitality-associations/

Park, N.K., Mezias, J.M. and Song, J. (2004), "A resource-based view of strategic alliances and firm value in the electronic marketplace", *Journal of Management*, Vol. 30 No. 1, pp. 7-27.

Rai, R.K. (2016), "A co-opetition-based approach to value creation in interfirm alliances: construction of a measure and examination of its psychometric properties", *Journal of Management*, Vol. 42 No. 6, pp. 1663-1699.

Ritala, P. (2012), "Coopetition strategy – when is it successful? Empirical evidence on innovation and market performance", *British Journal of Management*, Vol. 23 No. 3, pp. 307-324.

Rusko, R. (2018), "Coopetition for destination marketing: the scope of forging relationships with competitors", in Camilleri, M.A. (Ed.), *Tourism Planning and Destination Marketing*, Emerald Publishing Limited, Bingley, pp. 75-98, doi: 10.1108/978-1-78756-291-220181004.

Sampson, R.C. (2007), "R&D alliances and firm performance: the impact of technological diversity and alliance organization on innovation", *Academy of Management Journal*, Vol. 50 No. 2, pp. 364-386.

Sarstedt, M., Hair, J.F., Jr, Cheah, J.H., Becker, J.M. and Ringle, C.M. (2019), "How to specify, estimate, and validate higher-order constructs in PLS-SEM", *Australasian Marketing Journal*, Vol. 27 No. 3, pp. 197-211.

Tsai, H., Song, H. and Wong, K.K. (2009), "Tourism and hotel competitiveness research", *Journal of Travel and Tourism Marketing*, Vol. 26 Nos 5/6, pp. 522-546.

Von Von Friedrichs Grangsjo, Y. (2003), "Destination networking – co-opetition in peripheral surroundings", *International Journal of Physical Distribution and Logistics Management*, Vol. 33 No. 5, pp. 427-448.

Walley, K. (2007), "Coopetition: an introduction to the subject and an agenda for research", *International Studies of Management and Organization*, Vol. 37 No. 2, pp. 11-31.

Wang, Y. and Krakover, S. (2008), "Destination marketing: competition, cooperation or coopetition?", *International Journal of Contemporary Hospitality Management*.

Webb, T. and Schwartz, Z. (2017), "Revenue management analysis with competitive sets: vulnerability and a challenge to strategic co-opetition among hotels", *Tourism Economics*, Vol. 23 No. 6, pp. 1206-1219.

Yi, B., Shi, D., Shi, F. and Zhang, L. (2021), "Do the flipped impacts of hotels matter to the popularity of Airbnb?", *International Journal of Contemporary Hospitality Management*, Vol. 33 No. 6, pp. 2239-2263, doi: 10.1108/IJCHM-06-2020-0582.

Further reading

Hu, L.T. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 6 No. 1, pp. 1-55.

Wong, K.K.K. (2016), "Mediation analysis, categorical moderation analysis, and higher-order constructs modeling in partial least squares structural equation modeling (PLS-SEM): a B2B example using SmartPLS", *Marketing Bulletin*, Vol. 26, pp. 1-22.

Accepted Manuscript
Version of record at: https://doi.org/10.1108/IJCHM-03-2021-0340

Appendix

Mutual benefits
Because of coopetition (hotels cooperating and competing), my destination has improved its ability to (1 strongly disagree, 5 strongly agree).

- Provide more offerings for visitors.
- Enhance organizational effectiveness.
- Identify and attract new markets.
- Respond effectively to changes in the operating environment.

Private benefits cooperation
By cooperating with competing hotels my hotel has acquired the following competencies (1 strongly disagree, 5 strongly agree).

- Developed new ideas and skills.
- Improved its performance.
- Acquired knowledge of systems and processes.
- Fostered greater innovation.

Private benefits competition
By cooperating with competing hotels in my market, my hotel has (1 strongly disagree, 5 strongly agree).

- Been more profitable than the competition.
- Greater brand equity in the marketplace compared to the competition.
- Differentiated itself better than the competition.

Hotel performance
How would you compare your hotel's performance with that of other hotels (in your market) over the past three years? (1 – very poor, 5 – very well).

- Growth in sales.
- Profitability.
- Market share.
- Market growth.

Corresponding author
Timothy Webb can be contacted at: twebb@udel.edu