Tourism and Hotel Competitiveness Research

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ABSTRACT

Competitiveness has been a subject of study in the manufacturing and related sectors since the early 1990s. However, only recently have some researchers started to examine the tourism and hospitality competitiveness, both conceptually and empirically, with a particular focus on tourism destinations and the hotel industry. The goal of this paper is to review the published studies on destination and hotel competitiveness, provide critiques, and point out future directions in tourism and hotel competitiveness research. Such a review shall provide researchers with a good understanding of the current status of competitiveness research and with a vision for advancing the existing knowledge of destination and hotel competitiveness.

Keywords: Competitiveness, Destination, Hotel, Productivity

INTRODUCTION

The competitiveness of industry and firms has been one of the most important themes of research in the fields of economics and business studies. Although the concept of competitiveness of nations was initially proposed by economists (e.g., Porter, 1990), the term has also gained importance as a subject of study among management scholars during the last decade. Most empirical studies on competitiveness at the industry level have been related to the manufacturing and related sectors, and only recently have some researchers started to examine the international competitiveness of the service sector with a particular focus on tourism destinations and the hotel industry that deserves a systematic and critical review. As the tourism and hotel industry continue to prosper in the global economy, competition, whether it be international or domestic, among members of the industries becomes fiercer. Possessing competitive advantages could be key to success for those members. In this paper, we aim to synthesize the published studies in tourism destination and hotel competitiveness and provide a holistic picture of what has been examined previously with a view to facilitating further research in these areas.

The paper is organized as follows. In the next section we briefly discuss the concepts of competitiveness in general contexts, as they lay the foundation for the development of competitiveness research in tourism destinations and the hotel industry. The following section synthesizes competitiveness studies in the context of tourism destinations and the hotel industry, respectively. The important factors and different methods and analyses that relate to competitiveness of destinations and the hotel industry are summarized and presented next. Issues are then discussed, including suggestions for future research directions. The final section concludes this paper.

CONCEPTS OF COMPETITIVENESS

Competitiveness research starts arguably with the seminal work on the competitiveness of nations by Porter (1990), who defined national competitiveness as an outcome of a nation's ability to innovatively achieve, or maintain, an advantageous position over other nations in key industrial sectors. Organisation for Economic Co-operation and Development (OECD) defined competitiveness as "the degree to which a country can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the longer term" (1992, p. 237). Adding a time dimension to the definition of the national competitiveness, Boltho (1996) distinguished between the short- and long-run competitiveness of nations. He viewed the short-run international competitiveness as the level of the real exchange rate that ensured internal and external balance with appropriate domestic policies; the longer-run international competitiveness, on the other hand, could be associated with the highest possible growth of productivity that was compatible with external equilibrium.

In terms of the driving factors that determine national competitiveness, Porter argued that "it is firms, not nations, which compete in international markets", (1998, p. 33). Clark and Guy (1998) believed that competitiveness ultimately depends upon the firm in the country to compete both in domestic and international markets. The firm level competitiveness generally refers to the ability of the firm to increase in size, expand its global market share and its profit. According to Papadakis (1994), a nation's competitiveness can be measured by the accumulation of the competitiveness of firms operating within its boundaries; furthermore,

the strength of these firms is considered to be the single most important criterion of national competitiveness.

In addition to the role of firms in determining the national competitiveness, Newman, Porter, Roessner, Kongthong, and Jin (2005) listed a number of other factors that could influence national competitiveness. They believe that competitiveness encompasses everything from national government policies and citizens' attitudes to investments in infrastructure and manufacturing capability. National competitiveness exists because of competition. Francis (1992) argued that the presence of competition makes competitiveness a relative quality and competitiveness is essentially a zero-sum game. In other words, it is quality of a competitor that determines its probability of winning the competition, which indicates that the competition has to be specified along the competitiveness. Papadakis (1994) described the same notion from a consumer's perspective, suggesting that competitiveness is reflected by the consumer choice between two or more goods competing for the consumer's dollar.

Some researchers and practitioners define competitiveness through the assessment of national/firm productivity. Competitiveness is considered to involve a combination of assets and processes, where assets are either inherited (e.g. natural resources) or created (e.g. infrastructure) and processes transform assets to achieve economic benefits through sales to customer (Department of Industry, Science and Resources, 2001). According to Tefertiller and Ward (1995), competitiveness is related to productivity growth and entails quality differences, relative prices, production and distribution costs, the ability to market, and the efficiency of the supporting marketing and distribution system. In the same vein, Scott and Lodge defined competitiveness as "a country's ability to create, produce, distribute and/or service products in international economy, while rising returns on its sources." (1985, p. 3) Competitiveness is also "about producing more and better quality goods and services that are marketed successfully to consumers at home and abroad." (Newall, 1992, p. 94)

In comparison with the definitions of national competitiveness, the firm level competitiveness is a straightforward concept. A widely accepted firm level competitiveness is by D'Cruz (1992) who viewed the competitiveness of a firm as its ability to design, produce, and/or market its products superior to those provided by its competitors, considering both the price and non-price factors.

Competitiveness remains a difficult concept and is still not precisely defined in various contexts as is shown by the definitions given above. Nevertheless, competitiveness is obviously seen as involving elements of productivity, efficiency, and profitability as a means of achieving rising standards of living and increasing social welfare (Huggins, 2000). Furthermore, the definitions indicate the importance of firms and the environment in which the firms are operating. Indeed, the nation's competitive position lies in the creation of a social and economic environment that encourages the firms to take actions that promote their own self-interest, while at the same time enhancing national competitiveness (Blaine, 1993). However, an important point to make is that not all of the firms/industries in the nation contribute to competitiveness. If they did, it is likely that it was dependent on the way profits influence firm strategy and managerial behavior (Blaine, 1993). Krugman (1994) further cautioned that national competitiveness is a meaningless concept and the obsession with the concept is both wrong and dangerous. He rather treated national living standards as overwhelmingly determined by domestic factors rather than by competitive rivalry between nations of world markets.

Despite its complexity, the issue of competitiveness continues to attract much attention from policymakers worldwide who attempt to develop the best indicators for countries to benchmark their performances. In recent years, the concern with competitiveness has also drawn the attention of researchers in the fields of destination tourism and the hotel industry as evidenced by the growing number of research studies compared to that in other areas of the tourism industry. These studies will be reviewed and synthesized in the next section.

DESTINATION COMPETITIVENESS

The issue of competitiveness of tourism destinations has become increasingly important, particularly for countries and regions that rely heavily on tourism (Gooroochurn & Sugiyarto, 2005). A destination may be considered competitive if it can attract and satisfy potential tourists. Not only does the competitiveness of a destination directly affect tourism receipts in terms of visitor numbers and expenditures, but also it indirectly influences the tourism-related businesses, such as the hotel and retail industries in that destination, to a certain extent. As Cizmar and Weber (2000) pointed out, destination choice remains one of the first and most important decisions made by tourists, and this decision in turn is, to a large extent, subject to a number of external factors, such as country image, accessibility, attractiveness, safety, etc.

Destination choice, on the other hand, also determines inter-enterprise competition between airlines, tour operators, hotels and other tourism services (Ritchie & Crouch, 2000). Many researchers have studied destination competitiveness, and the following subsections review the concepts, models and determinants of destination competitiveness.

The Concept of Destination Competitiveness

Most competitiveness research has focused on the firm as a unit of analysis for a number of industries, which certainly has its limitations in applying to the tourism destination competitiveness context. As argued by Bordas (1994), the tourism business is not singular but encompasses a three-dimensional concept including market, product and technology that satisfy people's leisure wants and needs. Going beyond the firm level, he conceptualized destination competitiveness based on the notion that it is a cluster of tourist attractions, infrastructure, equipment, services and organization that jointly determines what a destination has to offer to its visitors. In this context, competitiveness is not established between countries but rather between clusters and tourist businesses. Hassan (2000) also noted that, because of the multiplicity of industries involved in making destinations become competitiveness, it is necessary to look beyond rivalry among firms and examine the extent of cooperation needed for the future of competitiveness.

Various researchers have defined destination competitiveness as follows:

- "…the ability of a destination to provide a high standard of living for residents of the destination." (Crouch & Ritchie, 1999, p.137)
- "…the destination's ability to create and integrate value-added products that sustain its resources while maintaining market position relative to competitors" (Hassan, 2000, p.239).
- "…the ability of a destination to maintain its market position and share and/or to improve upon them through time" (d'hartserre, 2000, p.23).
- "…include objectively measured variables such as visitor numbers, market share, tourist expenditure, employment, value added by the tourism industry, as well as subjectively measured variables such as 'richness of culture and heritage', 'quality of the tourism experience' etc." (Heath, 2003, p.9)
- "…the most competitive destination in the long term is that the one which creates well-being for its residents." (Bahar & Kozak, 2007, 62)

Adding a time dimension to their original competitiveness model proposed in 1993, Ritchie and Crouch (2000) argued that competitiveness is illusory without sustainability. True destination competitiveness must be sustainable not just economically, and not just ecologically, but socially, culturally and politically as well (Crouch & Ritchie, 1999). Dwyer and Kim (2003) stated that the ultimate goal of competitiveness is to maintain and increase the real income of its citizens. In this connection, destination competitiveness is not an end but rather a means to an end that enhances the standard of living of the people in the destination under free and fair market conditions (Heath, 2003).

Destination Competitiveness Models and Determinants

Comparative advantages (e.g., low labor costs and attractive exchange rates) had long been believed to be the only contributing factor to a successful tourist market. However, as Bordas (1994) pointed out, competitive advantages appear to be key to assure a long-term success of tourist destinations. He argued that efforts of governments should be focused on two areas: strategic planning of the country's tourist businesses, which guides the development of the public sector as well as the private one and the involvement of all the affected parts, and to establish a competitive environment for this kind of business, which should be the base of the tourism policy. In particular, competitive plans for clusters must be made and integrated on higher levels of region, destination or country in order to create/enhance well-being of the residents (Heath, 2003; Bahar & Kozak, 2007).

Based on the Calgary Model of Competitiveness (CMC) in Tourism, an exploratory framework of competitiveness of international tourism advanced by Crouch and Ritchie (1993), Chon and Mayer (1995) reasoned the incorporation of five tourism-specific sub-factors including substitutes, entry/exit barriers, organization design, technology and value to the CMC that is specifically applicable to Las Vegas. They particularly emphasized that service quality should be independent of price, not related to it. Indeed, value perceived by customers in the hospitality setting "combines elements of both price and a customer's expectations for a service experience." (Chon & Mayer, 1995, p. 235) Their proposed destination competitiveness model for Las Vegas further pinpoints potential problem or opportunity areas for the Las Vegas market and offers insight for further destination competitiveness research.

Crouch and Ritchie (1999) developed a comprehensive and sophisticated framework for tourism destination management. This framework is based on the theoretical concepts of competitive (effective use of resources) and comparative advantages (Porter, 1990; Enderwick, 1990), which consider a number of broad categories of factor endowments– human resources, physical resources, knowledge resources, capital resources, infrastructure, and historical and cultural resources. However, they argued that it is not good enough to merely list the factors that determine the destination's competitiveness; it is also important to understand the relationships and interplays between these factors. The conceptual model of destination competitiveness includes the following components: competitive (micro) environment, global (macro) environment, core resources and attractors for primary elements of destination appeal, supporting factors and resources for secondary elements of destination appeal, destination management (see also Go & Govers, 2000), and qualifying determinants (i.e., situational factors). Government and chance events are viewed as influencing competitiveness through their impact on the basic determinants. Possibly inspired by Bordas (1994), *Tourism Policy* was identified as a separate element to the above framework in order to further cover critical policy, planning and development issues that contribute to destination competitiveness and sustainability (Ritchie & Crouch, 2000).

Surveying solely from the tourism stakeholders' perspective, Yoon (2002) theoretically developed a structural equation model of tourism destination competitiveness and empirically tested the interplay of relationships among five constructs: tourism development impacts, environmental attitudes, place attachment, development preferences about tourism attractions and support for destination competitive strategy, where the first three are exogenous and the latter two are endogenous. *Tourism development impacts* construct in terms of creating jobs and attracting investment capital and *place attachment* construct in terms of emotional/symbolic attachment to the community were found to significantly influence the stakeholders' development of tourism attractions, which in fact also positively determine their support for destination competitive strategy.

Dwyer and Kim (2003) developed a model of destination competitiveness that enables comparisons between countries and between industries within the tourism sector. The model borrowed the main elements of competitiveness studies, in particular from Crouch and Ritchie (1999), who see the importance of competitive and comparative advantage. (See the previous section for the determinants.) The model explicitly recognizes demand conditions as

an important determinant of destination competitiveness (Dwyer & Kim, 2003), which was not mentioned by Crouch and Ritchie (1999).

Concerning the inability of the existing models of destination competitiveness to adequately apply in the Southern African context, Heath (2003) proposed a destination competitiveness model based on the experience gained through the destination strategic planning processes in addition to the main indicators proposed by Ritchie and Crouch (2000) and Dwyer and Kim (2003). The model was presented in the form of a house, where the foundations provide an essential base for competitiveness, the cement links the respective facets of competitiveness, the building blocks connect sustained destination competitiveness involving an integrated development policy and framework and a strategic and innovative destination marketing framework and strategy, and the roof, representing the key success drivers, covers the "people" factor of destination competitiveness. He further emphasized the concept of the inseparability between tourism development and marketing, which echoed "competitive marketing" advanced by Bordas (1994).

By combining 37 business-related factors and 15 conventional destination image /attractiveness factors, Enright and Newton (2004) applied the Importance-Performance analysis grid in assessing the importance of the determinants of competitiveness as well as their competitiveness relative to those main competing destinations. Their study showed the value of looking beyond tourism-specific factors in providing a holistic picture of destination competitiveness. In a later study, Enright and Newton (2005) empirically studied the destination competitiveness based on Crouch and Ritchie (1999) and Ritchie, Crouch, and Hudson (2001) and found the evidence that supports the inclusion of both industry (business-related factors) and destination attributes in competitiveness research. In this study, critique is also given to other approaches of destination competitiveness, which assume that the relative importance of attributes is common across locations and markets. They further demonstrated that attributes may vary in their importance, depending on the product mix and target markets.

Different from those competitiveness studies focusing on either only tourists (Hsu, Wolfe and Kang, 2004) or only service providers (Enright and Newton, 2004; Yoon, 2002), Bahar and Kozak (2007) examined the competitive position of Turkey vis-à-vis five other countries by comparing the views from both tourists and service providers. In their study, four factors, including cultural and natural attractiveness, quality of tourist services, availability of tourist

facilities and activities and quality of infrastructure, were extracted the 23 potential determinants of destination competitiveness and significant differences were found to exist between tourists and service providers on their views of the competitive position of Turkey.

Dwyer, Forsyth and Rao (2000) compared the price competitiveness of 19 countries by developing a price competitiveness index. They argued, similar to Francis (1992), that competitiveness is a relative concept. Price differentials, along with exchange rate movements, productivity levels of various components of the tourist industry and qualitative factors affect the attractiveness or otherwise of a destination. They claimed that overall destination competitiveness is determined by both price and non-price factors—socio-economic, demographic, and qualitative factors that determine the demand for tourism. Song, Romilly and Liu (2000) also stressed the importance of non-economic influences on tourists' destination choices. They constructed a tourism destination preference index that considers social, cultural, and psychological influences, such as tourists' social statuses, personal interests, and cultural backgrounds and the geographic characteristics of the destination country. Focusing only on relative tourism price competitiveness, Oyewole (2004) calculated the price competitiveness index following Dwyer et al. (2000) for 22 African countries in the international tourism industry. The results indicate that not only relative price competitiveness of a country could differ from one sector of the international tourism basket to the other, but also how changes in price competitiveness from one period to another could results from changes in the exchange rate, the CPI, or cost of tourism basket relative to other goods and services within the country, or a combination of all.

The Competitiveness Monitor

Gooroochurn and Sugiyarto (2005) discussed eight main indicators of tourism competitiveness under a Competitiveness Monitor (CM) initiated by World Travel & Tourism Council (WTTC) for over 200 countries. The indicators in the destination CM for tourism were similar to those used in monitoring the mainstream competitiveness of nations based on the seminal work of Porter (1990), who introduced the concept of "National Diamond." Moreover, Gooroochurn and Sugiyarto (2005) derived the indicators, based on the factor endowment of Crouch and Ritchie (1999), and borrowed the environment quality concept of Inskeep (1991) and Middleton (1997). They are convinced that environmental policies are vital for the development of the tourism sector. Furthermore, as international

travelers are sensitive to price, it is important to pay particular attention to the price competitiveness of a destination (Dwyer et al. 2000).

The eight indicators, presented in index form, show the level of performance of each country relative to other countries (Gooroochurn & Sugiyarto, 2005) and include price, openness in (international) trade, technology, infrastructure, human tourism (i.e., achievement of human development in terms of tourism activity), social development in the quality of life in the society, environment, and human resources. The social and technology indicators have the most weight, while, surprisingly, human tourism and environment indicators have the lowest. The environmental indicator is of particular importance to tourism, especially when the growth of eco-tourism is the main concern in a destination. Price had a significant inverse relationship with competitiveness: developed countries tend to be more competitive in terms of the other indicators and less competitive in terms of price (Gooroochurn and Sugiyarto, 2005). Gooroochurn and Sugiyarto (2005) argued that each indicator is far from exhaustive.

Extending from the definitional framework of the destination CM, Mazanec, Wober and Zins (2007) proposed and empirically tested an explanatory model of destination competitiveness. Taking into account market share and economic growth indicators weighted by bilateral distances of the geographical location of destinations and the inclusion of a cultural heritage indicator, three of the eight competitiveness determinants were found to contribute to the overall destination competitiveness: heritage and culture, economic wealth, and education. Attention should be paid on the education factor that countries of lower educational standard benefit in terms of competitive advantage. Destination competitiveness in their study significantly explained ordinary market shares based on international arrivals and distance-weighted market shares. Their study demonstrated theory building on the use of destination competitiveness beyond merely defining, aggregating and indexing it.

European Foundation for Quality Management Model (EFQM)

Go and Govers (2000) discussed the European Foundation for Quality Management Model (EFQM), which is used to assess and evaluate destination competitiveness in Europe. This model assumes that factors such as customer satisfaction, people (employee) satisfaction, and impact on society are realized through leadership-driving policy and strategy, people

management, resources, and processes, leading ultimately to excellence in business results. In particular, leadership, planning, human resources, customer satisfaction, and measurement of performance are identified as important conditions to attain quality improvement and implementation. The research findings indicate that integrated quality management in tourism destinations is underdeveloped, which inevitably could diminish their competitiveness; destinations tend to be strong in one element of the EFQM model (like strategy or human resources management) and did not have a good balance of this framework.

Destination Benchmarking

Fuchs and Weiermar (2004) critically assesed the Benchmarking Indicator System implemented by the Austrian Government in 1987, which initially was based on price and capacity only, and conceptually extended this benchmarking approach by linking tourists' satisfaction measures. They categorized tourism quality attributes into three different categories of factors (basic factors, excitement factors, and performance factors) that display a differing impact on tourist satisfaction. These three categories are based on the model of Kano (1984), which implies that basic factors are the prerequisite conditions for market entry. If the basic factors are delivered, it is also important to have performance factors that are directly connected to customers' needs and desires. Finally, unexpected (excitement) factors could make a destination more attractive. Vavra (1997) and Brandt (1987) proposed two different methods, to be discussed below, which can be used to empirically test these three-factor structures of customer satisfaction.

Vavra's Method

Vavra's two-dimensional Importance Grid, which is a structural picture of customer satisfaction, is based on customers' self-stated importance assessments. It deciphers hygiene and enhancing factors of customer satisfaction by comparing importance scores regarding specific service (i.e. destination) attributes with implicitly derived performance scores (Vavra, 1997). It is hypothesized that tourists can distinguish between explicit and implicit importance dimensions of service features, which in turn can help identify three distinct satisfaction determinants: satisfiers, performance factors, and dis-satisfiers. Advantages of this method include the usefulness in pinpointing relationships between satisfaction and importance values, and its application to a relatively large set of variables that have been

correlated with the measure of total destination satisfaction to derive implicit importance scores (Fuchs and Weiermar, 2004). However, this method has been criticized by different researchers (Oliver, 1997; Matzler, Sauerwein, & Heischmidt, 2003). One of the main criticisms is that the theory fails to explain why different satisfaction factors can be arrived at by combining implicitly and explicitly derived importance scores.

Brandt's Method

Brandt's Penalty-Reward-Contrast analysis is a performance-only approach, which only focuses on one variable (i.e., the satisfaction) (Fuchs & Weiermar, 2004). This method employs a dichotomized regression model with two sets of dummy variables, in which the first set exemplifies in quantitative form excitement factors and the second represents quantitative form basic factors (Brandt, 1987). Fuchs and Weiermar (2004) carried out a multiple regression analysis to empirically quantify destination-related basic (i.e. minimum satisfaction) requirements and satisfying (i.e. motivating) factors using the 11-point total destination satisfaction measure as the dependent variable and the dummy variables for each of the seven destination value-chain domains as independent variables. The constant in the regression equation in their study represents the average for all observations in the reference group with regards to tourist satisfaction. In this method, if customers are experiencing low levels of satisfaction, the penalties for a destination would be expressed in an incremental decline (i.e., amount subtracted from the constant); if customers are experiencing high levels of satisfaction, rewards are then expressed in an incremental increase (i.e., amount to be added to the constant). Consequently, the observed destination attributes would be classified as basic factors if penalty levels surpass reward levels. If, on the other hand, the reward index surpasses the penalty value, the observed destination attribute should be interpreted as an excitement factor. If the reward and penalty values are the same, customers are said to be satisfied only if the performance level of the attribute is relatively high, while dissatisfaction will result from low performance level of the attribute on the other side (Fuchs & Weiermar, 2004). According to Fuchs and Weiermar (2004), this approach seems to have a better potential, compared to Vavra's method, for identifying the factor-structure configuration of tourist satisfaction in destinations.

Kozak and Rimmington (1999) argued that destination benchmarking is problematic since there are so many factors that influence the satisfaction levels of tourists. However, they tried

to develop a new benchmarking method, which measures a number of specific elements of destination performance (Kozak & Rimmington, 1998). They argued that qualitative and quantitative measures are helpful in destination competitiveness assessment. According to Laws (1995), features of destinations can be classified under two main headings: primary and secondary features (see also Crouch & Ritchie, 1999), which together contribute to the overall competitiveness of a tourism destination. Primary features include climate, ecology, culture, and traditional architecture, and secondary features refer to superstructures developed specifically for tourism, such as hotels, catering, transport, and entertainment facilities. This study makes use of tourists' opinions about their experience at different destinations. One major advantage of the method, according to Goochurn and Sugiyarto (2005), is its ability to capture the intrinsic characteristics of a destination, which may, otherwise, be difficult to measure.

Travel and Tourism Competitiveness Index (TTCI)

The World Economic Forum Geneva recently published the Travel & Tourism Competitiveness Report (TTCR) 2008 (World Economic Forum, 2008) in an attempt to explore the factors that drive travel and tourism competitiveness of destinations. The aim of the Travel & Tourism Competitiveness Index (TTCI) is to provide a comprehensive strategic tool for measuring the factors and policies that make a destination attractive to international tourists. The TTCI is composed of 14 "pillars" of travel and tourism competitiveness, which include: policy rules and regulations, environmental regulations, safety and security, health and hygiene, prioritization of travel and tourism, air transport infrastructure, ground transport infrastructure, tourism infrastructure, information and communication technology (ICT) infrastructure, price competitiveness in the travel and tourism industry, human resources, affinity for travel & tourism, and natural and cultural resources. These factors have also been considered by researchers in destination competitiveness studies. The 14 pillars are then organized into three sub-indexes capturing the broad categories of variables that facilitate or drive travel and tourism competitiveness. These categories are a) travel and tourism regulatory framework, b) travel and tourism business environment and infrastructure, and c) travel and tourism human, cultural, and natural resources.

Although this report provides a ready competitiveness index encompassing a variety of "pillars" related to travel and tourism and an improvement over its previous report released in

2007, there are unfortunately a number of limitations. Among various criticisms, Crouch (2007) argued that national goals of economic and social development differ between countries, and these differences will lead to a diverse focus on important industries. Furthermore, Crouch (2007) stated that destinations vary enormously and countries compete for different market segments in tourism, and so it is more meaningful to compare countries by market segment. Indeed, the attributes that matter more in one segment may be less important in a different segment. However, the report is valuable in advising developing destinations on areas that deserve attention or focus for better tourism destination development.

Table 1 presents a summary of the major determinants of tourism destination competitiveness discussed in previous studies.

(Insert Table 1 here)

COMPETITIVENESS IN THE HOTEL INDUSTRY

The competitiveness of a country derives from the performance of its enterprises (Barros, 2005), which certainly include the hotel industry. While a community's growth stimulates hotel performances, in turn hotels contribute to the community's economic, social, and cultural development (Go, Pine, &Yu, 1994). The hotel industry benefits from a destination's economic growth and stability and community developments, such as office buildings, retail malls, and entertainment facilities, which draw both business and leisure travelers and help create demand for hotel rooms. There are many other factors (e.g., input, process, output, and outcome) that determine hotel industry's competitiveness. Indeed, hotels utilize input factors and produce a variety of products and services (outputs), and the nature of these outputs depends very much on hotels' strategic and competitive positions in the region. The impact of these measures in terms of tangible outcomes is reflected by the market share of the hotel industry and by the price competitiveness of the hotel industry in the regional market.

The available studies and literature that discuss the competitiveness of the hotel industry usually examine a limited number of factors, but fail to develop a model/framework that captures the relationships among those factors. Fortunately, there are a few exceptions that attempted to develop more comprehensive frameworks and models. In the following sections

the important hotel competitiveness factors and some related frameworks and models are discussed.

Strategic Decisions

Strategic decisions guide the development of a firm and hence affect its competitiveness. The ability of a firm to find or create a position in a market is at the core of strategy development (Yeung & Lau, 2005; Roth & van der Velde, 1991; Roth, 1993). When firms in the industry have reached their mature stage, each firm within this industry may struggle with the formulation of corporate and business strategies to stay ahead of their competitors (Wong & Kwan, 2001; Hwang & Chang, 2003). A number of frameworks are identified that could help firms formulate strategic decisions leading to a competitive position.

Hotel Performance Measurement Framework – Philips

Philips' (1999) framework is perhaps the most comprehensive one, which links three salient areas of strategic planning: formulation, implementation, and evaluation. The traditional way of gauging hotel performance from a finance-only perspective is not capable of presenting the true performance of the hotel industry. This framework was designed to capture both economic and organizational-specific factors and changes in the external environment. According to Philips (1999), the central theme of the framework is that input, output, processes, market, strategic orientation, and environmental characteristics are associated with outcomes (Fitzgerald, Johnston, Brignall, Silvestro, & Voss, 1991; Neely, Gregory, & Platts, 1995; Brignall & Ballantine, 1996; Brown & Dev, 2000). Moreover, the evaluation of a hotel's performance involves analyzing three categories of factors, which include physical characteristics, factors determined by the market and factors that are controllable (e.g., salaries) by the hotel general manager (see also Morey & Dittman, 1995; Philips, 1996; Barros, 2005).

Competitive Action Framework

The Competitive Action Framework has been designed to analyze strategic conduct among firms in the hotel industry (Yeung & Lau, 2005). In particular, slightly different from Philips (1999), this framework suggests that the *extent of differences* of action portfolios

within and between firms is relevant in determining a firm's performance (Yeung & Lau, 2005). The extent of difference and effectiveness of the action portfolio is determined by the competitive environment; it is the matter of the possession of resources, as well as the moves of the competitor (Porter, 1991). Two modes of differentiation were devised: diversity in competitive actions (Olsen, 1995; D'Aveni, 1994) and non-conformity behavior towards competitive actions of competitors. It is found that strategic flexibility is important; it is better for hotels to have a diversified competitive action portfolio, which should conform to that of their competitors (Yeung & Lau, 2005).

Hotel Productivity

Productivity is always a top priority for hotel operators (Brown & Dev, 1999; 2000; Reynolds & Thompson, 2007; Sigala, 2004; Wang, Hung, & Shang, 2006). Hotel productivity generally encompasses an umbrella concept that includes efficiency, effectiveness, quality, predictability, and other performance dimensions, as well as a concept reflecting only production efficiency (Sigala, 2004). According to Lovelock and Young (1979), service firms can increase productivity in four ways. Firstly, the firm can improve its labor force through better recruiting or more extensive training (human capital). Secondly, it can invest in more efficient capital equipment (capital). Thirdly, the firm can replace works with automated systems (technology). Lastly, the firm can recruit consumers to assist in the service process. As labor costs generally account for the highest percentage of hotel operating expenses, these four ways of enhancing productivity could serve to help produce the highest level of output with the lowest level of input.

In addition, firms can improve their productivity through effective strategic decisions, as suggested by Brown and Dev (1999). Barros (2005) agreed with Brown and Dev that operational efficiency is a management objective. Efficient management is the main issue that managers should pay attention to, because this would affect the productivity of hotels (Yang & Lu, 2006; Brown & Ragsdale, 2002; Sustainable Energy Ireland [SEI], 2001). Moreover, Brown and Dev (1999), being consistent with Philips (1996) and Morey and Dittman (1995), emphasized the role of the hotel general manager in making the right strategic decisions according to the demand and competitive conditions.

Productivity Assessment using Data Envelopment Analysis

One way to examine the performance/productivity of a hotel is the use of Data Envelopment Analysis (DEA). DEA can take into account controllable and uncontrollable (environmental and situational) factors in analyzing the firm's productivity/efficiency (Reynolds, 2004; Reynolds & Thompson, 2007). Indeed, meaningful productivity statistics must not only accurately identify inputs and outputs, but must integrate all critical variables if such a measure is used to assess the overall operational productivity or efficiency (Reynolds, 1998). A major advantage of DEA is that it does not require an assumption about the functional form of the model that underpins the relationships between the input and output variables (Hwang & Chang, 2003).

Wang et al. (2006) employed the DEA and used the Tobit regression model to evaluate the efficiency determinants of the firms. This model was applied because firm and market factors can be differentiated and are beyond the traditional input-output setting, but contribute to efficiency. Moreover, a bootstrapping technique, proposed by Xue and Harker (1999), is also used to overcome the dependency problem of DEA efficiency scores when used in regression analysis. Additionally, Sigala (2004) extended the above mentioned DEA approach by developing a stepwise model of DEA, an iterative procedure in which the productivity is measured in terms of the *important factors* identified. In this approach, the important factors are identified by examining the factors that correlate with the efficiency measures, and judgments are made to determine the cause-and-effect relationship between the efficiency measures and the factors identified. The identified factors are then incorporated into the DEA model, and the process is repeated until no other factors that determine the efficiency measures remain. The stepwise approach is beneficial for decision-making purposes, as this method can interpret why particular units are either efficient or inefficient at each step, by separating the efficiency scores of every step in the efficiency tables. (See also Sigala et al., 2004.)

Marketing

As competition in the hotel industry becomes more intense, it is increasingly important for hotels to invest more in marketing activities to attract and retain guests and distinguish themselves from their rivals in order to stay in the industry (Keh, Chu, & Xu, 2006; Brown &

Ragsdale, 2002). Investment in processes is important, as it influences customer satisfaction and service quality in the end (Roth & Jackson, 1995); if processes perform badly, it will affect the efficiency, and certainly competitiveness of firms.

Like most companies, hotel firms typically spend considerable amounts of their budgets on marketing activities, including sales and promotion (branding). According to Kotler (1984), marketing is considered a social and managerial process by which individuals obtain what they need and want through creating and trading product and values with others. Moreover, a marketing-oriented firm tries to create value through providing goods and services geared towards consumers (Levitt, 1986). Cizmar and Weber (2000) claimed that effective marketing activities are positively related to business performance; they also argued that if a service firm wants to perform well, it has to analyze the market and plan and implement marketing strategies properly. As discussed earlier (see Morey and Dittman, 1995; Philips, 1996; Barros, 2005; Gundersen, Heide and Olsson, 1996), a firm's efficiency/productivity depends very much on the ability of the managers to formulate the right marketing strategies, which could then be implemented effectively by the marketing department within the service firm. Consistently, Mandelbaum and Nicholas (2006) stressed the importance of the marketing department, in particular marketing personnel. They argue that the growth in brands and market segmentation has stimulated the need for hotels to "staff up" within the marketing department. Employing the DEA model, Keh et al. (2006) highlighted the crucial role of marketing and promotion in enhancing firms' efficiency. However, they also argued that if marketing expenditure is too excessive, the purpose of marketing may be defeated. That is, service firms should first minimize the level of marketing expenditure efficiently and then use marketing effectively to raise the level of productivity.

Market positioning, through various promotional and communication strategies, is part of the marketing processes and refers to the location of a brand relative to its competitors in the customers' minds (Kim & Kim, 2005; Reis & Trout, 1972). Brands have also been increasingly considered as primary capital, termed brand equity, for the hospitality industry to obtain the competitive advantage (Kim & Kim, 2005; Gundersen et al., 1996; Prasad & Dev, 2000), which in turn fosters the role of strategic alliances. Brands are based on customer perceptions, which are important to a firm's success. Indeed, if a firm is able to project a clear image, it can communicate effectively with its customers in terms of service, price, and

amenities (Brown & Ragsdale, 2002; Prasad & Dev, 2000). Thus, effective marketing programs on branding are important, because they create greater awareness and association of the brand with customers, which induce customer loyalty and their willingness to pay a premium price for the brand (Kim & Kim, 2005).

Consumer Satisfactions, Service Quality, and Pricing

Understanding consumer satisfaction is critical as it is believed that satisfaction leads to repeat purchases and favorable word of mouth promotion by clientele (Matilla & O'Neil, 2003; Cardozo, 1965; Fornell, 1992; Halstead & Page, 1992). In the hotel industry, customers tend to stay loyal to a brand when they are satisfied with the quality of the service that has been provided. As such, service quality has an important effect on the performance and competitiveness of the hotel. (See also Akbaba, 2006.)

Consumer (dis)satisfaction consists of the general feelings that a consumer has developed about a product or service after its purchase (Westbrook & Oliver, 1991). In addition, this is influenced by items such as culture, social class, personal influence and family, and other individual differences (motivation and involvement, knowledge, attitude, lifestyle, personality, and demographics) (Engel, Blackwell, & Miniard, 1990). Numerous studies have linked satisfaction with product attributes (Choi & Chu, 1999), instead of the product themselves (Mittal, Kumar, & Tsiros, 1999; Ratchford, 1975; Ladd & Zober, 1977). Attributes are the underlying characteristics of the product or service. According to Ratchford (1975), product attributes may be measured either objectively (e.g., presence of facilities, number of rooms, etc.) or perceptually (e.g., cleanliness of hotel, staff's helpfulness and efficiency, etc.) (Oh, 1999; Dube, Enz, Renaghan, & Siguaw, 1999).

Gundersen et al. (1996) used Linear Structural Relations (LISREL) to examine hotel customer satisfaction among business travelers. LISREL is a modeling program that can be employed to empirically assess theories that are usually formulated as theoretical models for observed and latent (unobservable) variables. If data are collected for the observed variables of the theoretical model, the LISREL program can be used to fit the model to the data (Ssicentral.com, 2007). In their study, Gundersen et al. (1996) demonstrated that tangible and intangible dimensions of three departments (reception, housekeeping, and food and beverage) could explain overall satisfaction, in which tangible aspects of the housekeeping and

intangible aspects of reception were found to have the strongest effects on overall guest satisfaction.

Choi and Chu (1999) discussed service quality in the hotel industry. They were of the opinion that service quality is difficult to define and argued that as hotel products and services become more homogeneous, it is crucial for hotels to provide high quality services to differentiate themselves from their competitors. Lewis and Booms (1983), nevertheless, defined service quality as how well the service delivered meets customers' expectations, where delivering a quality service means conforming to customers' expectations. In addition, Berry, Zeithaml and Parasuraman (1990) stated that service quality cannot be measured objectively, and therefore it remains a relatively elusive and abstract construct; it is even difficult to measure. Some service quality measurement methods were proposed, and one such method is SERVQUAL. Akbaba (2006) used SERVQUAL to examine the service quality expectations of hotel customers. Caution has to be made that the service quality dimensions in the SERVQUAL differ from one segment of hotel industry to another and that cultural differences matter as well. Armstrong, Mok, Go, and Chan (1997) recognized this issue when applying the SERVQUAL and investigated the quality of service in consideration of cross-cultural differences. They found that the service expectations of hotel customers differed from culture to culture.

By adopting the model of Philips as the theoretical framework, which includes four equations (price of the product, direct production costs, market share, and returns on investments), and by applying the structural equations modeling, Campos-Soria, Gonzalez-Garcia, and Ropero Garcia (2005) analyzed and quantified the main interrelationships between service quality and the competitiveness of hotels, distinguishing between external and internal effects. The external effects are customer satisfaction and its influence on the sales volume and the client's willingness to pay. The external effect mainly refers to the average direct costs of service provision. They found that the service quality had a positive and direct effect on competitiveness. Moreover, they also found that service quality had an indirect effect via other variables, such as the occupancy level and average direct costs (Campos-Soria et al., 2005).

Another important variable that relates to customer satisfaction and service quality is pricing. According to Qu, Xu, and Tan (2002), hotel room price has a significant effect on the

demand for rooms. Tsai, Kang, Yeh and Suh (2005) further found that the hotel room demand is positively related to the consumer price index (CPI). That is, hotel room price possesses a relative quality, compared to general goods and services, which may either stimulate or deaden the hotel room demand. Matilla and O'Neil (2003) discuss the role of pricing on customer satisfaction. They argue that a customer may experience a similar level of service during two hotel stays, yet their satisfaction levels could be very different depending on the room rate (Matilla & O'Neil, 2003). Moreover, hotel customers expect to receive a higher level of service when they pay more for that service (Parasuraman, Berry, and Zeithaml, 1991). If a hotel fails to satisfy the customers' needs, the hotel will tend to lose its customers (Oh, 1999). From a focus group interview, Lockyer (2005) also found out that price has a major impact on the selection of accommodations through the process of early decision (budget, location, reason for stay etc.). Moreover, besides these early decision items, Matilla and Choi (2006) agreed with Armstrong et al. (1997) by emphasizing the role of cross-cultural influences on hotel room pricing. Previous research demonstrated that customer expectations differ between Asian and Western consumers, thus influencing their satisfaction with hotel services (Matilla & Choi, 2006).

Technologies and Innovation

Empirical studies have demonstrated the role of technology on hotel labor productivity enhancement. As technological innovation of products and services is different, innovation in the accommodation services should be treated differently. The hotel industry is a supplier-driven sector that innovates in applying research and development (R&D) embodied in technology, rather than undertaking internal R&D activities (Orfila-Sintes, Crespi-Cladera, & Martinez-Ros, 2005). As long as technological innovation leads to better and rapid reaction to the changing environment conditions and as long as the innovation is integrated in the company strategy, technology can be seen as a way to improve competitiveness (Orfila-Sintes et al., 2005). On the other hand, Barros and Alves (2004) also argued that technology investments may lead to improved total productivity; in particular they emphasised that *"Technological change (innovation) involves any investment that improves total productivity of a productive unit; it arises due to capital accumulation, which gives rise to the adoption of technology by best-practise hotels, thus, shifting the frontier of technology. In hotel business, technological change means investing in new […] techniques with the aim of improving results"* (p. 223).

The relationship between innovation propensity and the hotels category, governance settings and size are also considered by Siguaw, Enz, and Namasivayam, (2000). The results of their study show that higher-tariff hotels and hotels that belong to a chain are more innovative, because they tend to, and can easily, gain the "know-how" and other intangible assets compared with the lower tariff and hotels that do not belong to any chains. It has also been demonstrated that in order to improve the competitiveness, hotels need to adjust training and other human resources investments in response to innovations. (See, for example, Cohen and Levin, 1989; Gricliches, 1990; Olsen and Connolly, 1999; Sirilli and Evangelista, 1998). Moreover, Chandrasekar and Dev (1989) labelled technology in the service industry as knowledge technology, because the employees carry the knowledge that is needed in the hotel business. Pine (1992) discussed technology transfer in the hotel industry and acknowledged the importance of human capital in this process. He demonstrated that physical technology, such as buildings and associated equipment, are easy to transfer, but technology needed for innovative methods and processes in the service organization is more difficult to transfer. It requires different types of skills, knowledge, and absorption capacity of people. In particular, successful technology transfer in the hotel industry depends upon the availability and willingness of employees who are provided with adequate education, training, development, and promotional opportunities (Pine, 1992). Sigala, Airey, Jones & Lockwood (2004) further argued that productivity gains accrue not only from investments per se, but also from the full exploitation of the information and communication technology networking and informationalization capabilities.

Chandrasekar and Dev (1989) examined the relationships between technology and structure in the lodging industry by presenting a technological framework. The technological dimensions in this framework can be viewed from a service perspective along two dimensions: diversity, which refers to the number of different service units, and complexity, which represents the degree and nature of relationships that exist between subunits. They further indicated that increased diversity and complexity will have technological implications, which requires a more coordinated organizational structure.

Information Technology (IT), such as the Internet, intranets, and central reservation systems, is one of the crucial technology investments that are often made by hotels to improve performance (Wong & Kwan, 2001; Alpar & Kim, 1990; Mahmood & Mann, 1993; Law & Jogaratnam, 2005). Furthermore, Siguaw et al. (2000) stated that IT decisions will

improve performance and can create a competitive advantage. Ham, Kim & Jeong (2005) examined the effect of IT applications on the performance of lodging operations. Their findings indicate that the installation of computer applications in the front office could improve performance of hotels. Although installing back-office applications, such as personnel, purchasing modules, accounting modules, and financial reporting modules, may not contribute to the improvement of hotel performance in the short term, it does help with the improvement of the hotel's long-term productivity. Moreover, the unique finding of their study showed that restaurant and banquet management systems have a significant impact on the performance of the hotel operation.

Operational (Environmental) Costs

Some authors discussed operational costs, in particular environmental- and energy-related (Karagiorgas, Tsoutos, & Moia-Pol, 2007), of a hotel firm in relation with hotel performance and competitiveness. In many hotels, energy charges account for a substantial proportion of operating costs. After staffing costs, energy is one of the largest elements of expenditure; rising price of energy leads to an increase in operating costs for hotels and a potential reduction in profitability (SEI, 2001). Furthermore, Trung and Kumar (2005) stated that increasing costs of resources and the impact of waste could affect the income, environmental performance, and public image of the hotel.

Karagiorgas et al. (2007) introduced a model for the simulation of the energy flows and energy consumptions in a hotel. The energy flows in the hotel start from the various fuel inputs (such as LPG, electricity, etc.), which belong to eight cost centers (e.g. lift, catering, laundry, etc.) and finally down to the five end-use services (such as leisure, bar, baths, stay room, etc.). This model, which is based on the energy mix matrix, is applied to show the importance of reducing cost and the growing sensitivity to environmental factors in hotel designs. Shimming and Burnett (2002) stressed the importance of an energy management program in achieving increased profitability due to reduced operational costs and other non-business (sustainable development) reasons to conserve energy use in hotels. However, it is important to note that without the skills and knowledge of employees, it is not possible to implement effective energy management programs. Thus, human capital is a crucial factor; hotels should invest more in training and educate their staff about the environmental issues (SEI, 2001; Trung & Kumar, 2005).

Other Aspects of Hotel Competitiveness

Preble, Reichel, and Hoffman (2000) and Pine and Philips (2005) focused on the role of strategic alliances in the hospitality industry competitions. (See also Hwang and Chang, 2003) Strategic alliances are often formed with competing firms that possess complementary skills and resources (Varadarajan and Cunningham, 1995). Key resources include location, brand name, and customer base. Direct advantages for members are: quick access to new markets, technology, knowledge and customers, circumventing or co-opting regulatory barriers, absorbing a key local competitor, lowering risk by sharing costs, and benefiting from a partner's political connections.

Go et al. (1994) applied Porter's diamond model to assess the competitiveness of the hotel industry. As already discussed in the previous sections, there are four main factors that determine competitiveness, such as the factor conditions and demand conditions. (See also Pine and Philips, 2005.) The observations of Go et al. (1994) indicate that the hotel industry conforms to Porter's model. In particular, the hotel industry's performance is determined by the factor conditions, including well-trained staff and infrastructures; the demand conditions, such as the spending power of tourists; the supporting industries like transportation and travel industries; and firm strategy, structure, and rivalry, such as the entry mode, pricing strategy, and even the location of the head office of the hotel chains, etc. They also pointed out that a healthy market, together with effective investments in technology, are also important determining factors of the hotel industry's competitiveness.

Table 2 presents a summary of the major determining factors of hotel competitiveness from previous research and Table 3 lists the frameworks and models used in measuring hotel competitiveness.

(Insert Tables 2 and 3 here)

DISCUSSION

In cognizance of the multidimensionality of the competitiveness concept viewed at the country, industry, or firm level, the challenge researchers have to confront in future research lies in attaining a deeper understanding of the salient factors determining firm level

competitiveness. These factors involve internal corporate resource strengths (both tangible and intangible) in the context of the firm's immediate task environment (strategic moves by immediate competitors) and its relationship to the sustainability of destination competitiveness.

Our review has systematically surveyed an abundance of past and current research on firm-specific competitiveness and has drawn upon diverse methodologies with varying degrees of specificity and sophistication. Evidence from industry professionals suggests that managers lack an understanding of how competitive interventions can be planned, implemented, and integrated with existing processes or new processes for rapid scale-up of competitiveness. To address this issue, future research on hotel competitiveness could focus on investigating how existing models and approaches could be adapted for determining appropriate interventions in different stages of development of the hotel. This would provide a better understanding of the relationship between competitiveness and the functional process for developing fresh strategies to raise the firm's competitive edge.

At the state-level, some studies strongly suggested the need for organizational governance coupled with incentives and transparency to achieve efficiency in operational activities to achieve the ultimate goal of profitability for a hotel, while others extol the merits of privatization. While some researchers may strive to find the optimal balance between these two approaches, there is some bias towards the fostering of enterprise and risk-taking to stimulate growth and innovation in the industry. For large, emerging economies like China, scant evidence and reliable findings exist on the economic merits of the privatization of the hotel sector and its impact on the level of international and domestic competitiveness. Thus exist the need and the continuing challenge for researchers to undertake more rigorous, future in-depth research into the changing market structures in the competitive process.

A major concern in establishing, raising, and sustaining competitiveness (in the long run) at the firm, industry, and destination level, is the amount of resources available, its effective use, and its productivity. For the tourism and hospitality sector, the issues and measurement issues are even more demanding. Core resources ranging from the physiography of a destination to its culture and history and tourism superstructure, facilitating resources (availability and quality of capital and labor resources), enterprise and in-house (company) inputs and capabilities of a firm have to be clearly identified with their efficiency and

productivity accurately assessed. This highlights the critical need for future research on tourism and the hospitality sector to focus on developing appropriate methodologies for assessing the contributions made by these core resources in enhancing the sector's competitiveness in future research on productivity and efficiency.

Productivity concerns of hospitality firms involve issues of efficient management, labor productivity (measurable), service productivity (elusive measures), and capital productivity. Change in emphasis and in the focus of productivity measures has been raised as an issue by some researchers (Brown & Dev, 1999; Brown & Dev, 2000) to address the need for a more appropriate comparative statistic. Thus, for further investigation into this issue in the future, it has been suggested that future research should include the modification of productivity measures to reflect the hotels' changing focus from a "rooms-only" orientation to a "full-service" one, which then makes the use of a Sales per available room (SalesPAR) measurement a more useful one than Revenue per available room (RevPAR). This is also related to the possible change in research emphasis towards customer-oriented measures as opposed to product-oriented ones. Furthermore, it has been argued that productivity measures incorporating the actual purchasing habits of the customer over time may be more valuable than those calculations which only take into account the physical assets of the hotel and its employees, thus signaling a need to change the research focus in this aspect as well.

On the methodological frontier for research into firm-specific competitiveness factors in hotels, the application of the non-parametric approach data envelopment analysis (DEA) will be beneficial, as it is a rigorous productivity analysis tool that provides a direct assessment of efficiency to be compared with financial performance. It takes into consideration multiple input and output measurements in the evaluation of relative efficiencies of the *large* decision-making units in international hotel chains. As such, it has distinct advantages over methods such as the asset-process-performance approach. In addition, with greater attention and resources devoted by the prominent hotel groups (global presence) to serious market research on its growing clientele, the compilation of detail and quality data will also expedite the use of DEA for more complex productivity analysis.

The growing number of strategic alliances among the various segments of the hospitality industry (hotels, travel agents, card companies, cruise companies, etc.) will also intensify competition in the already fiercely competitive industry by strengthening competitive

advantages of incumbent firms. This will further complicate the measurement of efficiency and productivity changes associated with re-structuring and altered use of resources (manpower, capital, assets, etc.) within enlarged or re-engineered units. Does size matter? What is the optimal size of a firm (hotel, tourist attraction, etc.) before it reaps economies of scale or suffers diseconomies of scale? In relation to these developments, in the future, greater effort should be devoted towards developing extensions of DEA and more sophisticated methods of efficiency measures, such as bootstrapping techniques, to further raise the level of accuracy in these key measurements in the tourism and hospitality sector for competitive analysis.

In addition, further development of new assessments of methodologies and indicators will be needed as technological innovation and technological transfers (globally) experienced by expanding hospitality firms lead to higher productivities, increased diversities, and a more rapid response to the changing business environment (task and general environment).

Viewing competitiveness research in broader terms, the quest for ascertaining and evaluating the level of competitiveness of a tourism destination will continue to be on the agenda of Tourism Authorities and Government Agencies. For destination competitiveness, future research will need to continue focusing on the construction and development of appropriate and useful travel and tourism competitive indices. While price competitiveness may take precedence over the other identified factors driving competitiveness, the attention to non-price attributes of a destination will attain greater significance as recognition of the increasingly discerning travelers highlights the other service attributes and qualitative differences that makes a destination attractive or special. Dwyer and Kim (2003) emphasize this latter issue, stating the need for further research to integrate the objective and subjective attributes of competitiveness by integrating the hard and soft factors into a single index.

CONCLUDING REMARKS

In a multifaceted industry like tourism and hospitality, the identifiable attributes that contribute to a destination's competitiveness will vary in their importance across locations, depending on the product mix and target market segments. In the past, some researches have attempted to assign "appropriate" weightings to different attributes of competitiveness based on differences in location and the size of economies to evaluate the level of competitiveness

between destinations. Moreover, this study also points out the significance of economies of scale and other benefits that arise from clustering of tourist attractions and provision of appropriate tourist-related infrastructure and equipment. Importantly, the state of competitiveness of a destination can effectively be raised by the quality of services and organizations (tourist) which complement these clusters and built-infrastructure. Integrating these related products and services in an appropriate manner will contribute towards maintaining and building a destination's continuing (sustained) competitiveness. Nonetheless it is noteworthy that there is still no universal recipe for determining tourism competitiveness.

As competitiveness continues to be one of the core issues for tourism destinations and the hotel industry, a good understanding of competitiveness-related issues, such as the determinants, measurements, frameworks, and models, could help policymakers and industry operators not only pinpoint stronger areas for reinforcement and weaker ones for improvement, but also formulate informed corporate strategies and decisions that will help maintain/establish a competitive position for the enterprises. Ultimately, it has been argued by some researchers that destination planners and policymakers will only succeed in the "competitive game" in the long run if it can raise the standard of living (welfare) for its own residents along with its tourism development.

This review article served the purpose of providing updated knowledge on theories, concepts, ideas and empirical studies on competitiveness in the context of tourism destinations and the hotel industry and should assist, to a large extent, researchers in advancing from existing knowledge bases. Further research work on critical issues in the competitive process, competitive forces at the industry, firm-specific level, as well as the destination level, have also been suggested. Through such work and the development of appropriate methodologies for assessment and key indicators for future benchmarking, the understanding of the ever-changing parameters, policies, and institutional elements in the business environment that impact future competitiveness in the hospitality and tourism sector can be further enhanced.

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Table 1 Major Determinants of Tourism Destination Competitiveness

MAJOR DETERMINANTS	AUTHORS
Technology and Innovation	Bordas (1994); Chon & Mayer (1995); Gooroochurn & Sugiyarto (2005); Heath (2003)
Infrastructure	Bahar & Kozak (2007); Bordas (1994); Crouch & Ritchie (1999); Dwyer & Kim (2003); Enright & Newton (2005); Gooroochurn & Sugiyarto (2005); Kozak & Rimmington (1999); TTCI (2008)
Human Capital	Bordas (1994); Chon & Mayer (1995); Gooroochurn & Sugiyarto (2005); Heath (2003); Go & Govers (2000); Mazanec et al. (2007); TTCI (2008)
Price	Chon & Mayer (1995); Crouch & Ritchie (1999); Dwyer & Kim (2003); Dwyer et al. (2000); Gooroochurn & Sugiyarto (2005); Kozak & Rimmington (1999); TTCI (2008)
Environment (Milieu)	Dwyer & Kim (2003); Enright & Newton (2005); Gooroochurn & Sugiyarto (2005); Heath (2003); Kozak & Rimmington (1999); Ritchie & Crouch (1993; 1999); TTCI (2008)
Openness	Gooroochurn & Sugiyarto (2005), TTCI (2008)
Social Development	Dwyer & Kim (2003); Enright & Newton (2005); Gooroochurn & Sugiyarto (2005); Mazanec et al. (2007)
Human Tourism	Go & Govers (2000); Gooroochurn & Sugiyarto (2005); TTCI (2008)
Government	Bordas (1994); Crouch & Ritchie (1999); Dwyer & Kim (2003); Enright & Newton

	(2005); Go & Govers (2000); Kozak & Rimmington (1999); TTCI (2008)
History and Culture	Bahar & Kozak (2007); Crouch & Ritchie (1999); Dwyer & Kim (2003); Enright & Newton (2005); Go & Govers (2000); Heath (2003); Kozak & Rimmington (1999); Mazanec et al. (2007); TTCI (2008); Yoon (2002)
Micro Environment	Bordas (1994); Crouch & Ritchie (1999); Dwyer & Kim (2003); Enright & Newton (2005)
Macro Environment	Bordas (1994); Chon & Mayer (1995); Crouch & Ritchie (1999); Dwyer & Kim (2003); Enright & Newton (2005); TTCI (2008)
Destination management (Marketing)	Bordas (1994); Chon & Mayer (1995); Crouch & Ritchie (1999); Dwyer & Kim (2003); Dwyer et al. (2000); Enright & Newton (2005); Go & Govers, (2000); Heath (2003); Kozak & Rimmington (1999); TTCI (2008); Yoon (2002)
Situational Factors	Crouch & Ritchie (1999); Dwyer & Kim (2003); Dwyer et al. (2000); Enright & Newton (2005); Go & Govers (2000); Heath (2003); Kozak & Rimmington (1999); TTCI (2008)
Demand Conditions	Bordas (1994); Dwyer & Kim (2003); Go & Govers (2000); Song, Liu, & Romilly (2000)
Customer Satisfaction	Bahar & Kozak (2007); Chon & Mayer (1995); Fuchs & Weiermar (2004); Go &Govers (2000); Gooroochurn & Sugiyarto (2005); Kozak & Rimmington

	(1999)
Social, psychological factors	Crouch & Ritchie (1999), Enright & Newton (2005); Song, Romilly & Liu (2000); Yoon (2002)

Table 2 Major Determinants of Hotel Competitiveness

Factors	Authors
Destination	Go et al. (1994); Cizmar & Weber (2000)
Human Capital, Education Level, Training	Go et al. (1994); Philips (1999; 1996); Morey & Dittman (2003); Wong & Kwan (2001); Brown & Dev (1999); Barros (2005); Yang & Lu (2005); Reynolds (2004); Cizmar & Weber (2000); Mandelbaum & Nicholas (2006); Gundersen et al. (1996); Brown & Ragsdale (2002); Orfila-Sintes et al. (2005); Chandrasekar & Dev (1989); Sustainable Energy Ireland (2001); Kumar & Trung (2005)
Technology	Go et al. (1994); Philips (1999); Wong & Kwan (2001); Brown & Dev (1999); Orfila-Sintes et al. (2005); Go et al. (1994); Ham et al. (2005); Chandrasekar & Dev (1989); Siguaw et al. (2000); Law & Jogaratnam (2005); Barros & Alves (2004); Sigala et al. (2007)
Strategies	Go et al. (1994); Philips (1999; 1996); Morey & Dittman (2003); Yeung & Lau (2005); Wong & Kwan (2001); Brown & Dev (1999; 2000); Barros (2005); Cizmar & Weber (2000); Hwang & Chang (2003)
Productivity	Brown & Dev (1999); Barros (2005); Reynolds & Thompson (2007); Reynolds (2004); Yang & Lu (2006); Sigala (2004); Seol, Choi, Park & Park (2007); Barros & Alves (2004); Brown & Dev (2000)

Capital	Brown & Dev (1999); Barros (2005)
Customer Satisfaction – Service quality	Reynolds & Thompson (2007); Brown & Ragsdale (2002); Campos-Soria et al. (2005); Matilla & O'Neil (2003); Gundersen et al. (1996); Reynolds & Biel (2007); Chu & Choi (1999); Armstrong et al. (1997); Akbaba (2006)
Brand Image	Brown & Ragsdale (2002), Kim & Kim (2005); Prasad & Dev (2000)
Strategic Alliances	Preble et al. (2000); Kim & Kim (2005); Pine & Philips (2005)
Operational Costs (environmental)	Barros (2005); Sustainable Energy Ireland (2001); Trung & Kumar (2005); Karagiogras et al. (2007)
Market Conditions	Go et al. (1994), Philips (1999); Morey & Dittman (2003); Yeung & Lau (2005); Brown & Dev (1999); Barros (2005); Yang & Lu (2006); Reynolds (2004); Brown & Dev (2000)
Demand Conditions	Go et al. (1994); Philips (1999); Brown & Dev (1999)
Marketing	Go et al. (1994); Cizmar & Weber (2000); Keh, Chu, & Xu (2006); Mandelbaum & Nicholas (2006)
Pricing	Reynolds & Biel 2007, Qu et al. (2002); Matilla & O'Neil (2003); Lockyer 2005, Matilla, & Choi
Physical Characteristics	Philips (1999); Morey & Dittman (2003); Barros (2005); Reynolds (2004); Yang & Lu (2006); Reynolds & Thompson (2007)
Process Management	Philips (1999); Yang & Lu (2006); Cizmar & Weber (2000); Seol et al. (2007)

Table 3 Frameworks and Models Applied in Measuring Hotel Competitiveness

Frameworks and Models	**Authors**
Data Envelopment Analysis	Barros (2005); Reynolds & Thompson, (2007); Reynolds (2004); Yang & Lu (2006); Brown & Ragsdale (2002); Keh et al. (2006); Reynolds & Biel (2007); Johns, Howcroft, & Drake (1997); Sigala (2004); Wang et al. (2006); Seol et al. (2007); Sigala et al. (2004); Hwang & Chang (2003)
LISREL	Gundersen et al. (1996)
SERVQUAL	Akbaba (2006); Armstrong et al. (1997)
Structural Equations Modeling	Campos-Soria et al. (2005)
Porter's Diamond	Go, Pine, & Yu (1994)
Hotel Performance Measurement Framework	Philips (1999)