THE IMPACT OF INDUSTRY FORCES ON RESOURCE COMPETITIVE STRATEGIES AND HOTEL PERFORMANCE

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CHAPTER I

INTRODUCTION

The hospitality industry is dramatically changing with intense competitions and sophisticated consumers. These changes force hospitality management to seek sustainable competitive advantages in the business (Olsen, West, & Tse, 1998). Strategy researchers argue that achieving a competitive advantage depends upon the firm's ability to utilize existing resources and its ability to accumulate new resources more efficiently and effectively relative to competitors (Mahoney & Pandian, 1992; Prahalad & Hamel, 1990). Most companies adopt a more dynamic strategy related to the existing resources in order to defend themselves against industry structures and increase their market share and performance. Before creative business strategies, however, environment factors come into the consideration of establishing strategies.

External environment is the primary determinant of hotels being competitive of every other hotel firm. The firm's competitive environment influences its ability to successfully carry out a chosen strategy (Hibbets, Albright, & Funk, 2003). External environment establishes the context evaluating the importance of various relationships between strategy and performance (Chacko, 1998). Without the appropriate form between external environment factors, organization structure, and competitive strategies, hotel firms may experience difficultly in achieving long-term success (Olsen, 1993).

Business management has been applied in hospitality industry for many years. In 1990, business management was determined to be an appeal of sectors in which the company was competing and by the competitive position of the company in sectors. This emphasized the external firm's competitive advantage, based on capitalizing on the relative imperfections of the sector in which the firms compete and external environment (McGahan & Porter, 1999; Porter, 1985; Wiggins & Ruefli, 2002). However, a recent idea of analyzing competitive advantage from an internal organization perspective has emerged (Lopez, 2005; Ray, Barney, & Muhanna, 2004). The diverse nature of resources is an essential element in the development of business activity and plays a key role in the evolution of organizational structure and performance (Lopez, 2005).

Lodging Industry in the United States

Hospitality businesses are one of the industries that are highly competitive with many competitors and experience dynamic environmental changes. In the United States, travel and tourism are one of the top ten largest industries, and this industry has some of America's largest employers including everything from lodging establishments, airlines, and restaurants to cruise lines, car rental firms, travel agents, and tour operators (American Hotel and Lodging Association [AHLA], 2009). For the lodging industry, there were 48,062 hotels or lodging properties in the U.S in 2007. More than 4.48 million guests have generated $139.4 billion in sales revenue in 2007. This is an increase from $122.7 billion in sales with 4.40 million guests in 2006. The 2007 revenue per available room (RevPAR) was $65.52 with 63.1% average occupancy rate (AHLA, 2009, 2006).

AHLA categorized the lodging characteristics in 2007 by location, rate, and size described in Table 1. More than 65% of the lodging properties are located in suburban and small town areas and have over than 55% of number of guestrooms. The lodging room rate more than $60 comprises 53% of the lodging properties. 57% of the lodging properties are small size properties (under 75 rooms) and represent 26% of number of guestrooms.

Table 1

Lodging Characteristics by Location, Room Rate, and Size

Property Breakdown	Properties*		Number of Guestroom**	
By Location				
Urban	4,544	(9%)	699,272	(16%)
Suburban	16,264	(34%)	1,609,913	(36%)
Airport	2,008	(4%)	282,733	(6%)
Interstate	6,915	(14%)	463,078	(10%)
Resort	3,641	(8%)	571,254	(13%)
Small metro/town	14,690	(31%)	849,941	(19%)
By Rate				
Under $30	828	(2%)	54,865	(1%)
$30-$44.99	6,934	(14%)	424,400	(9%)
$45-$59.99	14,685	(31%)	925,263	(21%)
$60-$85	14,507	(30%)	1,293,645	(29%)
Over $85	11,108	(23%)	1,778,018	(40%)
By Size				
Under 75 rooms	27,210	(57%)	1,159,166	(26%)
75-149 rooms	15,089	(31%)	1,595,436	(36%)
150-299 rooms	4,166	(9%)	832,957	(19%)

300-500 rooms	1,089	(2%)	404,963	(9%)
Over 500 rooms	508	(1%)	483,669	(11%)

*Based on 48,062 properties, ** based on 4,476,191 guestrooms

Hotel Competitive Strategy

Most organizations state their positions with the forces in environments in order to achieve sustained performances (Olsen & Roper, 1998). Olsen and Roper (1998) summarized previous research in strategic management in the hospitality industry. The research of strategy in the hospitality industry has been of two types: the conceptual contemporary work and the empirical approach. The conceptual framework, developed from other sectors, applies to the hospitality industry without the actual conduct of empirical investigation. The empirical approach applied the conceptual frameworks to theory building. Furthermore, the most recent strategy research has focused on identifying what abilities within the hospitality industry offer competitive advantages.

Due to the special characteristics of hotel industry and the dynamic competitive environment, hoteliers are challenged with advantages over the industry environmental factors and choose the competitive strategies leading to superior performance. For example, the hotel business will succeed only if hoteliers are able to see opportunities in the environment of the business, invest in adding competitive strategies, and allocate resources to these strategies, which add the greatest profitability to the firm (Olsen et al., 1998). Neither environment nor strategy nor organization structure acting alone is sufficient to explain the differences in performance (Lenz, 1980). Hotel firms should adapt themselves to the rapidly changing industry environments (industry five force factors approach), and continually develop new resources (resource-based approach) to achieve long-term growth and profitability (Kim & Oh, 2004). If hotel firms would like to be competitive in the business, they need to understand the links among environment, strategy, and performance (Olsen et al., 1998; Philips, Davies, & Moutinho, 2002). In other words, hoteliers' responses are to determine a relationship between competitive forces and implementing strategy choices (Hibbets et al., 2003).

The literature indicates that the firms can have a single strategy or many strategies. These strategies are likely to exist into three levels: corporate level, business level, and functional level strategies. The theoretical and empirical studies of the relationship between strategy and organizational performance have mainly emphasized on business strategy (Lee, 1988). The strategies to gain competitive advantages are plenty though they may be changing over time. However, implementation of strategies must rely on firm's resources and capabilities, which the resource-based researchers have focused on (Chen & Kuo, 2004). Table 2 explains the development of competitive strategies utilization by leading firms making up the multinational hotel industry from the period of 1985-1994 (Olsen et al., 1998).

Table 2

Competitive Methods of Hotel Firms 1985-1994

Competitive Methods	Definition
Frequent guest programs	Programs designed to build customer loyalty by providing special privileges and free travel opportunities to frequent guests
Strategic alliances	Efforts made by firms to formally corporate in such programs as advertising and marketing, sharing products and customers, and financing activities designed to maximize hotel occupancy
Computer reservation systems	Designed to fill rooms at rates that maximize the revenue yield per room
Amenities	Added products and services available to the guest once they have registered
Branding	Creating and delivering new products to the customers such as budget, economy, luxury, and business class hotels
Technology innovation	All elements of communication systems, decision support systems for management, accounting services, safety and security programs, automated check-in and check-out services, etc.
Niche marketing and advertising	Specific target markets emphasizing special products and services to those markets
Pricing tactics	Discounting and yield management
Cost containment	Reducing all costs associated with running a hotel
Service quality management	Improving service quality by such techniques as total quality management, continuous process improvement etc.
Franchising and management fee	Growth strategy for the firms that posses unique capacity to deliver the necessary capabilities in each case
Employees as important assets	Placing new value on the role of the employee in delivering and executing the delivery of high-quality products and services

Source: Olsen et al. (1998:159)

Starting in 1985, the hotel industry has been using the competitive strategies such as brand creation, frequent guest programs, technology innovation, and computer reservation system to obtain competitive advantage over competitors. In the mean time, service quality in terms of training guest contact employees, maintaining high quality product and service, setting goals to meet customer expectations is considered as being competitive in the business (Olsen et al., 1998). Even these competitive strategies have been adapted since twenty years ago; these strategies are continually being practiced in the hotel firms until present days. At the same time, many hotels also develop new competitive strategies over time.

For example, Marriott Corporation Inc. provides new bedding of all the chain hotels, offers high technology entertainment such as iPod, 32-inch TV screen, and sound system, and creates website for customers in order room service before their arrivals (Marriott International Inc., 2005). Hilton Hotels Corporation uses the strategy of creating new products (properties) to expand the new market segmentation (Hilton Hotels Corporation, 2005). Choice hotels International aims on strategies that can increase customer satisfaction, developing the brand equity and property performance, expanding the market segmentation (economy extended stay segment), and improving revenue performance as well as profitability (Choice Hotels International, 2005). Super 8 niches the market with cost-conscious customers, while Four Season differentiates itself as a luxury hotel (Crook, Ketchen, & Snow, 2003). The competitive strategies differentiate one hotel to another. It will be able to increase customer loyalty and drive demand for the hotel business.

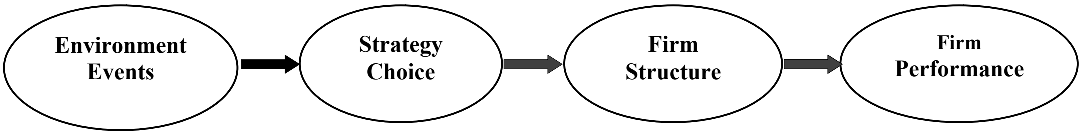
Qu and Sit (2007) argued that hotel products and facilities are relatively homogenous, and the hotel industry is very competitive. Hence, not only services or facilities but also the supplemented services provided by hotels can differentiate one hotel from another. Customers are not only looking for basic services and facilities provided by a hotel, they also expect good quality in these basic services and facilities. Therefore, hoteliers should maintain good service standards in the service and facility areas. These hotels continue in adapting and improving these competitive strategies to be more effective for the present and future success.

Background of the Problem

Many hoteliers constantly struggle to formulate strategies in which the hotel can move from the current competitive position to a newer and stronger one for business success. Olsen et al. (1998) stated that the relationship among environments, strategy, organization structure, and performance occurs in hotel and restaurant businesses. Figure 1 shows the co-alignment principle of the relationship among environments, strategy choices, organization structure, and firm performance.

Figure 1

Co-Alignment Principle



Source: Olsen et al. (1998:2)

Even though there have been attempts to examine the relationships between environment, strategy, and performance (Prescott, 1986, Olsen et al., 1998), research has not adequately addressed the issue of whether industry forces are independently related to resource competitive strategies, which lead to firm performance. The extent of literature of this area is hardly developing (Taylor & Edgar, 1996; Olsen & Roper, 1998). Although identification of the sources of competitive advantage has become an increasingly important priority in the fields of strategic management and marketing, hoteliers have made little effort to comprehend how a hotel's success can be achieved (Kim & Oh, 2004). It is argued that a firm's strategic adaptation occurs through managerial perceptions of its industry environment (Weerawardena, O'Casee, & Julian, 2006). Therefore, some challenging issues will be addressed for being competitive and successful in the hotel business as follows.

Firstly, some previous studies explored the effect of hotel size (Pine & Phillips, 2005; Claver-Cortes, Molina-Azorin, & Pereira-Miliner, 2007) and hotel affiliation (Claver-Cortes et al., 2007; Holverson & Revaz, 2006; Mitsuhashi & Yamaga, 2006) on the criteria of resource competitive strategies and performance. However, there is no evidence investigating the effect of hotel size and hotel affiliation on the factors of industry forces and organization structure. Hence, this study would like to explore the relationship of these variables. Hoteliers who operate the business with different types of hotel size and affiliation may have different perceptions toward industry forces and organization structure.

Secondly, there are many important factors to create the hotel competitive advantage: both external and internal environmental factors. Most researches tend to emphasize one single factor only, either external or internal environment factor (Yang & Fu, 2007). The resource-based approach provides the internal firm's resource competencies measuring the organizational performance. However, the resource-based theory has one weakness: it neglects the environment (Foss, 1998; Verdin & Williamson, 1994). This approach neglects the external factors such as the needs of market constituents like customers and competitors (Kim & Oh, 2004), which is related to the industry five force factors of Michael Porter (Stonehouse & Snowdon, 2007). Weerawardena et al. (2006) argued that the strengths of the relationship of industry forces was weaker than expected suggesting the need for further research into both industry specific and firm-specific factor jointly impacting the firms' strategies. Therefore, this study concludes the two approaches: industry five forces approach and resource-based theory to investigate hotel performance. These two approaches share a common process for the implementation of strategies and need to be integrated to better understanding in the hotel industry. In addition, there has not been much empirical work on these two approaches (Kim & Oh, 2004).

Thirdly, many researches showed effectiveness in terms of larger economics of scale, bargaining power over customers, and financial performance of hotel affiliation – chain hotels over independent hotels (Brown & Dev, 2000; Claver-Cortes et al., 2007; Holverson & Revaz, 2006; Mitsuhashi &Yamaga, 2006). However, there is a lack of supportive literatures on the relationship of hotel affiliation over industry forces of new hotel entrants and resource competitive strategies.

Lastly, many previous studies stated the influence of organization structure on the organization success (Olsen, et al., 1998; Porter, 1980a,b; Miles & Snow, 1978).

Organization structure plays a major role by being moderating effect (Tarigan, 2005; Boyer, Leong, & Ward, 1997; Maffei & Meredith, 1995) on the relationship between competitive strategies and performance. These results, however, did not provide much of the strong evidence in the moderating effect of organization structure on the relationship between resource competitive strategies and performance. This study would further explore the moderating effect of organization structure – organic and mechanistic structure – on the relationship between industry forces and resource competitive strategies. This investigation is not found in the hospitality industry, especially in the hotel firms. Hoteliers are the groups who develop the competitive strategies and more likely to apply the mechanistic structure for strategy development. However, at the operation function, most of the operative staffs would like to implicate the organic structure for the workflow. Therefore, this study would like to investigate the two different levels of organization structure in the hotel operations.

The purposes of this study are to: (1) build and test the theoretical model measuring hotel performance by integrating the industry force factors and resource-based approaches, and (2) test the hotel affiliation and organization structure moderating effect.

Objectives of the Study

According to the previous background of the problem, the objectives of this study are to:

1. Build a theoretical model of the hotel competitive advantage to measure hotel performance based on the industry force factors and resource-based approaches;

2. Assess the structural relationships among industry forces, resource competitive strategies, and hotel performance;
3. Explore the significant difference between hotel size and affiliation to industry forces, resource competitive strategies, organization structure, and hotel performance;
4. Evaluate the moderating effect of hotel affiliation on the relationship between industry forces and resource competitive strategies; and between resource competitive strategies and hotel performance;
5. Evaluate the moderating effect of organization structure on the relationship between industry forces and resource competitive strategies; and between resource competitive strategies and hotel performance; and
6. Make recommendations to hotel firms to improve resource competitive strategies for achieving superior performance and to sustain competitive advantage in the hotel business.

Significance of the Study

Theoretical Contribution

The theoretical contribution of this study is to establish a model that explains the achievement of hotel superior performance by integrating the external (Industry Five Forces Approach) and internal factors (Resources-Based Theory). This study further assesses the moderating effect of organization structure (organic and mechanistic structure) and hotel affiliation (chain and independent) on the relationship among industry forces, resource competitive strategies, and hotel performance (behavioral and financial).

Practical and Managerial Contribution

All hospitality researchers in strategic management need to contribute more to the theoretical knowledge by providing new insights into mainstream strategic theories given different industrial applications (Olsen & Roper, 1998). The hoteliers should be aware of the changes of all external and internal factors in developing competitive strategies for hotels. Integrating all the possibilities to make the business sustainable is very important. When hoteliers identify the strengths and opportunities of their hotel firms, they will be able to niche the marketing strategy into the right market segmentation. In the meantime, hoteliers will have the opportunities to investigate hotel firms' weaknesses and threats. Hence, hoteliers can find the appropriate solutions to decrease these disadvantages. The internal organization structure should take the business success in to account. Modifying the organization structure with the current environmental changes provides a good opportunity for the business to survive and achieve the most profitability level. Lastly, hotel affiliation is another option for the hoteliers to consider switching their operations. One or another might provide the competitiveness in hotel business than others. Therefore, hoteliers should consider finding the most profitable option for their business.

Definitions of Terms

Definitions of terms vary within different research and their constructs. This study defines terms of the constructs: industry forces, resource competitive strategies, organization structure, hotel performance, hotel size, and hotel affiliation as follows:

Industry forces

Industry forces refer to the underlying economic and technical characteristics of a hotel industry. Industry forces include the strength of each of the competitive forces: rivalry among existing firms, bargaining power of buyers, and threats of new entrants (Porter, 1985).

Resource Competitive Strategies

Resource competitive strategies are strategies of the hotel managerial decisions and actions for utilizing internal resources, which result in an overall direction of the firm and its long-term performance (Harrison, 2003; Hunger & Wheelen, 2000). In this study, resource competitive strategies include brand image, human resources, and information technology.

Organization Structure

Organization structure is defined as either mechanistic or organic. Mechanistic structures are highly formalized, non-participative, hierarchical, tightly controlled, and inflexible. On the other hand, organic structures are characterized by informality, decentralization of authority, open channels of communication, and flexibility (Khandwalla, 1977).

Hotel Performance

The accumulated end results of all the organization's work processes and activities in terms of behavioral (delivery products and services, customer satisfaction, and employee satisfaction) and financial (annual occupancy rate, profit after tax, and return on investment) performance (Robbins, 1984).

Hotel Size

Hotel size is related to number of beds criteria. According to Camison (2000), hotel sizes are classified as family hotel (1-100 beds), small hotels (101-150 beds), medium-sized hotels (151-300 beds), and large hotels (more than 300 beds). This study renamed family size as small size. Hotels with small and medium sizes were combined and named them as medium size.

Hotel Affiliation

Chain hotel is a hotel operated under management contract and franchise management. Independent hotel is owned and operated by families and /or entrepreneurs who build loyalty through tradition and quality (Holverson & Revaz, 2006).

Outline of Work

The organization of this dissertation is explained as follows. First, the background of the problem, objectives of the study, significance of the study, and definition of terms were explored in Chapter I. Secondly, Chapter II reviewed the literature explaining definitions and previous research regarding industry forces (rivalry among existing hotel firms, bargaining power of individual hotel customers, and new hotel entrants), competitive strategies, resource-based approaches (brand image, human resources, and information technology), organization structure (mechanistic and organic), hotel performance (behavioral and financial), hotel size (small, medium, and large), and hotel affiliation (chain and independent). From these literature reviews, the conceptual framework model and research hypotheses of this study were proposed. Then, the research methodology explained the research design, the instrument for data collection, sampling design, reliability and validity of the instrument, and data analysis in Chapter III. Statistical results and findings of this study were described in Chapter IV. Lastly, discussion, conclusion, academic and managerial implications, and limitations and future research were explained in Chapter V. References and appendixes (survey questionnaire and research approval from Institutional Review Board) were indicated at the end of this dissertation.

CHAPTER II

REVIEW OF LITERATURE

This chapter explored the relevant literature on related topics and attempted to integrate the findings within the following areas: industry forces, competitive advantage strategies, resources-based theory, organization structure, hotel performance, hotel size, and hotel affiliation. Lastly, the conceptual framework and research hypotheses were presented.

Industry Forces

Porter (1980a) provides a framework that models an industry as being influenced by five industry forces and it is called Porter's five forces approach. In every industry, the competitive advantage can be described through five competitive force factors: the threat of new entries, the threat of replacing products, the suppliers' power of bargaining, the customers' power of bargaining, and the rivalry inside between the firms of the same sector (Porter, 1980a; Passemard & Kleiner, 2000).

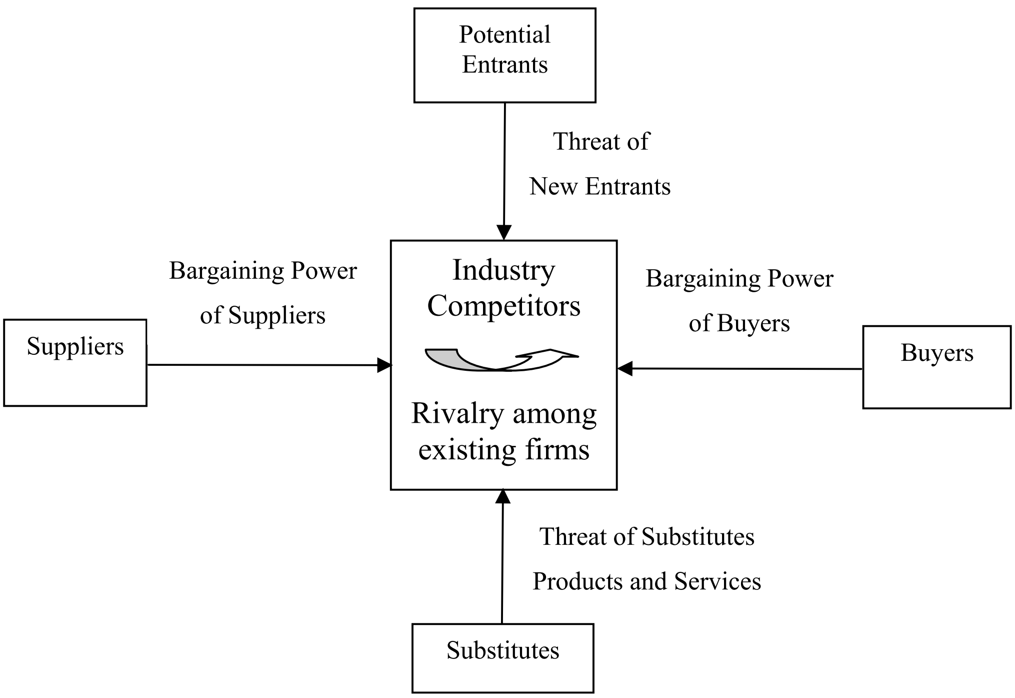
A competitive strategy is based on a deep analysis of factors of the industry and its evolution. Industry forces are the strength of each of the competitive forces function (Porter, 1985:5). Industry forces underline economic and technical characteristics of an industry (Passemard & Kleiner, 2000). The purpose of Porter's five forces model is to gain a thorough understanding of a particular industry by analyzing the external environments through analysis of five identified competitive forces (Porter, 1980a).

The industry forces approach is based on an assumption that firms within an industry possess identical or similar resources. As a result, a firm's success depends on how to react market signals and accurately predict the evolution of the industry structure (Kim & Oh, 2004).

Figure 2 shows the five competitive forces that determine industry profitability. In any industry, the rules of competition are embodied in five competitive forces: the entry of new competitors, the threat of substitutes, the bargaining power of buyers, the bargaining power of suppliers, and the rivalry among existing competitions.

Figure 2

Five Force Factors Approach



Source: Porter (1985:5)

The industry forces are often examined collectively to determine the nature or intensity of competition in a given market. From the five force factors, threat of substitutes and bargaining power of suppliers did not seem to have a major influence on competitive strategy (Hibbets et al., 2003). According to Kim and Oh (2004) and Olsen and Roper (1998), the bargaining power of suppliers in hotel industry appears to be low because of the large number of suppliers. This indicates no single supplier is dominating the lodging market. There is also the less threat of substitutes in hospitality industry. This occurs when hotels offer the similar or mass products and services (Dale, 2000). Since the bargaining power of suppliers and threat of substitutes tend to have little influence on implementing resource competitive strategies, the hotel business is mostly related to the customers, competitors, and new hotel entrants. Therefore, this study emphasized only on three force factors - rivalry among existing hotel firms, bargaining power of customers, and threats of new hotel entrants. The impact of bargaining power of suppliers and threat of substitutes were not included in this study. The overall assessment of industry forces gives an indication of whether these forces are strong for implementing competitive strategies.

Rivalry among Existing Firms

The degree of rivalry determines the extent to which the value created by an industry will be dissipated through head-to-head competition (Karagiannopoulos, Georgopoulos, & Nikolopoulos, 2005). Intense rivalry is the result of a number of interacting structural factors: numerous or equally balanced competitors, slow industry growth, high fixed or storage costs, lack of differentiation or switching costs, capacity augmented in large increments, and diverse competitors (Botten & McManus, 1999). Competitive intensity in hospitality industry has increased because of an increased number of operating units, new product introductions, and market entries of non-traditional products such as corporate housing (Kim & Oh, 2004). Rivalry occurs because competitors either feel the pressure or see the opportunity to improve position of products or services. In the case of differentiation among products, firms will use pricing strategy to attract customers. For example, Southwest and JetBlue niche their market by offering low price airfares (Crook et al., 2003).

For hotel industry, most rivals are determined according to the similarity of price, segment, and proximity (Mathews, 2000). Mathews (2000) argued that there is no single variable which can be used to identify key rivals for hotel industry. Firms are not independent and affected by the actions of other firms. Therefore, the hotel firm should not treat the competitors equally, because competitors can influence the hotel firms in different ways. Starwood Hotel & Resorts (2008) defines competition is generally based on the quality and the consistency of rooms, restaurant, and meeting facilities and services, attractiveness of locations, availability of a global distribution system, price, and the ability to earn and redeem loyalty program points. Competitors with disproportionately strong resource bases can be aggressive and create a strong rivalry. It is important to define the nature of rivalry in each market, as well as the industry as a whole.

Bargaining Power of Customers

Customer power increases the appropriation of the value created by an industry. The size and the concentration of customers are the determinant factors of buyer power. Buyers compete with the industry by forcing down prices, bargaining for higher quality or more services, and playing competitors off against each other (Botten & McManus, 1999). New technology can provide customers reserving hotels from anywhere in the world (Kim & Oh, 2004). Many hospitality firms neutralize buyer's power by creating loyalty programs that reward customers for repeat purchases and reduce buyer's power by differentiating products and services offerings (Crook et al., 2003).

New Market Entrants

The threat of new market entries refers to the prospect that new competitors entering an industry. The most common barriers to entry are: economics of scale, product differentiation, capital requirements, switching costs, access to distribution channels, cost disadvantages independent of scale, and government policy (Botten & McManus, 1999). Although the hotel industry has high entry barriers such as a huge amount of investment required building a building and the need for a national service network, but there still exists a threat of investing in hotels by companies or people with no experience in the industry (Kim & Oh, 2004). In contrast, Harrison (2003) argued that entry barriers in hospitality industry are not particularly high, so some hospitality firms have tried to make it harder for newcomers to enter by aggressively promoting their own brands, in hopes of creating differentiation and consumer loyalty. Hotel firms such as Marriott International, Choice Hotels International, and Hilton Hotels use their entry barrier through patented or proprietary know-how, restricted distribution channels, or difficulty in brand switching (Kim & Oh, 2004).

A key resource for successful firms is a competence in environment scanning (Jenkins, 2005). The five forces framework describes the differences across industries in terms of profitability. Understanding the environment helps hoteliers create the competitive strategies, which will drive change in that environment (Olsen et al., 1998). Depending on the environment, strategic management is often chosen based on the local conditions facing the hotel. Therefore, understanding the environment would appear to be a key element in strategy implementation (Crichton & Edgar, 1995).

Karagiannopoulos et al. (2005) found that industry forces are valuable for the business strategy formulation in the Internet industry. The business identifies the position in the market area and plan to fight against the competition that threatens strategic position before formulating strategies. The notion is that companies must adopt a more dynamic strategy in order to defend themselves against industry structures and increases their market share (Covin & Slevin, 1990). The firm must have knowledge of the industry (external conditions) to develop a competitive strategy (Barth, 2003). Olsen et al. (1998) proposed that hoteliers must observe trends developing industry forces and have considerable knowledge of the cause-and-effect relationships that exist between and among them.

The industry structure influences competitive marketing strategy offers the potential for improved understanding of environment-firm impacts of performance. Weerawardena et al. (2006) examined the relationship between industry structure (industry forces), organizational learning, innovation, and firm brand performance. This study hypothesized that the firms that perceive their industry environment as highly competitive tend to pursue innovative ways of performing activities to improve the firm brand's performance. Knowledge of the industry forces of competitive pressure highlights the strengths and weakness of a firm, and forms a useful basis of the evaluation of its position in the industry.

Hibbets et al. (2003) evaluated the influence of competitive environmental forces and firm strategy to decision making of adopting cost management tool. The results showed that product differentiating was more likely to apply in the firm than other competitive strategies (cost leadership). From the five force factors, the forces of rivalry and buyer power were strong competitive forces. However, the threat of substitutes did not show a major influence on these firms.

Competitive Advantage

The concept of competitive advantage is to describe where the organization currently derives the ability to contribute more value than its competitors. It refers to the degree to which the organization, under free market conditions, meets the demand of a product market while simultaneously maintaining and growing its profit levels (Chaharbaghi & Lynch, 1999). A firm's competitive advantage develops valuable firm resources and skills to yield position advantages and obtains positive outcomes in terms of market shares and profitability (Barney, 1991). In Jones's (2007:12) prospect, competitive advantage is "the ability of one company to outperform another because its managers are able to create more value from the resources at their proposal." Porter (1985) referred to competitive advantage as the strategy used for accomplishment over competitors. These could be three types of competitive advantages: cost advantage, differentiation, and focus. This study applied the differentiation of the internal resources as the competitive strategy for hotel firms.

Differentiation advantage is the superiority over the resources and capabilities of the company and its employees. Differentiation occurs by market (e.g. setting standards, raising value/expectations); by location (e.g. city centers or resorts); or by facilities (e.g. offering leisure facilities). These forms maintain basic price command and create barriers to enter causing non-price based competition, and therefore raising profitability and reducing loss of market share. The differentiation methods are often supported in their role by the level of after-sales service offered by the hotel groups (Crichton & Edgar, 1995). Differentiation entails customers perceiving a consistent difference in important attributes between the firm's offerings and its competitors' offerings (Bharadwaj, Varadarajan, & Fahy, 1993). Differentiation advantage is conferred by brand reputation, proprietary technology, or extensive sales and service network (Grant, 1991). Hotel brand name, image, and service that name implied build brand loyalty through tactics aimed at reinforcing differentiation factors. This differentiation is a strategy that is only sustainable in the long term (Dev & Hubbard, 1989).

Differentiation is aimed at mass market and involves the creation of a product or service that is perceived by its industry as unique. It selects one or more attributes that customers from an industry perceive as significant, and uniquely positions itself to meet needs. It is rewarded for its uniqueness with a premium price. With a successful differentiation strategy, loyalty to the firm's product will increase the assumption that customers are not too price-sensitive. The firm can charge premium prices for its products and services that are of better quality than others in the market. Some implications for differentiation strategy are: (1) the firm must provide some distinguishing characteristics such as superior quality, and (2) the firm must continually seek to innovate and to stay ahead of its rivals in quality and other differentiating attributes (Botten & McManus, 1999). Coyne (1986) pointed out that differences among competitors in plant locations, raw material choice, labor prices, and the like matter only when and if those differences translate into product/delivery attributes that influence the customers' choices of where to spend their sales dollars. Hotel managers can develop ways to differentiate themselves from competitors by entering market where their rivals are not located, or by using creative marketing plans in locations where many of their rivals are located (Mathews, 2000).

Porter (1980a) argued that an advantage comes from either having consistently lower costs than what the rivals have or by differentiating a product or service from the competitors. However, choosing one or the other is not enough, and choosing both may lead to disaster. The best competitors are those who have more than one or two keys strengths, and integrate a number of business activities in a way that is consistent, interconnected, and mutually reinforcing. Competitors cannot just match one source of advantage; they have to match the entire system. The creation of competitive advantage is a localized process, that it is in the company's home base, and that the essential competitive advantages are created and sustained (Goett, 1999).

A competitive advantage is meaningful in strategy only when three distinct conditions are met. First, customers perceived a consistent difference in important attributes between the producer's product and service and those of competitors. Second, the difference is the direct consequence of a capability gap between the producer and his competitors. Capability gap fall into four categories: (1) business system gap – the ability to perform individual functions more effectively than competitors and from the inability of competitors to easily follow suit, (2) position gap – the prior decisions, actions, and circumstances of management generation, (3) regulator/legal gap – the government's limiting on the competitors who can perform certain activities or degree to which they can perform those activities, and (4) organization or managerial quality gap – the organization's ability to consistently innovate and adapt more effectively and quickly than competitors. Last, both the difference in important attributes and the capability gap can be expected to endure over time (Coyne, 1986).

Competitive advantage is mainly used to differentiate company performance in the profit-making sector. The important aspects of competitive advantage include sustained revenue, innovation and new product development/first to market, brand and reputation, advertising, media coverage, customer needs, customer service/satisfaction, employee relations, acquisitions and mergers, regulatory issues, political correctness, and information technology services that affect customer service (Freeman, 2001).

Meanwhile, Dube and Renaghan (1999) stated the factors for firm competitive advantage as follows. First, the firm must have value propositions that can distinguish the company or the brand from its competitors. Managers can articulate the promises to customers. For example, the brand promises can lead to the extent of other visible values such as the willingness to pay more. The strengths in organizational culture, system, and functional qualities of psychical property are the core to instinctive customer values. Second, the firm focuses on strategic positioning. Hotels must have clear ideas on operating functions to create the promised experience. The integration between operating functions and brand promises protect hotels from competitive imitation. Third, structural alignment of hotels promised of the psychical property, technological and operational systems, and human organizational structure. Hotel locations are the primary decisions of guests, meeting planners, and travel agents. Fourth, employees must maintain a proper attitude. This is defined as the alignment of human resources. Human resource policies specify training, job design, remuneration, performance evaluation, and career opportunities. Fifth, alignment of brand, franchisee, and owners require a sufficient return of their investment of time, resources, and capital.

Matthyssens and Vandenbempt (1998) pinpointed the relationship between industrial services and the competitive advantage position of a business. First, assets included information technology systems (e.g. ease for communication, reducing costs, possibilities of differentiation, relationship bonding, and improvements in order cycles and transactions), performance tracking systems (replacing the traditional budget-oriented systems by market-based measures), and efficiency improving equipment (reconfirming the flexible service-offering concept). Second, unique skills were people-oriented commercial technicians (well-trained employees and technical competence), relational marketing skills (contributing to customer value), and project management (stimulating the value creation process from the first stages of the transaction cycle to the final steps of joint evaluation of outcome and process quality). Lastly, culture, organization, and human resource management are related to flexible and transparent organization, teamwork and empowerment (flexibility suppliers of services with a transparent organization), and entrepreneurship and learning (real problem-solving eagerness). All of these three factors have created superior customer value.

Resource-Based Approach

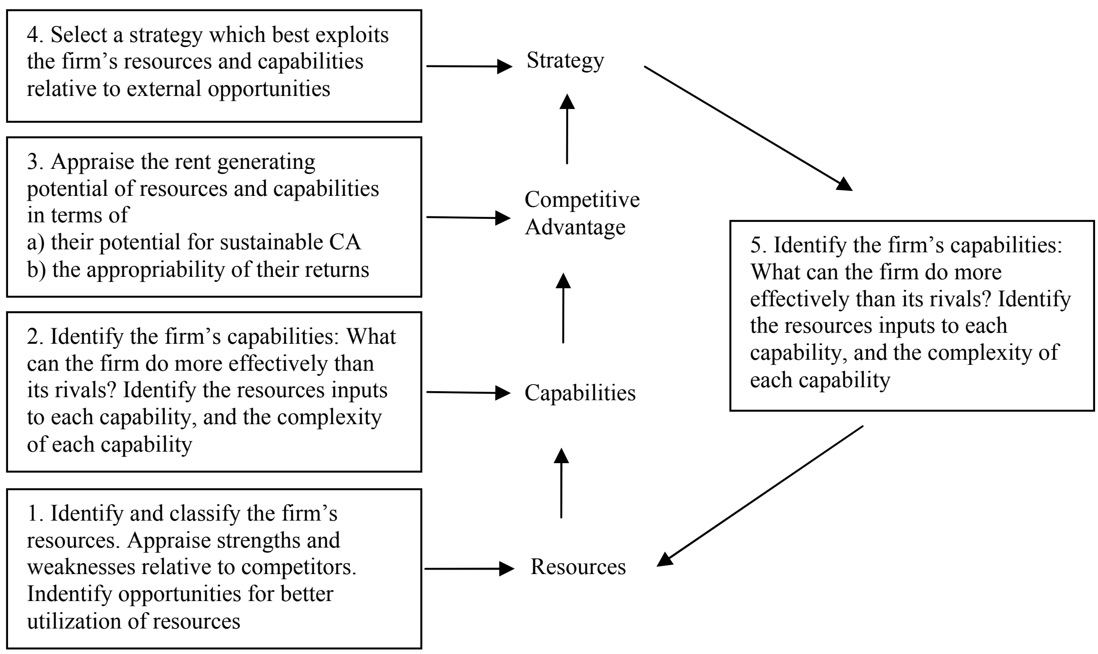
For being competitive in the market business, the resource-based approach is introduced. Barney (1991:101) defined resources as "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by the firm that enable the firm to conceive of and implement strategies". Marcus (2005:57) quoted that "resources consist of financial capital (money from entrepreneurs, equity holders, bonds, banks, and retained earnings) and physical capital (plant, equipment, land, natural resources, raw materials, computer hardware and software, manufacturing robots, automated warehouses, semi-finished goods, by products waste, unsold stocks of finished goods, and other tangible property)."

The resource-based analysis of competitive advantage comes from two basic empirical generalizations. First, there are systematic differences across firms in the extent to which they control resources that are necessary for implementing strategies. Secondly, these differences are relatively stable. The basic structure of the resource-based perspective emerges when these two generalizations are combined with fundamental assumptions that are largely derived from economics. These assumptions are: (1) differences in firms' resource endowments could cause performance differences, and (2) that firms seek to increase economic performance (Foss, 1998).

Grant (1991) proposed a framework of a resource-based approach to strategy formulation, which integrates a number of key themes arising from the streams of literature, see Figure 3. The five-stage procedure for strategy formulation are: analyzing the firm's resource-base, appraising the firm's capabilities, analyzing the profit-earning potential of firm's resources and capabilities, selecting a strategy, and extending and upgrading the firm's pool of resources and capabilities. The key to a resource-based approach to strategy formulation is to understand the relationships between resources, capabilities, competitive advantage, and profitability. Particularly, understanding the mechanisms is that competitive advantage can be sustained over time.

Figure 3

Resource-Based Approach to Strategic Analysis: A Practical Framework



Source: Grant (1991:115)

The firm must have competitive resource attributes in order to have any potential for competitive advantage (Barney, 1991). First, it must be valuable, in the sense that it exploits opportunities and/or neutralizes threats in a firm's environment. Resources are valuable when they enable a firm to conceive of or implement strategies that improve its efficiency and effectiveness. Second, it must be rare among a firm's current and potential competition. If a firm's valuable resources are unique among a set of competing firms, those resources will generate at least some competitive advantages. Third, it must be imperfectly imitable. Firm resources can be imperfectly imitable for one or a combination of three reasons: (1) the ability of a firm to obtain a resource is dependent upon unique historical conditions, (2) the link between the resources possessed by a firm and a firm's sustained competitive advantage is causally ambiguous, and (3) the resource generating a firm's advantage is socially complex (Barney, 1991; Dierickx & Cool, 1989). Lastly, there cannot be strategically equivalent substitutes for resources that are valuable but neither rare nor imperfectly imitable. Substitution can be created for a similar resource that enables it to conceive of and implement the same strategies or creates different resources for strategic substitutes (Barney, 1991).

Most scholars claim that only intangible resources explain performance heterogeneity among firms and thus are the likely sources of competitive advantage. Galbreath and Galvin (2004) recently discovered that while resource-based theory largely associated with firm performance with intangible resources, the association might not always hold true empirically. The strengths of some resources are dependent upon interactions or combinations with other resources and therefore no single resource (intangible or otherwise) becomes the most important to firm performance. Without strong organizational assets, the firm will undermine productivity, deliver poor quality products and services, and will have inferior human talent.

Barney's resource-based view defines overall resources as the combination of a firm's tangible assets, intangible assets, and organizational capabilities. Firm resources can be generally classified into three categories: (1) physical – e.g. plant, equipment, location, brands, patents, and trademarks, (2) human – e.g. the skills and knowledge of individual employees, (3) organizational – e.g. culture routines and rituals. These capabilities develop as firms combine resources to create what are known as higher-order competencies (Dev, Erramilli, & Agarwal, 2002; Madhok, 1997). These factors influence the organizational performance difference. While they may face similar competitive conditions, they realize different returns. Performance differences within industry groups and segments are as significant as performance differences between them (Marcus, 2005).

Murthy (1994) found out competitive strategies being used in the hotel firms. By asking almost 600 hotels, the competitive strategies are related to service quality leadership, technology leadership, direct selling, cost control, strategic alliance, group channels, and cross training. Resources are a source of performance, which may increase the firm's capability to charge higher prices and contribute to performance by helping the firm to appropriate the value linked to competitive advantage (Bridoux, 1997).

Table 3 summarizes the previous studies regarding advantage strategies and resource competitive advantages of the firms.

Table 3

Summary of Resource Competitive Strategy Dimensions

Dimensions	Brewton (1987)	Vandermerwe, Lovelock, & Taishoff (1994)	Go, Pine, & Yu, (1994)	Webster (1994)	Matthyssens & Vandenbenpt (1998)	Phillips (1999)	Freeman (2001)	Wong & Kwan (2001)	Harrison (2003)	**This study**
Price and cost competitiveness	√	√						√		
Mobilizing people and stakeholders		√		√	√	√		√		
Building service delivery systems	√	√			√	√		√		
Brand image		√			√	√	√	√		√
Human resources	√	√	√		√	√	√	√	√	√
Information technology	√	√			√	√	√	√	√	√
Meeting customer expectation	√	√		√			√	√	√	
Building and capital	√		√			√			√	
Operational Management			√	√	√	√			√	
Competitors	√		√	√					√	

Strategy can be defined as “the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals (Chandler, 1962: 13).” This study investigates the three differentiating resources advantage of the hotel firms: brand image, human resources, and information technology (Grant, 1991). Each strategic approach builds on the resources-based view of the firm. Even though hotel industry has some similar in products, these three resource competencies – brand image, human resources, and information technology – can differentiate the hotels from their competitors. Moreover, product differentiation competes on the basis of the quality or functionality of the product offering. Product differentiation is more likely to apply to choices of competitive strategy (Hibbets et al., 2003).

Brand Image

Brand image is defined as “the reasoned or emotional perceptions consumers attach to specific brands” (Low & Lamb, 2000:352). According to Ataman and Ulengin (2003), brand image includes the product’s name, its main physical features and appearance (including the packaging and logo), and its main functions. Brand image is the key to answer the question of how consumer chooses among alternative brands after information gathering processes of buyer behavior.

Brand is one of the most dominant trends in the global hotel industry and brand is one of the most valuable assets for hotel firms (Keller & Lehmann, 2003). Having a strong brand enables companies to distinguish its offer from the competitions, to create customer loyalty in performance, to exert greater control over promotion and distribution of the brand, and to command a premium price over the competitors (Holverson & Revaz, 2006). The brand is supported to reflect the standards, quality, value, and consistency in product and service delivery. Defining the key elements of the brand can create brand dilution and eroding the usefulness of the concept in achieving competitive advantage (Chen & Kuo, 2004). O'Neill and Xiao (2006) argued that parent companies may influence branding strategies. In the other word, the differences among parent companies' branding strategies may account for the different effects among the brands.

There are 285 lodging brands worldwide. In the U.S., brand penetration in the ratio of branded versus non-branded properties is over 70% in the commercial lodging industry. Branded hotels tend to outperform comparable nonaffiliated properties in most markets according to performance indicators. The most successful hotel brands understand that their value proposition must be relevant to their targeted customers. These could lead them to successfully differentiate themselves from their competitors. Successful brands offer consistent products and services with integrity. Strong brands will meet customer expectations and keep the brand asset value in balance (Forgacs, 2004).

Strong brands enable hotels to be part of and to differentiate themselves in the mind-set of customers (Prasad & Dev, 2000). It was reported that eighty-five percent of business travelers and seventy-six percent of leisure travelers preferred branded hotels over interdependent properties (Yesawich, 1996). Some people travel to relatively unfamiliar destinations, hotel brands are going to become increasingly important in their hotel decision. Brand name hotels are not necessary better than non-branded hotels, but they are just the speed and convenience-minded consumer for decision-making with the branded hotels (Gooch, 1997). For instance, Four Seasons, listed as one of the 100 best companies to work for in North America by Fortune Magazine, is a brand that promises to fulfill any request the guests may have. Four Seasons introduces new products and services that will make the returning guest's experience even more comfortable and convenient than before (Dube & Renaghan, 1999).

Some studies claim a positive correlation between brand image and a firm's performance (Phillips et al., 2002; Aaker, 1996). Kim, Kim, and An (2003) investigated the impact of dimensions of hotel brand on performance. The results showed that brand image have the most significant impact on hotel financial performance (RevPAR or revenue per available rooms in hotels). Hotel firms should significantly consider brand image when attempting to establish definite brand equity from the customer's viewpoint. Kim et al. (2003) argued that brand image is a long-term measure; hence, hotel marketers must equipped with a detailed knowledge of the important brand attributes. The strong brand name causes a significant increase in revenue and a lack of brand name in hotel firms can damage potential sales flow.

The findings by O'Neill and Xiao (2006) found the role of brand affiliation in hotel market value. The results show that brands have a significant effect on hotel value of midscale without F&B, midscale with F&B, upscale, and upper scale. However, there was no significant differentiating effect for branded economy and luxury properties. They suggest for hotel owners to recognize the role of brand image for positioning and flagging decision. Increasing sales and improving image were significant reasons for hotels to select branded affiliations. When customers become loyal to a brand, the brand owner can capitalize on the brand’s value through price premiums, decreased price elasticity, increased market share, and more rapid brand expansion.

Human Resources

The objective of strategic human resource management is to link approaches for managing people to business strategies (Miles & Snow, 1984). The study of Enz (2004) showed that the critical issues of human recourses are employee skills, benefits, and recruiting. The business cannot become competitive, if it lacks each one of these issues. All these issues have to meet at the satisfaction level (finance, benefits, and new skills), so that the skilled employees can retain in the business. Well-prepared employees are more capable of responding to a variety of challenges than other employees. High performance practice such as training, pay for performance compensation, empowerment programs, and self-managing team can reduce the employee turnover and enhance sales (Huselid, 1995). Harrison (2003) argued that the most important resources a hospitality firm possesses are human resources. The human resource analysis should be conducted at all levels from top manager to the operative staff evaluating the skill levels, training, experience, and performance. Moreover, an organization should continuously evaluate the effectiveness of its training programs and policies, as well as its employee-reward systems.

Human resource management practices such as in employee skills are recognized as imitable resources that crease competitive advantage (Kim & Oh, 2004; Wang & Shyu, 2008) and can provide a direct and economically significant contribution to organization performance (Wang & Shyu, 2008). Since the hotel industry is becoming increasingly complex and require greater skills from all levels of employees, many hotels are trying to improve employee retention by offering them education and reward program in which will raise the overall skill level of all employees (Olsen et al., 1998). Human resource development can make a difference in high performance and may be even higher especially in hospitality industry (Crook et al., 2003). Attitudes and actions of employees can affect the success of a service encounter. Employee behavior must be strongly customer oriented in services. In contrast, negative employee reaction to the work is often cited as a barrier to the implementation of functional flexibility (Kelliher & Riley, 2002).

It is important to have employees with skills, attitudes, commitment, and ability to use discretion on dealing with customers (Botten & McManus, 1999). Crowne Plaza in Atlanta offers increased expenditures for human resources to enhance the level of quality support, training, development and sales and marketing efforts. This number of support staff was more than triple in 1998, as part of the effort to maintain brand loyalty and support among franchisees (Gooch, 1997). Sharma and Upneja (2005) indicated that financial performance of the hotel operations is crucially dependent upon formal education and technical training of front-line employees.

Bowen and Chen (2001) argued that from the thirteen hotels attributes that measure customer's loyalty and performance. Three from the top five attributes are related to hotel employees. For example, 'employees communicate the attitude that your needs are important to them,' 'if you make a request at the hotel, no matter large or small, it will be handled appropriately,' and 'when an employee of the hotel says she/he will do something, you know it will get done.' Employees, who are guided by some measurable service standard and set by the company, are likely to be more motivated and provide higher quality services in a cost-effective manner. Frontline employees are the major role in delivering quality service and have a significant correlation between mobilizing people and partners and building service delivery system (Wong & Kwan, 2001). Jones (2007) suggested that human resource management can contribute the differentiation by selecting and hiring high-quality employees and managers and by running innovative training programs. Chan and Wong (2006) also stated that hotels should consider recruiting the most suitable staffs. By supporting a hotel school's internship programs, the human resource manager and the department heads will have an opportunity to evaluate the interns' performance, capabilities and personalities to determine whether or not they are suitable in the industry. At the same time, for existing staffs, hotels can provide them with necessary skills and knowledge through various training programs in any effort to provide good service to retain customers.

Information Technology

Yeh, Leong, Blecher, and Lai (2005:32) defined the meaning of information technology (IT) application as "Any hardware, middleware, and/or software including transactions using the Internet, network, and other digital technologies." The benefits of technology to service organization, customers, and employees have been studied in widespread academic areas. IT can be used to manage market complexity as a deliberate strategy for gaining competitive advantage (Crinchton & Edgar, 1995). IT enhances service quality (Reid & Sandler, 1992), enhances a firm's value chain (Porter, 1985), creates a competitive advantage (Porter, 1985, 2001), and improves the skills of the people who make up the service organization (Berry, 1995).

IT is applied at two levels in hotels: guest room technology, and managerial and operation level. Guest room technologies include multiple telephone lines, electronic meal ordering, self-checkout, self wake-up system, electronic and video entertainment services. In the managerial and operation level, IT assists the distribution of information across departments of a hotel and between levels of staff (Kim & Oh, 2004; Crichton & Edgar, 1995). Hotel groups can raise the complexity of the market (thus discouraging competitors from entering the marketplace) by offering a variety of products at a range of process and by offering agents easier access to their products. Conversely, it is suggested that hotel groups can lower the complexity of the market for potential guests by offering easier access to more and better quality information, perhaps via multimedia information on CD-ROM, domestic booking systems or simply by providing intermediaries with more online information (Crichton & Edgar, 1995).

Ritz-Carlton, for example, includes the IT system into the core of its business. The IT system can transmit important customer data to where it is needed to provide customer service. IT system can communicate information to the chain's entire global network (Clemons, 1988; Crook et al., 2003). Law and Jogaratnam (2005) studied IT applications in the hotel industry in Hong Kong. The results found that IT is an essential component in the strategic planning process of the hotel business performance and improving customer service. Many hotels have adopted IT to improve business operations and the IT penetration rate has generally increased. The level of IT commitment was insignificant in hotels in Singapore (Leong, 2001). However, the hotels in the UK were not making full use of IT capacity. These may be due to the rarely use of software technology, lacking behind in technology applications, and the nature of customer services (Sheldon, 1997; Law & Jogaratnam, 2005). Law and Jogaratnam (2005) suggested that hotel managers need some training on IT capabilities and also inform technical computing professionals about the importance of business goals.

Parson (1983) applied competitive five force factors to identify six generic categories of opportunities for IT competitive advantage: (1) increase customer's switching costs through value-adding IT-based information or service, (2) decrease one's own switching costs against suppliers, (3) use IT to support product innovation for the purpose of maintaining one's position or deterring potential substitutes, (4) cooperate with selected rivals through shared IT responses, (5) substitute IT for labor, and (6) use information to better segment and satisfy one's customer base. IT can cause a shift in the structure of entire industries. IT can lower certain barriers to entry while raising others and can help markets be more efficient by increasing the amount of available information (Bakos & Treacy, 1986).

The industry forces can be transformed to competitive threats at the IT department. The threat of new entrants becomes the threat of new technologies that will disrupt the viability of the IT department's operational landscape. Bargaining power of customers becomes IT users exerting pressure of not buying IT services under a charge-back environment. Lastly, rivalry among existing firms is the threat of internal system development including end-user development and decentralization of IT activities (Martin, Ching, & Estenson, 1999).

The study of Yeh et al., (2005) investigated implementing IT application in hospitality industry to satisfy customers and develop a competitive advantage for receiving travelers' information and accommodation booking. The results showed that hotel traveling customers had positive perception toward IT applications. These applications included efficient and effective hotel web site, in-room concierge services such as dining, concert, tour, and other information. On the other hand, express check-in/ check-out, in-room high-speed Internet access, accurate and reliable website for gathering information and making reservations were important factors for business customers.

Organization Structure

Olsen et al. (1998:211) defined organizational structure as "the way firms organize work" or the degree of centralization, formalization, complexity, configuration, and flexibility in the firm. Centralization defines the lines of communication, responsibility, and authority throughout the firm. Formalization associates with the control function of management. Complexity refers to the number of specialization within the organization along with the degree of task complexity within all jobs. Configuration defines as the actual spatial arrangements that exist in an organization and affect all transactions of employees, divisions, and customers. Lastly, flexibility refers to the firm's ability to change quickly in the dynamic times. Hall (1977) suggested that structure has two basic functions, which affect individual behavior and organizational performance. First, structures are designed to minimize or at least regulate the influence of individual variations on the organization. Second, structure is the setting in which power is exercised, decisions are made, and the organization's activities are carried out.

The hotel industry has the pyramid-shaped organizational structure (hierarchical structure) since the 1980s. It has advantages of providing clear lines of authority and control while maintaining consistency and efficiency. However, this structure cannot produce the necessary improvements in quality and productivity required for an organization to be competitive (Galbraith, Lawler, & Associates, 1993). The hierarchical organization structure creates some disadvantages, for example, difficulty in coordinating activities of functions that are closely independent, production of specialists who are noted well prepared to move to higher levels in the organization, resistance to innovations and changes that may reduce power, and a lack of flexibility to better serve guests' needs because of cumbersome operating rules and regulations (Nebel, 1991).

An organization structure is to help management achieve its objectives and to follow the firm strategy (Robin & DeCenzo, 2005). Each strategy implies different skills and requirements for success, which translate into differences organizational structure and culture. For instance, differentiation may be facilitated by a culture encouraging innovation, individuality, and risk-taking; in contrast, cost leadership may be facilitated by frugality, discipline, and attention to detail (Porter, 1985). Within the dynamic business change, it is a significant challenge in the ability of management to design firms that can achieve a set of highly developed competencies while still being flexible in organization structure (Olsen et al., 1998).

Barth (2003) proposed that the fit between competitive strategy and organization structure is related to the firm performance. The organization structure was divided into centralized, mixed, and decentralized structure, while competitive strategies were categorized into cost, mixed, and differentiation strategies. No significance was found in the relationship between competitive strategies and organization structure on the firm performance. The firms continuously changed their strategy and structure, so that misfit could occur more often between these changes. The results also found that the fit between differentiation strategy and decentralized structure is very common, and firms that have a mixed strategy tend to decentralized structure perform significantly in between than firms with a centralized structure. The firms which are aiming to cost strategy would use the centralized structure; in contrast, the differentiation strategy would be appropriate with the decentralized structure. The firms that have centralized structures are smaller than firms with decentralized structures (Barth, 2003). Galetic, Prester, and Nacinovic (2007) stated that organization structure is a possible source of competitive advantage, but it must adapt to the strategy and business environment timely. Meanwhile, Goold and Campbell (2002) argue that organization structure should support the company's strategy from different aspects.

Chacko (1998) proposed the design of hotel organization structure. The hotel organization structure should be: (1) circular – all boundaries of the hotel are equally accessible, (2) flat – to reduce the number of hierarchical levels within the hotel, and (3) dynamic – to create the flexibility to serve the changing needs of guests. The study examined the replacement of the hotel organizational structure to from the functional pyramid to a new structure that would be more appropriate for the new changes of customer needs, technology, and employee motivations. The notion is that the hotel organizations should move their structure from tradition to innovation and from safety to adventure. The firms should change their organization structure associate with strategies in order to be competitive in the market. In case that the management makes a significant change in its organization's strategy, the firm needs to modify its structure to accommodate and support the change (Robbins, 2000).

In this study, the organization structure is categorized into mechanistic and organic structure.

Mechanistic Structure

Mechanistic structures are highly formalized, non-participative, hierarchical, tightly controlled, and inflexible (Khandwalla, 1977). Mechanism includes greater centralization of decision making, formalization of decision making practice, planning in financial reporting and budgeting, output control using records and reports to evaluate individual subsidiaries, and behavioral control through frequent visits of personnel between headquarters and the firm's subsidiaries (Furrer, Krug, Sudharshan, & Thomas, 2004). Mechanistic structures are more suitable to low rates of technical and market change (Burns & Stalker, 1961).

In the mechanistic organization, tasks are split up to make clearly defined specialized jobs. Standardized rules and procedures define what people should do. If a decision needs to be taken which is outside of these rules and procedures, it is referred up the hierarchy (Guerrier, 1999). The mechanistic structure works better in stable organization environment. Mechanistic structure tends to be more with greater reliance on formal rules and procedures than organic structure. Decisions are reached at higher levels of the organization and there are narrower spans of supervisory control.

Organic Structure

Organic structures are characterized by informality, decentralization of authority, open channels of communication, and flexibility (Khandwalla, 1977). Organic structure supports the systematic discovery of innovative opportunities and foster opportunities through facilitation and motivation (Covin & Slevin, 1990). Organic structure is generally common in multi-domestic strategies. Planning, budgeting, and company policies are determined by the individual subsidiary, which managers its own personnel without significant monitoring or control from the parent company (Furrer et al., 2004). In the organic organization, there is less emphasis on job specialization and people are expected to use their initiative to resolve problems. The organization is integrated through the use of performance targets rather than through the use of rules and regulations (Guerrier, 1999). Organic structures are generally more open to learning, innovation, participate decision making, and flexibility than are mechanistic structures (Hurley & Hult, 1998). Burns and Stalker (1961) suggested that organic structure was more suitable in environments characterized by high rates of technical and market change. Organic structure was less attentive to formal procedures and spans of supervisory control were wider. Decisions were more likely to be reached at the middle level of the organization.

Table 4 summarizes the basic differences between mechanistic and organic structure within an organization adapted from Hage (1980) and Robbins and DeCenzo (2005).

Table 4

Characteristics of Mechanistic and Organic Organization Structures

	Mechanistic Structure	Organic Structure
Hage (1980:125-130)	1. Hierarchical structure of control, authority, and communication	1. Network structure of control, authority, and communication
	2. A tendency for operations and working behavior to be governed by instructions and decisions issued by supervisors	2. A context of communication that consists of information and advice
	3. The specialized differentiation of functional tasks	3. The adjustment and continual redefinition of task
	4. Greater importance attached to local rather than cosmopolitan knowledge	4. Greater importance attached to affiliations and expertise valid to the goal but external to it
	5. The precise definition of rights, obligations, and technical methods attached to a role	5. The realistic nature of the task which is seen as set by the total situation of the concern
	6. A tendency for interaction to be vertical	6. A lateral rather than a vertical direction of communication
	7. Loyalty to supervisors	7. Loyalty to technical process
Robbins and DeCenzo (2005:172)	1. Rigid hierarchical relationships	1. Collaboration (both vertical and horizontal)
	2. Fixed duties	2. Adaptable duties
	3. Many rules	3. Few rules
	4. Formalized communication channels	4. Informal communication
	5. Centralized decision authority	5. Decentralized decision authority
	6. Taller structures	6. Flatter structures

Previous studies found the effect of organization structure in business performance. Liu and Hu (2007) examined the effects of organization structure on firm's performance of the automobile industry in China. Five aspects of organization structure are considered: formalization, locus of decision making, hierarchical layers, internal boundary, and external boundary. The firms that have lower degree of formalization, reduced hierarchical layers, blurred internal boundary, and infiltrated external boundary would have higher performance. In contrast, the lower locus of decision-making is not associated with higher performance. Liu and Hu (2007) suggested that the firms seek to attain high performance should consider the important role played by these structural dimensions and must have appropriate organizational structure to meet high performance.

According to Covin and Slevin (1990), Asian hotels with organic structure, which is more flexible, more adaptable to a participative form of management, and less concerned with a clearly defined structure, was positively correlated with performance in the early industry life cycle stages. In contrast, the negative correlation was shown between organic structure and performance in the mature hotel industry life cycle. They concluded that managers in mature industries might best serve their interest by emphasizing the establishment of centralized control, standardized operations, formal rules and procedures, or other mechanistic tools designed to promote internal efficiency.

Grinyer, Yasai-Ardekani, and Al-Bazzaz (1980) analyzed the effect of strategy and organization structure in performance. The organization structure was hypothesized as a mediating variable affecting the strategy and performance relationship. The finding found that the match between the strategy and organization structure had little or almost no effect on financial performance. At the same time, Tarigan (2005) used the decentralization construct as the moderating variable in the alignment and performance relationship. Many studies found that decentralized management enhanced performance (Boyer et al., 1997; Maffei & Meredith, 1995). In contrast, centralization was negatively associated with performance (Dalton, Todor, Spendolini, Fielding, & Porter, 1980).

Erkutlu (2008) discussed the adjustment in the organization structure for reducing environmental uncertainty of boutique hotels in Turkey. The foreign investors think that hospitality industry in Turkey is unpredictable and dynamic, whereas the boutique managers disagreed. Therefore, in order to be most effective, using either mechanistic or organic structures is based on the environmental changes and situations.

The findings of Jogaratnam and Tse (2004) found that the hotel organic structure was negatively associated with performance. This may be partially attributed to the employee work expectations and management styles in Asia sub-cultures where mechanistic organization structures may be more prevalent and effective than organic structure.

Hotel Performance

Organizational performance can be viewed as the accumulated results of all of an organization's work processes and activities (Robbins, 1984). In more specific terms, organizational performance is the outcome of the strategy that an organization implements.

After managers implement strategic management to firms, managers must measure the organizational effectiveness by measuring performance data (Crook et al., 2003). Performance may vary depending to whether it is the customers' or stakeholders' viewpoints or during different time periods (Tse, 1991). Galbraith and Schendel (1983) suggested that organizational performance is a complex and multidimensional phenomenon that consists of multiple objects. Important trade-offs between performance measures may occur depending on the strategy used, structure selected, and the relative competitive strength from which the firm implements its strategy (Tse, 1991).

The study of Haktanir and Harris (2005:42) explored performance measurement practices in the context of independent hotels. Six measurements are: (1) business dynamics – concerned with decision-making and information flow in the departments of the hotel; (2) overall performance measures – identified the performance measures utilized by different departments in order to summarize the performance of the whole establishment; (3) employee performance measures – revealed the important role of human resources in providing rooms, food and beverage, and leisure services; (4) customer satisfaction measures – reflected the significance of understanding customer requirements and developing systems accordingly; (5) Financial performance measures – identified the financial performance that is measured and utilized at different levels of the business and the rationale for utilizing such measures, and (6) innovative activity measures – identified the new activities, products and different ways of delivering service to customers and the measurement of their outcome.

There are two outcomes implemented for organizational performance. The first relates to an organization's behavioral performance and the other relates to an organization's financial performance (Business Week, 1998).

Behavioral Performance

Behavioral performance refers to the performance in job-related tasks (Lawler & Porter, 1967; Petty, Mcgee, & Cavender, 1984). The behavioral performance measurement is appropriate for situations in which performance results are hard to measure and in which there is a clear cause-effect connection between activities and results (Botten & McManus, 1999). Donavan, Brown, and Mowen (2004) argued that it is important for the motivational well-being of the service workers (e.g. satisfaction and commitment). The well-being service workers were willing to commit to the organization, satisfy with their job, and improve the business performance. Other criteria will be used to measure the hotel's performance. Performance measures can be established to focus either on actual performance results (outputs) or on the activities that generate the performance (behavior). Output controls specify what is to be accomplished by focusing on the result of the behavior using objectives and performance targets.

Barsky and Nash (2003) used five areas—product, staff, arrival, value, and location—to measure customer satisfaction after the 9/11 events. Hotel customers needed to feel comfortable with hotel products (e.g. hotel and room cleanliness, comfortable beds and rooms, and convenient and special amenities). They preferred responsive staffs with enthusiastic attitudes; they feel that they received value for the price paid; and they think the hotels are at convenient locations. Earning high satisfaction ratings from a customer is an especially important strategy for hotel companies, because loyal customers are the principals to drive hotel profits, to stay at a brand's properties, and to refer new business. Hotels with satisfied, loyal customers enjoy higher margins and, consequently greater profit than do hotels that fail to retain and satisfy their customers.

Financial Performance

Bridoux (1997:10) views financial performance as "profit in excess of the cost of capital, depends upon the attractiveness of the industry in which the firm operates (industry-effect on performance) and the firm's competitive advantage." Financial performance indicators such as return on investment, total sales, profit before tax, net profit, and total asset have been widely used as a method for evaluating business performance and for comparing a firm with others in an industry. Financial ratios have been used to determine: (1) the firm's position in its industry, (2) the degree to which strategic objectives are being accomplished, (3) the firm's vulnerability to decrease in revenue, (4) the growth potential of the firm, and (5) the firm's ability to react to unforeseen changes in the external industry environment (Botten & McManus, 1999; Graham & Strombom, 1998; Reimann, 1982).

The study of Sharma and Upneja (2005) found that hotel financial performance is influenced by internal factors (employee training, investments in equipment, and availability of financing options) and external factors (institutional environments and product service standardization systems). Moreover, organizational assets (organizational structure and human resource management and policy) and reputational assets (company reputation, customer service reputation, and product reputation) were significantly and positively associated with financial performance.

Many factors that influence the financial performance of small hotels in Tanzania are: (1) low volume and low prices of rentable rooms, (2) high costs of goods sold, (3) high cost of sales percentage of controllable expenses, and (4) limited investment in technology and equipment. These also include a lack of product and service variety and quality, lack of access to finance new investments, refurbishments, and working capital requirements, lack of formal training and education opportunities for employees, and obstacles in the institutional environment—for establishing operating licenses and approvals (Sharma & Upneja, 2005). In other words, these factors are diverse, and they include both internal and external influences. They range from micro level factors of operational inefficiencies—due to employee training, investments in equipment, availability of financing operations—to macro level issues such as institutional environments and product/service standardization systems.

Tse (1991) argued that by measuring growth in unit sales, high performance was derived from the less centralized, more formalized, and specified organization structure. Meanwhile, a restaurant company with a high degree of formalization and specification, and low centralization had the highest average percentage of return on assets (ROA) and sales. Jogaratnam and Tse (2004:253) argued that high financial performance emerges from firm competitive behaviors. These behaviors include a continuous search to find and exploit new products and market prospects, a strong tendency to be forward-thinking in the pursuit of market opportunities, constantly acting in anticipation of future needs or changes, and usually being the first to find and introduce new products and technologies. In contrast, the low financial hotel performers were more declined to adopt a competitive orientation that was likely to disrupt the status quo and were less conservative in operational and strategic decision-making.

Hotel Size

Hotel size indicates the number of rooms' availability. According to Camison (2000), hotels are classified as family hotel (1-100 beds), small hotels (101-150 beds), medium-size hotels (151-300 beds), and large hotels (more than 300 beds). Pine and Phillips (2005) argued that the larger the hotel size, the higher the revenue per available room (RevPAR) and occupancy rate, which result was similar to the finding of Claver-Cortes et al., (2007). Claver-Cortes et al. (2007) identified the impact of hotel strategic variables (size and affiliation) on hotel performance. Significance differences in hotel performance - occupancy rates per room, occupancy rate per beds, and gross operative profits - were found when the size of hotels increase. Since the bigger the hotel is, the bigger the chance for it to generate economics of scale and experience. This includes the occupancy rates, which they grow with hotel size. Larger hotel size can make greater effort to commercialize the hotels and most of the large hotels are the chain affiliation. Medium and large hotels have high ratio of occupancy rate and gross operating profits. Large hotels can help reducing the costs incurred by the hotel, which has more rooms and therefore need to make a greater commercial effort to sell them. In addition to that, as there are non-rented rooms, the hotel's fixed costs cannot be distributed between greater sales.

Chung and Kalnins (2001) applied agglomeration effect and performance of hotel industry by location and market. The results showed that small hotels do better in marketed populated than larger hotels. While medium chain affiliated hotels avoid a market with large chains, a small independent hotel would do well. The study of Mathews (2000) is to identify the rivalry, based on the proximity. The results found that organization size does not appear to be an important factor in identifying rivals. This was due to such firms are similar in structure and strategy, depend on the same environmental resources, and have the same constraints.

Tse (1991) investigated the impact of a restaurant structure on financial performance. The results showed that as restaurant size increase, the degree of centralization decreased. The unit manager had the authority to make decision that involved day-to-day operation, hiring and firing of employees. The division/regional managers had the authority on hiring and firing unit managers. Moreover, restaurant companies that had a single concept were more centralized than those that had multiple concepts. This concept could be applied for hotel business as well. The hotels may have the followed strategies from headquarter. At the property level, each hotel has its own right of hiring and recruiting employees.

Hotel Affiliation

Chain Hotel

The goal of chain hotels is to target specific market segments of the lodging market with new products or extension of existing products. Chain hotels create many strategies in order to capture the specific markets. The strategies pursued by chain hotels create standardized services, advertising reservations, operating procedures, equipment, and even building. Chain hotels also generate economics of scale and have real ability to make profit, which decrease the degree of business failure (Glenn, 1993; Ingran & Baum, 1997).

Regarding the type of hotel management, Claver-Cortes et al. (2007) suggests that it would be highly advisable to belong to a chain affiliation. Performance levels in chain hotels are always above those achieved by independent hotels. The chain affiliation gives the hotel a greater commercialization capacity, better chances to deliver higher service quality levels, and the possibility to offer guests more services or a greater financial capacity to face investment projects (Ingram & Bruam, 1997; Israeli, 2002). The chain hotel can charge customers with greater rack rates and a greater operational experience in the local market because of brand recognition (Mitsuhashi & Yamaga, 2006). The results further imply that a given hotel was more likely to charge greater rack rates when: (1) the given hotel had a hotel affiliation, (2) the chain to which it belonged had greater operational experience in the local market, (3) the chain had experience of operating branches larger than it, and (4) the chain had opened new hotels at longer intervals.

Independent Hotel

Independent hotels are owned and managed by families and/or entrepreneurs which are sometimes centuries old and which have built loyalty through tradition and quality, and also have a great deal to offer (Holverson & Revaz, 2006). The independent hotels have the main responsibility to maintain control over key decision-making processes (Glancey & Pettigrew, 1997). Independent hotels are not members of a chain; they are owned and operated in an independent basis (Dahlstrom, Haughand, Nygaard, & Rokkan, 2008). If independent hotels have solid repeating customers with satisfactory occupancies, revenues, and profits, they would not require investment in any affiliation with brand. However, independent hotels have limited development for their business. These include limited marketing, non-economic motives, issues of quality assurance, pricing policies, cost control, and a lack of financial resources (Morrison, 1997). Buhalis and Main (1997) identified the disadvantages of independent hotels are: lack of capital, deficient economies of scale and under-utilized economies of scope, peripherality, insufficient management and marketing skills and expertise, inadequate bargaining power within the distribution channel, and the lack of representation in the emerging electronic marketing place.

Brown and Dev (2000) pointed out that company-owned hotels (chain hotels) would generate more value than independently owned hotels. Chain hotels can achieve more and better raw materials and equipment supplies as well as acquire more successful franchised outlets that generate more sales and increase performance. Other industry factors such as increasing hotel capacity worldwide, large hotel company's brand proliferation and brand extensions, and brand conscious customers make the independent hotel owners consider the hotel brand option (Weizhong, Dev, & Vithala, 2002; Holverson & Revaz, 2006). Dahlstrom et al., (2008) argued that hotel firms forego independence for alliances for several reasons. For example, a local entrepreneur that has control over the entire operation may not be able to attract international visitors, and thus may decide to enter into an agreement with a hotel chain. In this way, the local hotel gains access to a recognized brand name and an international reservation system.

The study of Holverson and Revaz (2006) found that the primary reason that independent hotels differ from chain hotels is their marketing services, global reservation systems, and higher in sales. They also suggest the criteria for considering the brand. It must meet: (1) hotel owner's objectives and attitudes - mission, vision, values, long-term goals, and willingness to relinquish some control; (2) hotel owner's situation - resources and ability to invest, financial performance, and direct competitive set; and (3) hotel owner's offer to match the brand - location, size, target market, core competencies, and condition/characteristics of the hotel.

Many chain hotels applied advanced information technology for improving customers' satisfaction and hotel performance. Ritz-Carlton, for instance, tracks the tastes and preferences of its regular visitors. Ritz-Carlton properties use their guest database to good advantage by arranging express check-in for regular guests, who only need to call and inform when they plan to arrive. All is in readiness when they drive up to the curb. In another example, Wingate Inns drew attention to its debut as a chain a few years ago by installing free high-speed Internet connections in every room. That differentiation strategy helped Wingate to expand rapidly by appealing to value-conscious business travelers who, at that time, were known to patronize such well-established operations as Hampton and Courtyard (Harrison, 2003).

Claver-Cortes et al. (2007) found a higher performance in terms of hotel room rates and occupancy rates in chain hotels rather than the independent hotels. These were due to the chain hotels having an advantage in the commercialization of their rooms (e.g. economic scale, the capacity to generate a positive brand image and the access to a larger number of customers). Regarding the gross operating profit (GOP) valuation, chain hotels see themselves above independent hotels. They have more security than chain affiliations could bring them and they are aware of their larger size. A hotel belonging to a chain has more chance for performance improvement (Chung & Kalnins, 2001). Claver-Cortes et al. (2007) also suggested that the affiliation to a chain brings the hotel numerous advantages, for example, a greater commercialization capacity, better chances to deliver a higher service quality level, the possibility to offer the guest more services to a greater financial capacity to face investment projects (Ingram & Baum, 1997). Chung and Kalnins (2001) applied agglomeration effect and performance of hotel industry by location. The results showed that independent hotels do better in marketed populated by chain hotels.

The Theoretical Framework and Hypotheses

From the previous review of literature and the variables proposed, the hypotheses of this study are as follows:

There are some different competencies between sizes of hotel operation. Larger hotel size has a more competitive advantage of generating economics of scales over smaller hotel size. Larger hotels are able to generate higher financial revenue and occupancy (Pine & Phillips, 2005; Claver-Cortes et al., 2007). However, larger hotels have more complex levels of decision making than smaller hotels. Therefore, Hypothesis 1 is proposed as follows.

Hypothesis 1: There is a significant difference between hotel size (small, medium, and large) and industry forces, resource competitive strategies, organization structure, and hotel performance.

The study of Holverson and Revaz (2006) and Claver-Cortes et al. (2007) found that chain hotels indicate more competitive strategies of branding and information technology than the independent hotels. Chain hotels have more advantages over rivalry (Mathew, 2000) and customers (Morrison, 1997). Moreover, in terms of hotel room rates and occupancy rates, chain hotels generate better performance than independent hotels because chain hotel have broader global reservation system, which can generate higher financial performance. In contrast, independent hotels have more flexible decision making and service activities. This can lead to high financial performance (Covin & Slevin, 1990). Therefore, Hypothesis 2 is proposed as follows.

Hypothesis 2: There is a significant difference between hotel affiliation (chain and independent) and industry forces, resource competitive strategies, organization structure, and hotel performance.

The hotel firms must have knowledge of the industry to develop competitive strategies and increase performance (Barth, 2003). Understanding the environment would appear to be a key element in business strategy implementation (Crichton & Edgar, 1995). Depending on the environment, strategic management is often chosen based on the local conditions facing the hotel and internal resources provided (Brown & Dev, 2000). Covin and Slevin (1990) stated that industry forces have a major impact on the firm strategies, which is the same as the study from Karagiannopoulos et al. (2005). Therefore, the hypothesis 3a-c, 4a-c, and 5a-c are proposed:

Hypothesis 3a: Advantage of few rivalries among existing hotel firms would have a positive impact on implementing a competitive brand image strategy;

Hypothesis 3b: Advantage of few rivalries among existing hotel firms would have a positive impact on implementing a competitive human resource strategy;

Hypothesis 3c: Advantage of few rivalries among existing hotel firms would have a positive impact on implementing a competitive information technology strategy;

Hypothesis 4a: Advantage of low bargaining power of individual hotel customers would have a positive impact on implementing a competitive brand image strategy;

Hypothesis 4b: Advantage of low bargaining power of individual hotel customers would have a positive impact on implementing a competitive human resource strategy;

Hypothesis 4c: Advantage of low bargaining power of individual hotel customers would have a positive impact on implementing a competitive information technology strategy;

Hypothesis 5a: Advantage of less threat of new hotel entrants would have a positive impact on implementing a competitive brand image strategy;

Hypothesis 5b: Advantage of less threat of new hotel entrants would have a positive impact on implementing a competitive human resource strategy; and

Hypothesis 5c: Advantage of less threat of new hotel entrants would have a positive impact on implementing a competitive information technology strategy.

Brand image has the most significant impact on hotel performance (Kim et al., 2003). Hotel branding can differentiate the product and service offering to customers (O'Neil & Xiao, 2006; Hummels & Levinsohn, 1993). An appropriate brand image to customers appears to be critical for the hotel industry for superior performance and survival in a highly competitive and threaten environment (Holverson & Revaz, 2006). The study of Barth (2003) showed the influence of competitive strategies of brand image and product and service quality on firm performance. Therefore, the hypothesis 6a and 6b are proposed:

Hypothesis 6a: The competitive brand image strategy would have a positive impact on hotel behavioral performance; and

Hypothesis 6b: The competitive brand image strategy would have a positive impact on hotel financial performance.

Jones (2007) argues that human resource management contributes the differentiation by selecting and hiring high-quality employees and managers and by running innovative training programs. Hotel employees are the main factors to drive differentiate services to customers which lead to the superior performance (Bowen & Chen, 2001). Wong and Kwan (2001) found the relationship between human resource development and hotel performance. Therefore, the hypothesis 7a and 7b are proposed:

Hypothesis 7a: The competitive human resource strategy would have a positive impact on hotel behavioral performance; and

Hypothesis 7b: The competitive human resource strategy would have a positive impact on hotel financial performance.

Technology enhances service quality performance (Dollas, 1993; Reid & Sandler, 1992), creates a competitive advantage (Porter, 1985, 2001), and improves the skills of the people who make up the service organization (Berry, 1995). Law and Jogaratnam (2005) studied information technology applications in the hotel industry in Hong Kong. The results found that information technology is an essential component in the strategic planning process of the hotel business performance and improving customer service. Therefore, the hypothesis 8a and 8b are proposed:

Hypothesis 8a: The competitive information technology strategy would have a positive impact on hotel behavioral performance; and

Hypothesis 8b: The competitive information technology strategy would have a positive impact on hotel financial performance.

Chain hotels have a capability over independent hotels in the ways of economics of scale, a greater commercial capacity, a larger number of customers, and rivalry competencies, and bargaining power over customers (Mathews, 2000; Buhalis & Main, 1997). Therefore, the hypothesis 9a-c, 10a-c, and 11a-c are proposed:

Hypothesis 9a-c: There is a moderating effect of hotel affiliation on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, (c) and threat of new hotel entrants – and brand image strategy;

Hypothesis 10a-c: There is a moderating effect of hotel affiliation on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, (c) and threat of new hotel entrants – and human resource strategy; and

Hypothesis 11a-c: There is a moderating effect of hotel affiliation on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, (c) and threat of new hotel entrants – and information technology strategy.

Brand image (Brown & Dev, 2000; O'Neill &Xiao, 2006), human resources (Harrison, 2003), and information technology (Holverson & Revaz, 2006) of the chain hotels have more capacities and provide the better outcome of performance than the independent hotels (Claver-Cortes et al., 2007; Mitsuhashi & Yamaga, 2006). Therefore, the hypothesis 12a-b, 13a-b, and 14a-b are proposed:

Hypothesis 12a-b: There is a moderating effect of hotel affiliation on the relationship between brand image strategy and hotel performance – (a) behavioral and (b) financial;

Hypothesis 13a-b: There is a moderating effect of hotel affiliation on the relationship between human resource strategy and hotel performance – (a) behavioral and (b) financial; and

Hypothesis 14a-b: There is a moderating effect of hotel affiliation on the relationship between information technology strategy and hotel performance – (a) behavioral and (b) financial.

Without the fit between environment, organization structure, and strategy, the hotel firms may face difficulty in achieving long-term success (Venkatraman & Prescott, 1990). Firm in stable environments can often accurately predict such factors as material supplies and customer demand. In such context, mechanistic structures that stressed standardization and formalized control are especially common, and often associated with superior performance. In contrast, the unpredictability of dynamic environments can negate any benefits that would be derived through the adoption of mechanistic structures (Lawrence & Lorsch, 1967). Therefore, firms must have the ability of rapidly respond to changing conditions. Eccles, Costa, and Teare (1997) proposed the fit between environment, organization structure, and strategies. Organizations that operate in dynamically changing and uncertain environments tend to need organic or flexible structures and processes, while more stable environments lend themselves to more familiar mechanistic structure (Teare, Costa, & Eccles, 1998). However, no evidence has been provided using the organization structure as the moderating effect on the relationship between industry forces and resource competitive strategies. Hence, the hypothesis 15a-c, 16a-c, and 17a-c are proposed:

Hypothesis 15a-c: There is a moderating effect of organization structure on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, (c) and threat of new hotel entrants – and brand image strategy;

Hypothesis 16a-c: There is a moderating effect of organization structure on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, (c) and threat of new hotel entrants – and human resource strategy; and

Hypothesis 17a-c: There is a moderating effect of organization structure on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, (c) and threat of new hotel entrants – and information technology strategy.

Tarigan (2005) uses the organization structure construct as the moderating effect variable in the business strategies and performance relationship. This study finds that alignment strategies are positively related to performance. Furthermore, high levels of organization support the positive performance relationship. Many studies found that organic structure would enhance performance than mechanistic structure (Boyer et al., 1997; Maffei & Meredith, 1995). Therefore, the hypotheses 18a-b, 19a-b, and 20a-b are proposed:

Hypothesis 18a-b: There is a moderating effect of organization structure on the relationship between brand image strategy and hotel performance – (a) behavioral and (b) financial;

Hypothesis 19a-b: There is a moderating effect of organization structure on the relationship between human resource strategy and hotel performance – (a) behavioral and (b) financial; and

Hypothesis 20a-b: There is a moderating effect of organization structure on the relationship between information technology strategy and hotel performance – (a) behavioral and (b) financial.

The proposed relationships stemming from these hypotheses and the hotel competitive advantage model are illustrated in Table 5 and Figure 4.

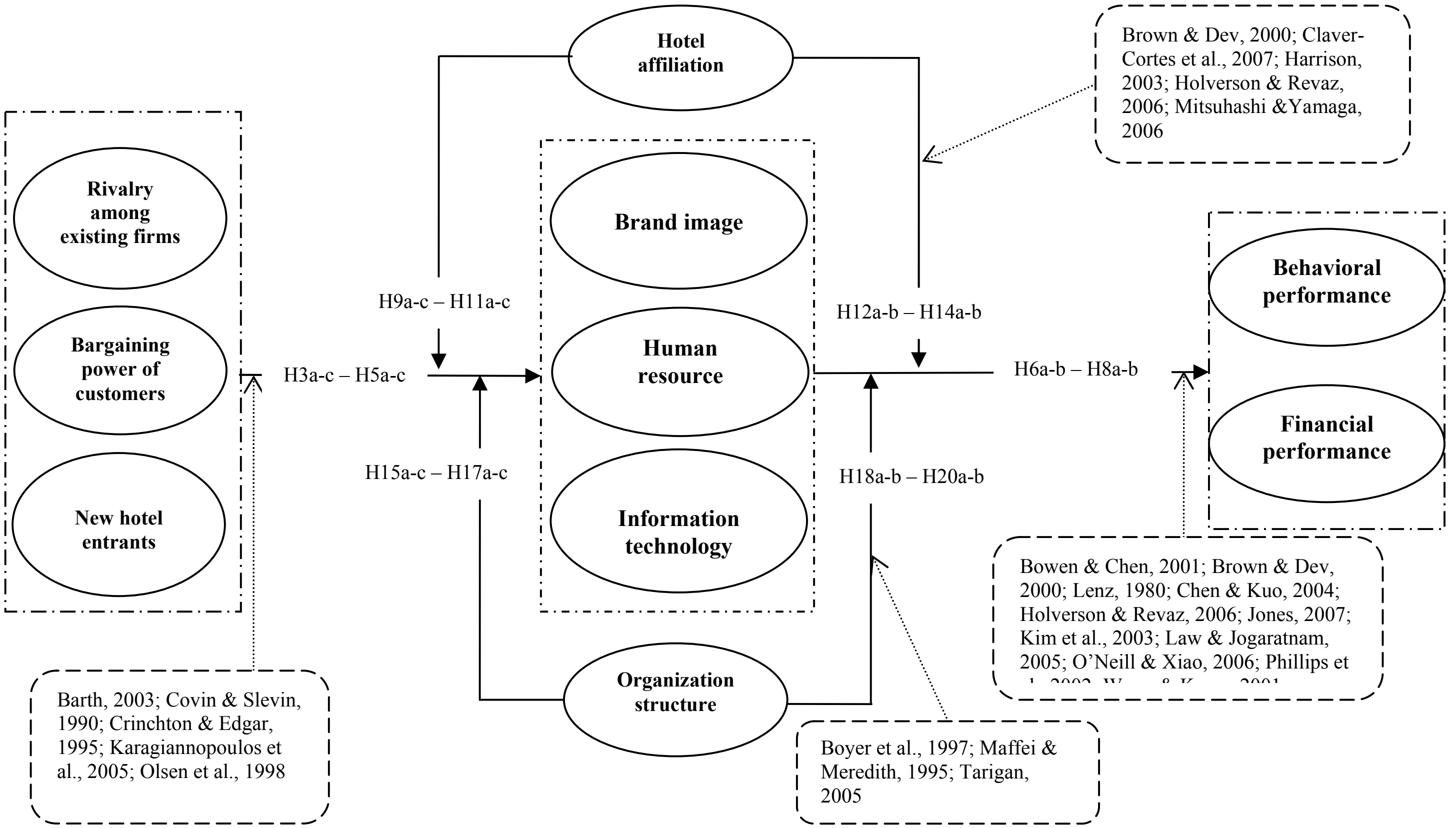
Table 5

Summary of Objectives and Hypotheses

Objectives	Hypothesis Number
1. To build a theoretical model of the Hotel Competitive Advantage to measure hotel performance based on the industry forces and resource-based approaches.	
2. To assess structural relationships among industry forces, resource competitive strategies, and hotel performance.	$H3_{a\text{-}c} – H5_{a\text{-}c}$ $H6_{a\text{-}b} – H8_{a\text{-}b}$
3. To explore the significant differences between hotel size and affiliation to industry forces, resource competitive strategies, organization structure, and hotel performance.	H1– H2
4. To evaluate the moderating effect of hotel affiliation on the relationship between industry forces and resource competitive strategies; and between resource competitive strategies and hotel performance.	$H9_{a\text{-}c} – H11_{a\text{-}c}$ $H12_{a\text{-}b} – H14_{a\text{-}b}$
5. To evaluate the moderating effect of organization structure on the relationship between industry forces and resource competitive strategies; and between resource competitive strategies and hotel performance.	$H15_{a\text{-}c} – H17_{a\text{-}c}$ $H18_{a\text{-}b} – H20_{a\text{-}b}$
6. To make recommendations to hospitality academia for the academic program development and to hotel firms for achieving superior performance.	

Figure 4

The Hotel Competitive Advantage Model



CHAPTER III

METHODOLOGY

Based on the review of literature, the theoretical framework defined the variables selecting for operational constructs. In addition, this section covered the research framework, the research design, the survey instrument, sampling design, data collection, and analysis of data.

Research Framework

Figure 5 and 6 showed the research framework for this study. This research was quantitative research by using a questionnaire for data collection. The questionnaire captured the main constructs of industry forces, resource competitive strategies, organization structure, hotel performance, and respondent and hotel characteristics. The descriptive analysis of frequency and percentage explored the respondents' demographic profiles and hotels' characteristics.

The Analysis of Variance (ANOVA) was applied to investigate the significant differences between hotel size and industry forces, resource competitive strategies, organization structure, and hotel performance (testing H1). T-test analysis was used to assess the mean difference between hotel affiliation and industry forces, resource competitive strategies, organization structure, and hotel performance (testing H2). These two tests were to answer objective 3, see Figure 5.

The confirmatory factor analysis (CFA) tested the reliability and validity of eight constructs. Structural equation modeling (SEM) was employed to analyze the causal relationships among industry forces, resource competitive strategies, and hotel performance. These procedures were to answer objective 2, with H3a-c, H4a-c, H5a-c, H6a-b, H7a-b, and H8a-b. Furthermore, SEM was employed to test the moderating effect of hotel affiliation on the relationship between industry forces and resource competitive strategies, and between resource competitive strategies and hotel performance. These were to test H9a-c, H10a-c, H11a-c, H12a-b, H13a-b, and H14a-b of objective 4, see Figure 6.

Lastly, the hierarchical multiple regression was applied to test the moderating effect of organization structure on the relationship between industry forces and resource competitive strategies, and between resource competitive strategies and hotel performance. These were to answer objective 5, with H15a-c, H16a-c, H17a-c, H18a-b, H19a-b, and H20a-b, see Figure 5.

Figure 5

Research Framework I

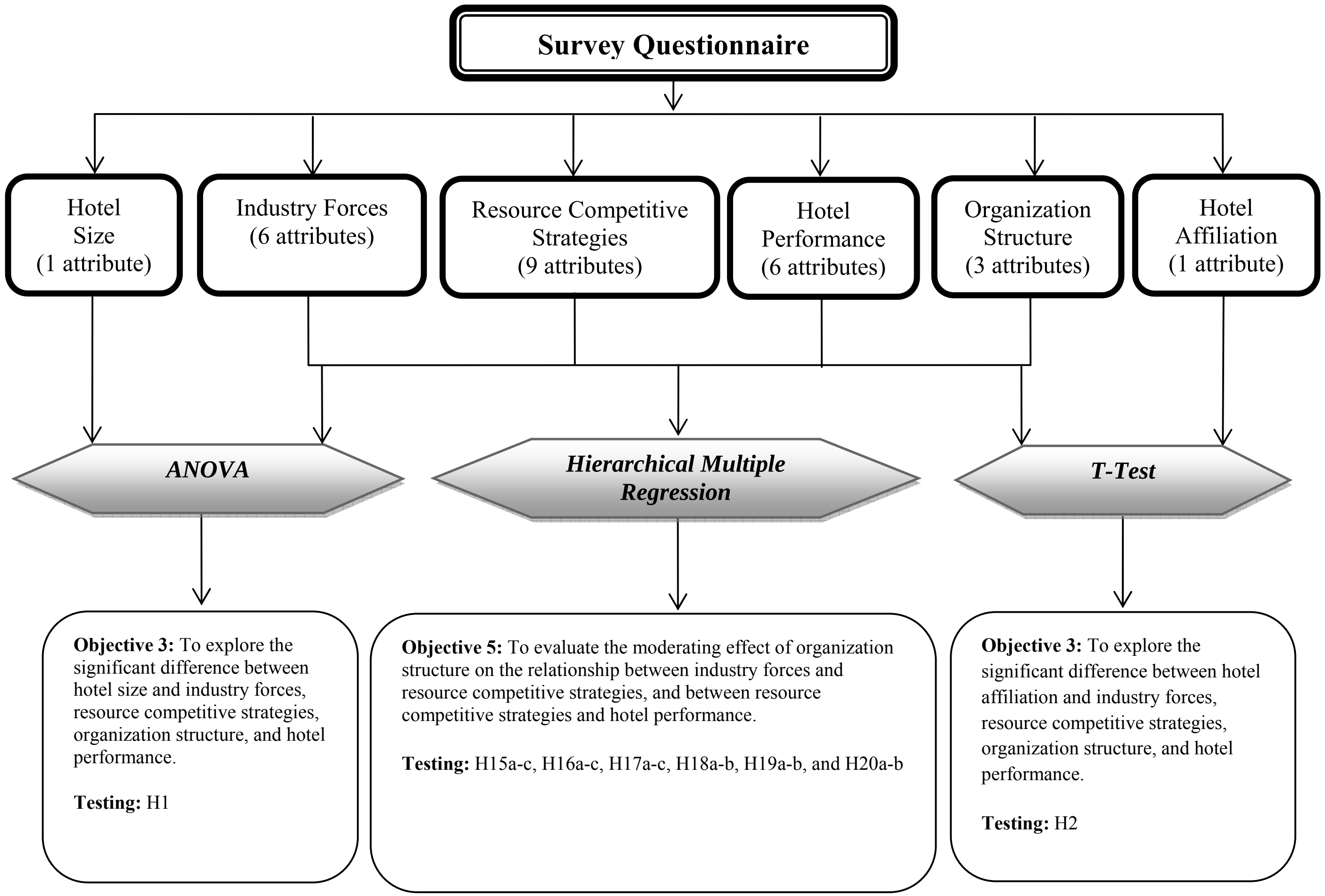
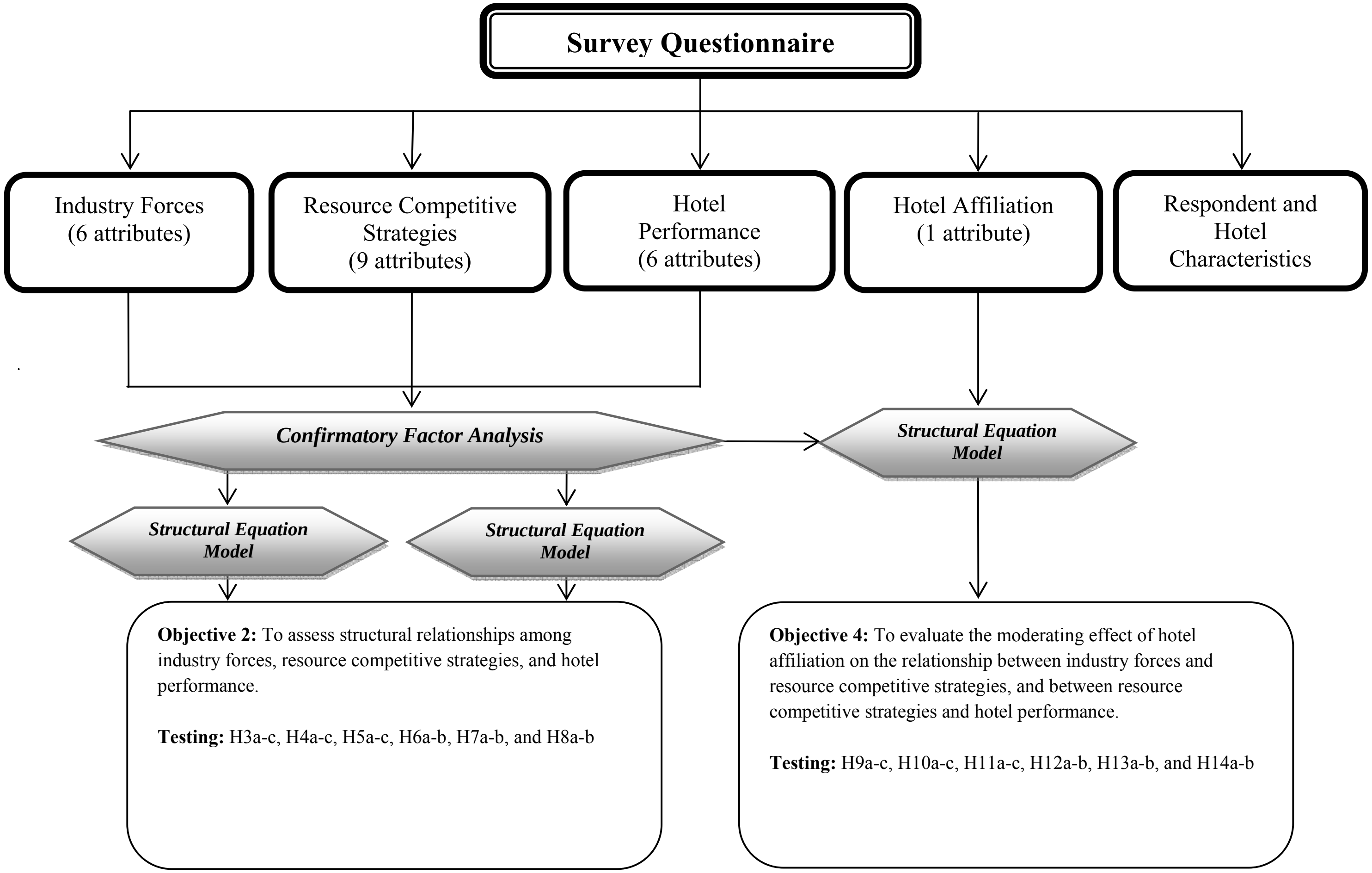


Figure 6

Research Framework II



Research Design

This study employed the causal and descriptive research designs to determine the cause-and-effect relationships among constructs - industry forces, resource competitive strategies, and hotel performance. A cross-sectional sample survey was used for this study because of the strong theoretical foundation (Porter, 1980a; Barney 1991; Shook, Ketchen, Hult, & Kacmar, 2004). By using the two theory approaches: five-force factors approach and recourses-based theory, the theoretical model and hypotheses were tested to find casual paths among constructs.

Survey Instrument

A self-administered questionnaire was developed based on the review of the literature. The questionnaire consisted of three sections with 34 questions total (see Appendix A). Section I explored the hotel characteristics (7 questions). Section II assessed respondents' agreement of industry forces (6 questions), organizational structure (3 questions), and hotel resource competitive strategies - brand image, human resources, and information technology (9 questions). The respondent's evaluation of hotel performance was investigated in Section III (6 questions). Lastly, Section IV (3 questions) explored the hoteliers' demographic profiles. This questionnaire had been approved by the Oklahoma State University Institutional Review Board (IRB), see Appendix B.

Industry Forces

Industry forces items were adapted from the study of Porter (1985) and Weerawardena et al. (2006). These variables measured three concepts of rivalry among existing hotel firms, bargaining power of individual hotel customers, and threat of new hotel entrants. Respondents were asked to rate the agreement of six statements. The items were: 'my hotel has fewer competitors,' 'the competition in my area is less fierce,' 'individual customers have less bargaining power over my hotel room rate,' 'individual customers show loyalty to my hotel,' 'it is difficult for new hotel entrants to enter the market,' and 'my hotels advertise heavily to overcome existing brand preferences.' Each statement was measured by using the 5-point Likert-type scale, scale from 1- strongly disagree to 5 - strongly agree.

Resource Competitive Strategies

The component of resource competitive strategies in the hotel industry was developed from the studies of Wong and Kwan (2001) and Kim and Oh (2004) with the total of nine items. These strategy items consisted of the concepts of brand image, human resources, and information technology. The correlation among competitive strategies from the previous studies was significant ranged from .23 to .66, which indicated the acceptable correlation among the items (Wong & Kwan, 2001). Therefore, future data analysis prevented multicolinearity issues. Respondents were asked to rate the agreement of each statement according to the hotel strategies. Statements for measuring brand image strategy were: 'my hotel makes conscious efforts to differentiate brand image from the competitors,' 'my hotel continually improves brand images to satisfy customer demands,' and ‘customers are constantly satisfied with my existing hotel’s brand image.’ Items of human resource strategy were: ‘my hotel has an adequate number of skilled staff members,’ ‘my hotel makes sufficient investment in human resource training and development,’ and ‘my hotel staff is effective n completing their tasks.’ Information technology strategy items were: ‘my hotel uses information technology as a competitive strategy,’ ‘my hotel has a strong belief in advanced information technology,’ and ‘my hotel uses new information technology to accommodate customers’ needs.’ These items were measured by using the 5-point Likert-type scale, scale from 1 (strongly disagree) to 5 (strongly agree).

Organization Structure

Three item attributes asked the respondents for their perception on internal organization structure. These items were developed from the study of Covin and Slevin (1988), which emphasized on mechanistic and organic management structure. The alpha coefficient from the previous study was .76. The respondents were asked to rate three statements – ‘my hotel has heavy dependence on information relations of co-operation for getting work done,’ ‘my hotel has a strong emphasis on adapting freely to changing circumstances without too much concern for past experience,’ and ‘my hotel has a strong tendency to let the individual’s personality define proper on-the-job behavior.’ These three items were measured by using the 5-point Likert-type scale, scale from 1- strongly disagree to 5 - strongly agree.

Hotel Performance

The hotel financial performance had been treated as a multi-dimensional phenomenon. This study measured performance from both behavioral and financial perspectives. The three items of behavioral performance measurement were the quality of products and service, customer satisfaction, and employees' performance. The three financial performances were measured by asking the overall financial performance, for example, annual occupancy rate, profits after tax, and return on investment. These six items were developed from the studies of Brown and Dev (1997) and Jogaratnam and Tse (2004). Measurement of performance scales consisted of 5-point Likert-type scale, where 1 (far below industry norm) and 5 (far above industry norm).

Respondent and Hotel Characteristics

Closed-ended questions were asked relating to professional profiles and hotel property characteristics (7 questions), and respondent demographic characteristics (3 questions). The professional profiles and hotel property characteristics have included current position, years of working experience, type of hotel affiliation, type of lodging, scale of lodging, location, and property sizes. The respondent characteristics have included gender, age, and level of education.

Sampling

Target Population

The target population of this study was hotel owners, general managers, and executive managers who were members of the American Hotel and Lodging Association

(USA), hotel operations listed in a public available database, and Thai Hotel Association, Thailand. The target population consisted of 837 members of the American Hotel and Lodging Association (AHLA, 2007), 5,500 hotel employees listed in a public available database, and 256 members of Thai Hotel Association (2008). The purpose of including U.S. and Thai hotel employees was to assess the cultural difference between two groups.

Sampling Approach

A census survey was conducted and the questionnaire was distributed to all hotel managers, owners, and executives of all email name lists of AHLA, hotel operation database, and Thai Hotel Association. The hoteliers' name lists of the American Hotel and Lodging Association were gathered from the AHLA directory (2007). The hoteliers' email lists of the Thai hotels were retrieved from Thai Hotel Association website. Lastly, the online email database of hoteliers was gathered from a published available database purchase.

Sample Size

By using the Structural Equation Modeling (SEM) as a statistical method, some guidelines about absolute sample size in estimation methods were offered and related to the complex models. The sample size was estimated based on the number of parameters. The recommendations provided by Stevens (2000) were that the ratio of the number of cases to the number of free parameters was 15:1, and according to Kline (2005), it was 10:1. Meanwhile, Hair, Black, Babin, Anderson, and Tatham (2006) recommend sample size of SEM ranged from 100 to 200. Furthermore, sample size should be large enough when compare with the number of estimated parameters (as a rule of thumb, at least 5 times the number of parameters), but with an absolute minimum of 50 respondents. In this study, there were 6 items for industry forces, 9 items for attributes of competitive strategies, and 6 items for attributes of hotel performance (behavioral and financial). Therefore, with the attribution of the 21 items, 42 parameters of 8 constructs, the expected number of sample size was at least 210 or more to meet the recommended criteria. The sample size of this study was 317, which meet the recommendation criteria. This indicated the statistical power for SEM analysis.

Response Rate

The survey was sent using email address from various resources: 837 emails from AHLA, 5,500 emails from a public available database, and 256 emails from Thai Hotel Association in November 2008. The response number of the first batch was 256, which was 43 from AHLA, 172 from the public available database, and 41from Thai Hotel Association. A follow-up survey was sent out in December 2008 to the non-respondents of the first batch. The responses were 12 from AHLA, 42 from the public available database, and 24 from Thai Hotel Association. Therefore, the total responses from the two batches were 55 from AHLA, 214 from the public available database, and 65 from Thai Hotel Association. From the overall of 334 returned responses, there were 317 usable responses, indicating 4.8% response rate.

Data Collection

Online survey was used and sent out to the hoteliers of American Hotel and Lodging Association name lists, hotel operations' email database, and Thai Hotel Association, who had an email address. The respondents received a cover letter that included the link for conducting survey. The survey was posted on www.surveymonkey.com. Two weeks later, a follow-up online survey was sent out to those individuals who did not respond to the previous survey. Furthermore, online fax was applied for a second followed-up survey. The survey was sent out from the name lists that had a fax number but did not reply to the previous two surveys. Respondents were asked to send back the result with their free-fax number.

Analysis of Data

Several statistical procedures were used to analyze the data from this study. The statistical analysis consisted of the following steps.

Examination of Data

Examining the data was to check the individual variable and the relationships among variables. Data Examination included the evaluation of missing data, approaches for dealing with missing data, identification of outliers, and the testing of assumptions of the multivariate analysis (assessing individual variables versus the variate, normality, homoscedasticity, and linearity) (Hair et al., 2006).

Among the total of 334 returned questionnaires, 17 responses were consisted of incomplete answers, violation of identification of outliers, or violation of normality testing. Hence, they were eliminated for the further analysis. Missing data was solved using complete case approach (listwise deletion). This was recommended for further SEM purpose (Hair et al., 2006). Therefore, there were 317 usable sample sizes for further study.

Descriptive Analysis

After the data had met the examining criteria, descriptive characteristics of the data were assigned. The frequency and percentage of the respondent demographic profiles and hotel characteristics were explored. Respondents' characteristics were classified as gender (male and female), age (18-30, 31-45, 46-60, and over than 60 years old), education (high school, college/associate degree, bachelor degree, and master/MBA degree and higher), current position (hotel owner, general manager, resident manager, division manager, and others), and year of current position (less than 3 years, 3-6, 7-10, and more than 10 years).

Meanwhile, hotel property characteristics were categorized into affiliation (chain and independent), type of lodging (hotel, motel/inn, resort, B&B, timeshare), scale of lodging (budget, mid scale without F&B, mid scale with F&B, upscale, up-upscale, and luxury), location (airport, urban, suburban, highway, and resort), and hotel size (small, medium, and large).

One Way ANOVA

Analysis of Variance (ANOVA) is used to determine whether samples from two or more groups come from populations with equal means (Hair et al., 2006). The two or more independent variables are estimation of the variance for the compared dependent variable. The first reflects the general variability of the within treatment groups (MS_W), and the second represents the difference between groups attributable to the treatment effects (MS_B). Within groups estimate of variance (MS_W), it is based on deviation of individual scores from their respective group means. Between groups estimate of variance (MS_B), it is based on deviation of group means from the overall grand mean of all scores. The ratio of MS_B to MS_W is to measure how much variance is attributable to the different treatments versus the variance expected from random sampling. The ratio of MS_B to MS_W is described as follow:

$$F \text{ statistic} = \frac{MS_B}{MS_W}$$

The difference between groups inflates MS_B, large values of the *F* statistic lead to rejection of the null hypothesis of no difference in means across groups. In the other word, the value of the calculated *F* statistic exceeds F_{crit}, conclude that the means across all groups are note all equal.

Independent Sample T-Test

T-test assesses the statistical significant of the difference between two independent sample mean for a single dependent variable. In order to apply t-test for analysis, Shavelson (1996: 357) described the assumptions of t-test application.

1. The scores of subjects are independently and randomly sampled from the two respective populations.
2. The scores in the respective populations are normally distributed.

3. The variances of scores in the respective populations are equal (homogeneity of variance: $\sigma^2_1 = \sigma^2_2$).

Table 6 compared the different statistical uses of ANOVA and *t*-test on the relationship between industry forces, resource competitive strategies, organization structure, and hotel performance.

Table 6

Comparison between ANOVA and T-Test Analysis

One Dependent Variable	Number of groups in Independent Variables
T-Test	Two groups (Specialized case)
ANOVA	Two or more groups (Generalized case)

A one-way ANOVA was conducted to compare the mean score differences of hotel size (small, medium, and large) and items of industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and new hotel entrants, resource competitive strategy – brand image, human resources, and information technology, organization structure, and hotel performance – behavioral and financial. The F-value was used to determine the probability that difference in these items' means across hotel size groups, which was due to sampling error.

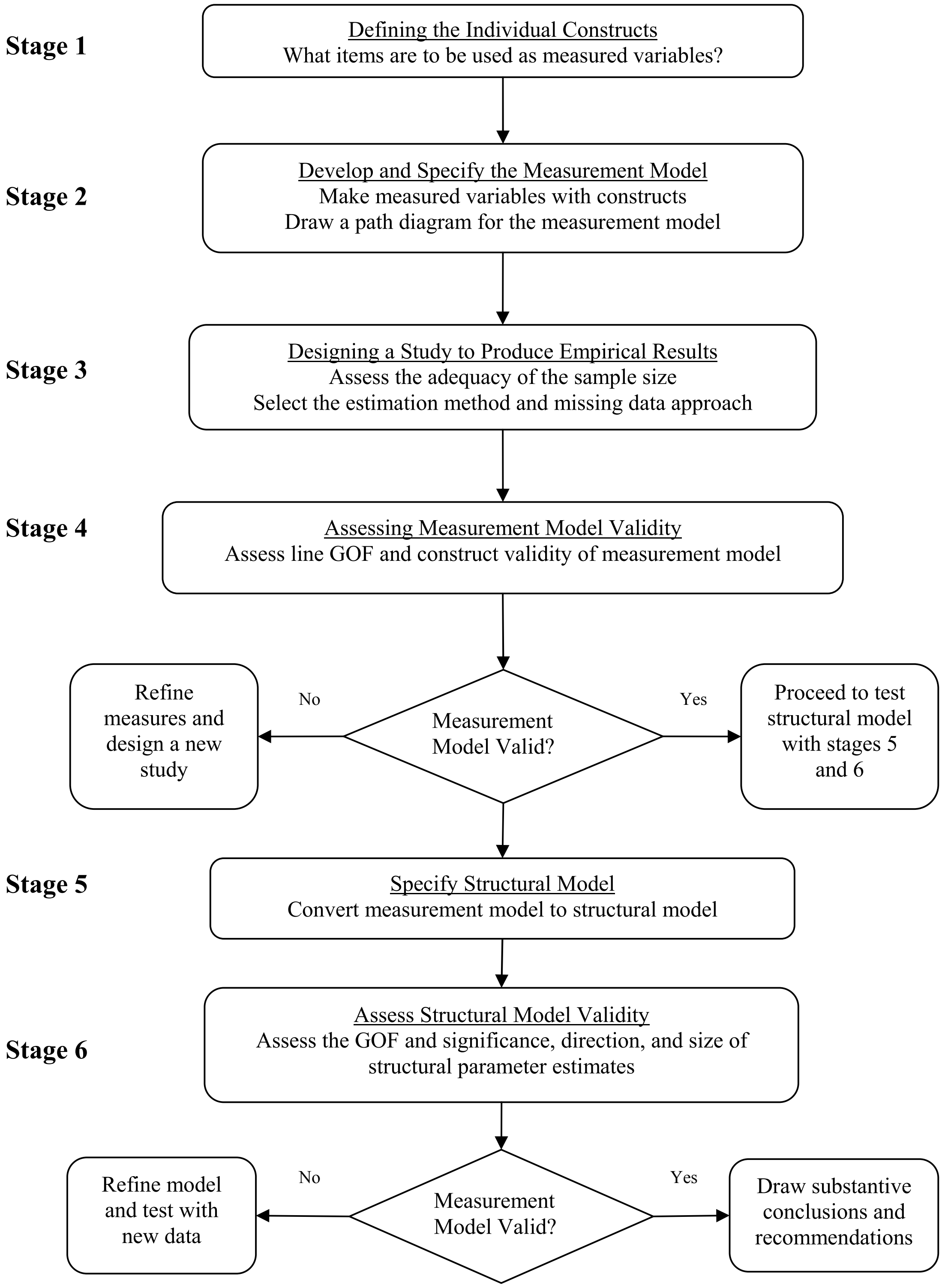
T-test was used to assess whether items' means of the two groups of hotel affiliation (chain and independent) were statistically different from each other on items of industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and new hotel entrants, resource competitive strategy – brand image, human resources, and information technology; organization structure; and hotel performance – behavioral and financial.

Structural Equation Modeling

Structural equation modeling was utilized for the conceptual framework of this study. One of the important advantages of structural equation modeling was the ability to explicitly allowing measurement error (Rigdon, 1994). Structural equation models that incorporate unobservable variables and measurement error had increased applications in theory testing and empirical model building in marketing (Fornell & Larcker, 1981). Hair et al. (2006: 759) defined six-stage process for Structural Equation Modeling in testing a full structural model, see Figure 7.

Figure 7

Six-Stage Process for Structural Equation Modeling



Stage 1: Defining Individual Constructs

This step was the operationalization of the constructs. All these measurement items were retrieved from the previous literature, which had been tested with reliability and validity of measurement items. Therefore, hypothesis tests involving structural relationships among constructs were no more reliable or valid than was the measurement model explaining how these constructs are constructed (Hair et al., 2006). The exogenous variables were industry forces: rivalry among existing hotel firms (ζ_1), bargaining power of individual hotel customers (ζ_2), and new hotel entrants (ζ_3). Moreover, the endogenous variables were resource competitive strategies - brand image strategy (η_1), human resource strategy (η_2), and information technology strategy (η_3) and hotel performance - behavioral (η_4), and financial performance (η_5).

Stage 2: Developing and Specifying the Measurement Model

Each latent construct included in the model was identified, and the measured indicator variables (items) were assigned to latent constructs. According to Hair et al. (2006), a construct can be represented with two indicators, but three indicators are preferred minimum numbers, and there should be a maximum limit for the number of indicators to be included. From the overall eight constructs, three exogenous variables - rivalry among existing hotel firms (ζ_1), bargaining power of individual hotel customers (ζ_2), and new hotel entrants (ζ_3) – had two items each for measuring these three constructs. At the same time, five endogenous variables - brand image strategy (η_1), human resource strategy (η_2), information technology strategy (η_3), behavioral performance (η_4), and financial performance (η_5) – had three items each for measuring these constructs. All these latent variables met minimum requirement of specifying measurement models (Hair et al., 2006).

Stage 3: Designing a Study to Produce Empirical Results

This study used the covariance matrix as an input for the measurement model and causal relationship analysis. Covariance matrices provided more flexibility due to the relatively greater information content they contain. The advantages of covariance matrix over correlation matrix are: (1) the use of correlations as input can at times lead to errors in standard error computation, (2) covariance is more appropriate when hypotheses concern questions related to the scale or magnitude of value, and (3) covariance is used as input for any comparisons between samples (Hair et al., 2006; MacCallum & Austin, 2000).

The missing data was solved by using complete case approach (listwise deletion). The advantages of this approach were: chi-square showed little bias under most conditions and easy to implement using any program. The sample sizes of 317 of this study met the suggested requirement of Hair et al. (2006). The SEM was performed by Maximum Likelihood Estimation (MLE). MLE is widely employed technique in most SEM programs, because it produces more reliable results under many circumstances. LISREL version 8.8 was used to analyze the data and derive the parameter estimates. This statistical analysis program had several advantages over other analyses. It exposed the research models to a more restrictive test than was the case with traditional null hypothesis testing. LISREL enabled us to examine multiple and interrelated dependence relationships simultaneously and thus made it possible to incorporate measurement errors from, for example, the factor model in the causal model. Finally, LISREL was desirable because of its ability to represent unobserved concepts in dependence relationships (Hair et al., 2006).

Stage 4: Assessing Measurement Model Validity

The measurement model validity depended on goodness-of-fit for the measurement model and specific evidence of construct validity. The confirmatory factor analysis (CFA) was applied to evaluate the measurement model validity. CFA explored the composite construct reliability, average variance extracted, convergent validity, and discriminant validity of eight constructs.

The convergent validity is represented in a specific construct that should share a high proportion of variance in common. The most common three figures for convergent validity testing were factor loading, composite reliability and average variance extracted. High factor loadings indicated a common point of constructs. All factor loadings should be statically significant, and standardized leading estimates should be .5 or higher. The composite reliabilities indicated internal consistency, meaning all the measures consistently represent the same latent construct (Fornell & Larcker, 1981; Hair et al., 2006). The acceptable range of composite reliability was .07 or higher. The variance-extracted estimate measures the amount of variance captured by a construct in relation to the variance due to random measurement error (Fornell & Larcker, 1981; Bagozzi & Yi, 1988; Hair et al., 2006). The average variance extracted of .5 or higher was a good rule of thumb suggesting adequate convergence (Hair et al., 2006). The discriminant validity was the extent to which a construct is distinct from other constructs. The discriminate validity was present when the variance-extracted estimates of two constructs were greater than the squared correlation estimate between these two constructs (Hair et al., 2006).

The overall fit of the structure model is evaluated by examining the Chi-square statistics (χ^2), the goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI), comparative fit index (CFI), standardized root mean square (SRMR), and root mean square error of approximation (RMSEA). Table 7 represents the acceptable range of these measurement fits (Hair et al., 2006).

Chi-square statistics (χ^2) is to assess the goodness of fit difference between observed and estimated covariance matrices. SEM estimated covariance matrix is influenced by how many parameters are free to be estimated, so the model degree of freedom also influences the χ^2GOF test. Degree of freedom (df) represents the amount of mathematical information available to estimate model parameters.

Goodness of Fit Index (GFI) is to produce a fit statistic that is less sensitive to sample size. The possible range of GFI values is 0 to 1, with higher values indicating better fit. GFI values of greater than .90 typically are considered good.

Adjusted Goodness of Fit Index (AGFI) is to take differing degree of model complexity into account. It does so by adjusting GFI by a ratio of the degrees of freedom used in a model to the total degrees of freedom available. AGFI values are typically lower than GFI values in proportion to model complexity.

Normed Fit Index (NFI) is a ratio of the difference in the χ^2 values of the null model. It ranges between 0 and 1, and a model with perfect fit model would produce an NFI of 1.

Comparative Fit Index (CFI) is an improved version of the normed fit index. The CFI is normed so that values are ranged between 0 and 1. The higher values indicating better fit.

Root Means Square Residual (RMSR) is the square root of the mean of these squared residuals. In the other ward, it is an average of the residuals between individual observed and estimated covariance and variance terms. Standardized Root Mean Residual (SRMR) is a standardized value of RMSR and thus is more useful for comparing fit across models. The average SRMR value is 0, meaning that both positive and negative residuals can occur. A predicted covariance that is lower than the observed value results in a positive residual, while a predicted covariance that is larger than the observed results in a negative residual. The recommend index is less than .05.

Root Mean Square Error of Approximation (RMSEA) is to correct the tendency of the χ^2 GOF test statistic to reject model with a large samples or a large number of observed variables. RMSEA represents how well a model fit as a population, not just a sample used for estimation. The recommended RMSEA is between .03 and .08.

Table 7 summarized the values of model fit indices for measurement model and structural model testing.

Table 7

Measurement Fit Acceptance Range

Measures of fit	Acceptable range
χ^2 and *p*-value	*p*-value > .05
GFI	≥ .9
AGFI	≥ .9
NFI	≥ .9
CFI	≥ .9
SRMR	< .05
RMSEA	< .08
χ^2/df	1 to 3

Table 8 presented standardized loadings and *t*-value of each indicator. All indicators had the significant standardized loadings at $\rho \leq .05$ and t-values of the individual indicators ranged from 10.57 to 19.88 for all variables (Gerbing & Anderson, 1988). Furthermore, the reliability and validity of the measures were to represent the constructs being evaluated and to assess the psychometric properties of scaled measures (Fornell & Larcker, 1981).The composite reliabilities indicated internal consistency, meaning that all measures consistently represent the same latent construct. The composite construct reliability of each construct ranged from .74 to .85, which met the acceptable criteria (Fornell & Larcker, 1981; Hair et al., 2006). The variance-extracted estimate measured the amount of variance captured by a construct in relation to the variance due to random measurement error. The variance extracted scores of constructs ranged from .50 to .65, which were suggested adequate convergent validity (Fornell & Larcker, 1981; Bagozzi & Yi, 1988; Hair et al., 2006).

All eight constructs were tested on the goodness of fit and validation of scales of the measurement of these constructs by confirmatory factor analysis. Model fit for the measurement model was acceptable. The measurement fit was $\chi^2 = 434.84$, df = 164, $\rho < .00$; comparative fit index (CFI) was .92; goodness-of-fit index (GFI) = .89; standardized root mean residual (SRMR) = .04; root mean square error of approximation (RMSEA) = .069; normed fit index (NFI) = .87; and Tucker-Lewis index (TLI) = .89. These indices met the accepted criteria for the overall model fit of sample group suggested by Hair et al. (2006) and Kline (2005).

Table 8

Measurement Model of Constructs

Constructs	Factor Loadings (t-value)	Average Variance Extracted	Composite Reliability
Rivalry among existing firms		.63	.76
My hotel has fewer competitors.	.68 (12.48)		
The competition in my area is less fierce.	.89 (19.88)		
Individual customers		.59	.74
Individual customers have less bargaining power over my hotel room rate.	.74 (13.76)		
Individual customers show loyalty to my hotel.	.80 (16.09)		
Entrants of new hotel firms		.61	.75
It is difficult for new hotel entrants to enter the market.	.69 (12.51)		
New hotels advertise heavily to overcome existing brand preferences.	.86 (18.72)		
Brand image strategy		.55	.79
My hotel makes conscious efforts to differentiate brand image from the competitors.	.75 (13.98)		
My hotel continually improves brand images to satisfy customer demands.	.85 (16.24)		
Customers are constantly satisfied with my existing hotel's brand image.	.61 (11.03)		
Human resource strategy		.50	.75
My hotel has an adequate number of skilled staff members.	.78 (14.49)		
My hotel makes sufficient investment in HR training and development.	.60 (10.57)		
My hotel staff is effective in completing their tasks.	.74 (13.59)		
Information technology strategy		.65	.85
My hotel uses IT as a competitive strategy.	.87 (17.98)		
My hotel has a strong belief in advanced IT.	.74 (14.51)		
My hotel uses new IT to accommodate customers' needs.	.80 (16.14)		
Behavioral performance		.52	.76
The different ways of delivering services to customers	.65 (11.35)		
My hotel's customer satisfaction level	.82 (14.53)		
My hotel's employee performance	.68 (12.29)		
Financial performance		.52	.77
My hotel's average annual occupancy rate	.70 (12.33)		
My hotel's net profit after tax	.76 (13.29)		
My hotel's return on investment (ROI)	.71 (12.51)		

χ^2 = 434.84, df = 164, ρ < .00; CFI= .92; GFI = .89; SRMR = .04; RMSEA = .069; NFI = .87; TLI = .89

Discriminant validity compared the variance-extracted estimates of the measurements with the square of the parameter estimate between the measurements. If the variance-extracted estimates of the constructs were greater than the square of the correlation between two constructs, evidence of discriminant validity existed (Fornell & Larcker, 1981; Gerbing & Anderson, 1988). The example was the relationship between 'brand image strategy' and 'information technology strategy.' The average variance-extracted estimate of 'brand image strategy' was .55 and of 'information technology strategy' was .65. These two variance-extracted estimates were greater than the square of the correlation between 'brand image strategy' and 'information technology strategy' (Φ = .53, Φ^2 = .28), see Table 9. Another example was the relationship between 'human resource strategy' and 'behavioral performance.' The average variance-extracted estimate of 'human resource strategy' was .50 and 'behavioral performance' and was .52. These two variance-extracted estimates were greater than the square of the correlation between 'human resource strategy' and 'behavioral performance' (Φ = .55, Φ^2 = .30). Therefore, these results supported the dicriminant validity of constructs. These investigations were applied with other descriminant validity of other constructs in this study.

Table 9

Correlation among the Constructs

Constructs	Mean	S.D	1	2	3	4	5	6	7	8
1. Rivalry among existing firms	2.16	1.05	-							
2.Individual hotel customers	3.57	.80	.20	-						
3. Entrants of new hotel firms	3.33	.79	.17	.51	-					
4. Brand image	4.11	.68	.13	.30	.38	-				
5.Human resources	3.74	.76	.15	.31	.37	.42	-			
6.Information technology	3.89	.78	.03	.30	.29	.53	.53	-		
7.Behavioral performance	3.95	.60	.06	.16	.11	.24	.55	.35	-	
8.Financial performance	3.46	.78	.07	.02	.38	.12	.22	.26	.30	-

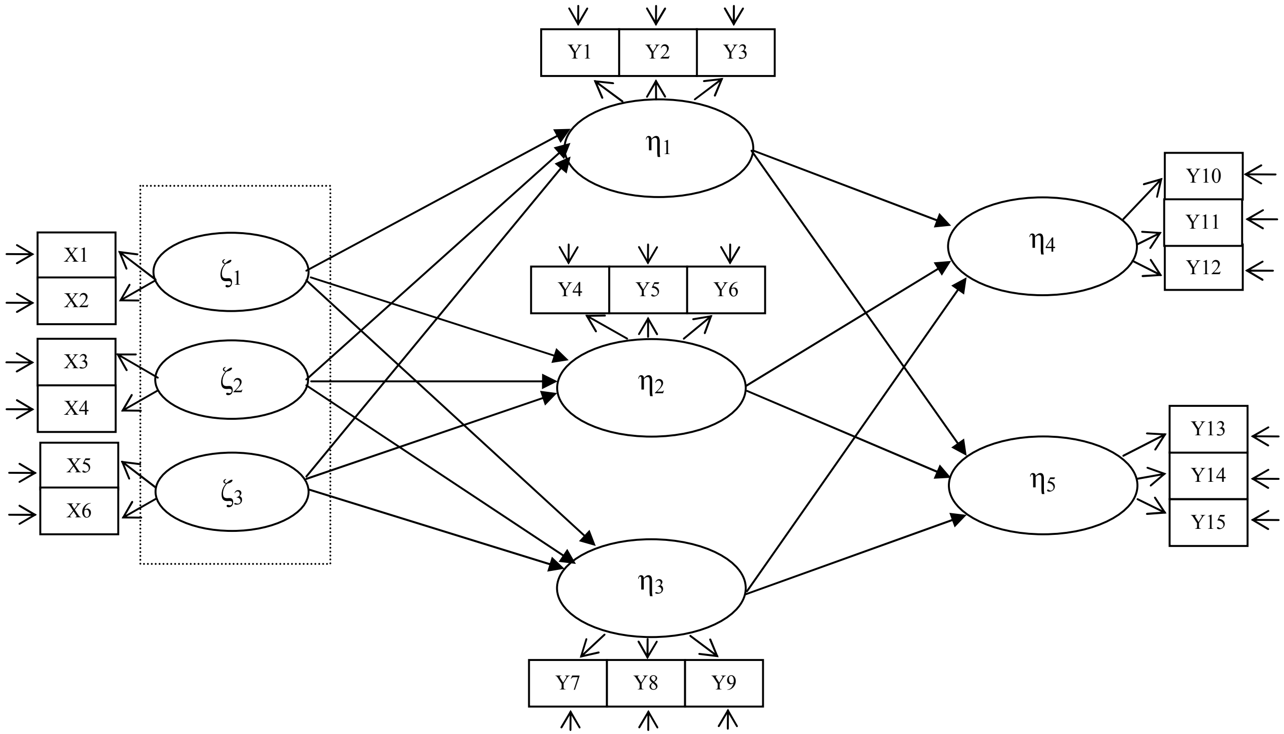
The model fit indices, composite construct reliability, average variance extracted, convergent validity, and discriminant validity were met at all the acceptable criteria (Fornell & Larcker, 1981; Hair et al., 2006; Kline, 2005). Therefore, this study was further test in the next step of structural equation modeling.

Stage 5: Specifying the Structural Model

The purpose of specifying the structural model was to assign the relationship from one construct to another. Figure 8 showed the path diagrams of the measurement and structural models of the constructs in one overall model. There were a total of fifteen paths investigated the causal relationship between constructs. All these paths were hypotheses testing.

Figure 8

Path Diagram for the Structural Model



Note: $\zeta_{1\text{-}3}$= Industry forces, η_1 = Brand image strategy, η_2 = Human resource strategy, η_3 = Information technology strategy, η_4 = Behavioral performance, η_5 = Financial performance, X1-X6 = Exogenous items, and Y1-Y15 = Endogenous items

Stage 6: Assessing the Structural Model Validity

This stage is to test validity of the structural model and its correspodending hypothesized theoretical relationship. All constructs were tested of validity from the earlier stage. At this stage, the hypotheses were tested. From stage 4, meaning of measurement model was validated; therefore, the structural model was tested. All model-fit-indices of SEM will be less than the model-fit-indices of measurement model. The significant paths and directions were explained the phenomenon of finding.

Moderating Effect

Comparing nested models were to compare two SEM models based on a chi-square difference statistic ($\Delta\chi^2$). The χ^2 value from some baseline model was subtracted from the χ^2 value of a lesser constrained, alternative nested model. In this case, the path was estimated with one degree of freedom difference. The $\Delta\chi^2$ concluded that the model with one additional path provided a better fit based on the significant reduction in the χ^2 goodness-of-fit.

This approach was applied to test the moderating effect of hotel affiliation (chain and independent) on the relationship between industry forces and resource competitive strategies, and between resource competitive strategies and hotel performance. The hotel affiliation was separated into two groups by using the dichotomous variable. The computation of non-restricted model was first calculated. All of the covariance matrices of all measurement items of four constructs – rivalry among existing hotel firms, bargaining power of individual hotel customers, new hotel entrants, and brand image strategy of two sub groups – from chain and independent were included into the same syntax command with free parameter constraints. Later, the involved re-estimating of the model with the restriction of two groups was set to be equaled. The first constrained path was between rivalry among existing hotel firms and brand image strategy. With the one degree of freedom difference, the chi-square difference value indicated whether or not the moderating effect of hotel affiliation was significant. If there was no moderating effect and the path coefficients were equal in both populations, then the variable proposed did not have a significant influence. In contrast, a moderating effect existed of the change in the case that chi-square value was significant (Evanschitzky & Wunderlish, 2006; Redondo & Fierro, 2005).

These procedures continually proceed with other constrained path between bargaining power of individual hotel customers and brand image strategy, and path between new hotel entrants and brand image strategy. Moreover, all these steps were applied with other moderating effect testing of hotel affiliation on the relationship between:

1. Industry forces (rivalry among existing hotel firms, bargaining power of individual hotel customers, and new hotel entrants) and human resource strategy,
2. Industry forces (rivalry among existing hotel firms, bargaining power of individual hotel customers, and new hotel entrants) and information technology strategy,
3. Resource competitive strategies (brand image, human resources, information technology) and hotel behavioral performance, and

4. Resource competitive strategies (brand image, human resources, information technology) and hotel financial performance.

Hierarchical Multiple Regression

Multiple regression analysis is a statistical technique that analyzes the relationship between a single dependent variable and several independent variables. Each independent variable is weighted by the regression analysis procedure to ensure maximal prediction from the set of independent variables. The moderator effect in multiple regression is represented as a compound variable formed by multiplying one variable to another variable, which is entered into the regression equation. To determine whether the moderator effect is significant, three steps process should be followed:

1. Estimate the original (unmoderated) equation,
2. Estimate the moderated relationship (original equation plus moderator variable), and
3. Assess the change in R^2: If it is significant, then a significant moderator effect is present (Hair et al.; 2005).

The analysis is carried out using blocks; the regression equation on the main effects may be obtained simply as the equation based on the variables in the first block. The analysis, carried out using blocks, is called hierarchical analysis because it relies on a hierarchical or order of entry of terms into equation (Weinberg & Abramowitz, 2008).

The organization structure variable was used for testing the moderating effect on the relationship between industry forces and resource competitive strategies, and between resource competitive strategies and hotel performance. The organization structure constructs was measured by using the mean average of the three item measurement. This new mean average variable was recorded by splitting them into two groups. Samples were split at the median range (Dash, Bruning, & Guin, 2009). Hence, 169 samples were grouped as organic organization structure, and 148 samples were grouped as mechanistic organization structure.

For testing the moderating effect of organization structure on the relationship between industry forces and resource competitive strategies, the main effects – rivalry among existing hotel firms, bargaining power of individual hotel customers, new hotel entrants, and organization structure, were first included in the equation for the first block. Later the moderating effect variables - rivalry among existing hotel firms*organization structure, bargaining power of individual hotel customers*organization structure, and new hotel entrants*organization structure were included in the second block. The dependent variables were resource competitive strategies: brand image, human resources, and information technology. Therefore, to test the moderating effect of organization structure on the relationship between industry forces and resource competitive strategies, the total of six multiple regressions were calculated. The multiple regressions of moderating effect of organization structure on the relationship between industry forces and resource competitive strategies were:

$$Y_{1\text{-}3} = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

$$Y_{1\text{-}3} = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7$$

Where:

Y_1 Competitive brand image strategy

Y_2 Competitive human resource strategy

Y_3 Competitive information technology strategy

b_0 Coefficient of intercept

$b_{1...}b_7$ Coefficients of seven independent variables

X_1 Rivalry among existing hotel firms

X_2 Bargaining power of individual hotel customers

X_3 New hotel entrants

X_4 Organization structure

X_5 Rivalry among existing hotel firms*organization structure

X_6 Bargaining power of individual hotel customers*organization structure

X_7 New hotel entrants*organization structure

The R^2 difference between the first and second blocks (two regression equations) indicated the moderating effect of variables.

This procedure was the same process with testing the moderating effect of organization structure on the relationship between resource competitive strategies and hotel performance. The main effects were resource competitive strategies: brand image, human resources, and information technology, and organization structure. These four variables were set in to the first block. Meanwhile, the moderating effect of organization structure and these three resource competitive strategies - brand image*organization structure, human resources*organization structure, and information technology *organization structure were included in the second block. The dependent variables were behavioral and financial performance. The total of four multiple regressions were calculated. The R^2 difference between the first and second blocks indicated the moderating effect of variables.

The multiple regressions of moderating effect of organization structure on the relationship between resource competitive strategies and hotel performance were:

$$Y_{1\text{-}2} = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

$$Y_{1\text{-}2} = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7$$

Where:

Y_1 Hotel behavioral performance

Y_2 Hotel financial performance

b_0 Coefficient of intercept

$b_{1\ldots}b_7$ Coefficients of seven independent variables

X_1 Competitive brand image strategy

X_2 Competitive human resource strategy

X_3 Competitive information technology strategy

X_4 Organization structure

X_5 Competitive brand image strategy*organization structure

X_6 Competitive human resource strategy*organization structure

X_7 Competitive information technology strategy*organization structure

CHAPTER IV

FINDINGS

This chapter presented the findings of the study and comprised four main sections. The first section showed the demographic characteristics of respondents' and properties' characteristics of hotels. The ANOVA and T-Test were applied to test the significant difference of hotel size and affiliation to industry forces, resource competitive strategies, organization structure, and hotel performance in the second section. The third section tested the model fit of the data set by structural equation modeling. SEM further instigated the moderating effect of hotel affiliation. Lastly, the moderating effect of organization structure was explored in the last section.

Respondent Demographic Profiles and Hotel Property Characteristics

Respondent Demographic Profiles

Table 10 showed the demographic characteristics of the respondents. Approximately 59.3% of the respondents were male (169) and 40.7% were female (116). 17% (49) of the respondents were between 18-30 years old, 39.8% (115) were between 31-45 years old, and 43.2% (125) were older than 46 years old. 69.4% (197) of the respondents earned a bachelor degree and higher and only 7.4% (21) had a high school diploma. 48.8% (154) of the respondents were either hotel owners or general managers and 32.7% (103) were division managers. Meanwhile, 41.3% (130) of the majority of the respondents have been working in the current position for more than 10 years. The other 26% of the respondents only worked at their current position for less than 3 years. The remaining respondents ranged from 3 to 10 years in their current positions.

Table 10

Respondent Demographic Characteristics

Characteristics	**n**	**%**
Gender:		
Male	169	59.3
Female	116	40.7
Age:		
18-30	49	17.0
31-45	115	39.8
46-60	93	32.1
Over than 60	32	11.1
Education:		
High school	21	7.4
College/ Associate degree	66	23.2
Bachelor degree	149	52.5
Master/ MBA degree and higher	48	16.9
Current Position:		
Hotel Owners	77	24.4
General Manager	77	24.4
Resident Manager	29	9.2
Division Manager	103	32.7
Others	29	9.3
Year of current position:		
Less than 3 years	82	26.0
3-6 years	61	19.4
7-10 years	42	13.3
More than 10 years	130	41.3

Hotel Property Characteristics

The hotel property characteristics were described in Table 11. Overall, the properties consist of either chain hotels or independent hotels; with 41.2% (128) and 58.8% (183), respectively. 59.9% (184) were the hotel type, 18.2% (56) were the motel/ inn type, and 16.3% (50) were the resort. 48.5% (149) of the properties were considered mid scale properties with and without food and beverage. The remaining 46% (141) of the properties were either the upscale, up-upscale, or luxury scale. Also, the majority of the properties 45.8% or 140) were located in resort areas. 25.5% (78) were located in the urban areas with the remaining properties located along highways, airport, and suburban areas. 46.2% (145) of the hotel properties were small hotels and 19.1% (60) of the hotel properties were large hotels.

Table 11

Hotel Property Characteristics

Characteristics	n	%
Affiliation:		
Chain	128	41.2
Independent	183	58.8
Type of lodging:		
Hotel	184	59.9
Motel/ Inn	56	18.2
Resort	50	16.3
B&B	10	3.3
Timeshare	7	2.3
Scale of lodging:		
Budget	17	5.5
Mid scale without F&B	83	27.0
Mid scale with F&B	66	21.5
Upscale	79	25.8
Up-upscale	32	10.4
Luxury	30	9.8
Location:		
Airport	23	7.5
Urban	78	25.5
Suburban	49	16.0
Highway	16	5.2
Resort	140	45.8
Size:		
Small (1-100 beds)	145	46.2
Medium (101-300 beds)	109	34.7
Large (more than 301 beds)	60	19.1

Differences between U.S. and Thai Hotels

From the 317 usable sample sizes, 259 were from the U.S. hotel companies and 58 were from Thai hotel companies. The U.S. hotels were represented as Western culture and Thai hotels were represented as Eastern culture. The independent sample t-test was applied to test whether the significant difference between the U.S. and Thai hotels was existed.

The t-value results indicated that five of the twenty-four items were significantly different ($p \leq .05$ and $p \leq .01$, see Table 12). The U.S. hotels showed the least threat of rivalry among the existing firms – 'The competition in my area is less fierce' (t-value = 2.88, $p \leq .01$) – than Thai hotels. Furthermore, the U.S. hotels perceived one item of behavioral performance – 'The different ways of delivering services to customers' (t-value = 2.05, $p \leq .05$) – was higher than Thai hotels. In contrast, the U.S. hotels perceived more threat from new hotel entrants – 'It is difficult for new hotel entrants to enter the market' (t-value = -2.41, $p \leq .05$) – than Thai hotels. For the brand image strategy, the U.S. hotels showed less competitive on the item of 'My hotel continually improves brand images to satisfy customer demands' (t-value = -2.06, $p \leq .05$) than Thai hotels. Lastly, the organization structure item – 'My hotel has heavy dependence on informal relations of co-operation for getting work done' (t-value = -2.10, $p \leq .05$) – is more likely to be mechanistically structure in the U.S. hotels than in Thai hotels.

Table 12

Cultural Comparison between U.S and Thai Hotels

Variable	Culture: U.S. n=259 Mean (SD)	Culture: Thai n=58 Mean (SD)	Mean Difference	*t*-value
Industry Forces				
Rivalry among existing firms				
My hotel has fewer competitors.	3.37 (1.00)	3.31 (.95)	.06	.44
The competition in my area is less fierce.	3.40 (.96)	3.00 (.95)	.40	2.88**
Individual customers				
Individual customers have less bargaining power over my hotel room rate.	3.51 (.98)	3.24 (.98)	.27	1.87
Individual customers show loyalty to my hotel.	4.32 (.76)	4.50 (.65)	-.17	-1.65
Entrants of new hotel firms				
It is difficult for new hotel entrants to enter the market.	3.55 (1.01)	3.91 (1.06)	-.35	-2.41*
New hotels advertise heavily to overcome existing brand preferences.	3.64 (.89)	3.77 (.83)	-.13	-1.01
Resource Competitive Strategies				
Brand image strategy				
My hotel makes conscious efforts to differentiate brand image from the competitors.	4.27 (.70)	4.43 (.70)	-.15	-1.48
My hotel continually improves brand images to satisfy customer demands.	4.30 (.70)	4.51 (.73)	-.21	-2.06*
Customers are constantly satisfied with my existing hotel's brand image.	4.10 (.75)	4.05 (.71)	.05	.52
Human resource strategy				
My hotel has an adequate number of skilled staff members.	4.14 (.69)	4.05 (.73)	.09	.89
My hotel makes sufficient investment in human resource training and development.	4.03 (.82)	3.82 (.70)	.20	1.77
My hotel staff is effective in completing their tasks.	4.05 (.64)	4.13 (.63)	-.08	-.94
Information technology strategy				
My hotel uses information technology as a competitive strategy.	4.18 (.64)	4.10 (.69)	.08	.86
My hotel has a strong belief in advanced information technology.	4.06 (.73)	3.98 (.82)	.08	.75
My hotel uses new information technology to accommodate customers' needs.	4.13 (.70)	4.10 (.61)	.03	.35
Organizational Structure				
My hotel has heavy dependence on informal relations of				

co-operation for getting work done.	3.63 (.93)	3.91 (.73)	-.27	-2.10*
My hotel has a strong emphasis on adapting freely to changing circumstances without too much concern for past experience.	3.37 (.92)	3.43 (.77)	-.05	-.43
My hotel has a strong tendency to let the individual's personality define proper on-the- job behavior.	3.11 (1.34)	3.29 (.87)	-.18	-.98
Behavioral Performance				
The different ways of delivering services to customers	3.98 (.71)	3.77 (.62)	.20	2.05*
My hotel's customer satisfaction level	4.22 (.68)	4.18 (.66)	.03	.34
My hotel's employee performance	3.96 (.68)	3.84 (.79)	.12	1.17
Financial Performance				
My hotel's average annual occupancy rate	3.75 (.77)	3.93 (.55)	-.17	-1.65
My hotel's net profit after tax	3.92 (.83)	3.82 (.62)	.09	.82
My hotel's return on investment (ROI)	3.87 (.75)	3.82 (.62)	.04	.42

Significant Differences between Hotel Size and Industry Forces, Resource Competitive Strategies, Organization Structure, and Hotel Performance

Hypothesis 1 was to examine the significant difference between hotel size and industry forces, resource competitive strategies, organization structure, and hotel performance. The hotel size was categorized by small size (1-100 beds), medium-size hotels (101-300 beds), and large hotels (> 300 beds). The numbers of samples in small, medium, and large size are 145, 109, and 60 respectively. Table 13 showed the results of the one-way ANOVA. From the total of 24 items, ten of them were statically significant ($p \leq .05$). Hoteliers from small hotels rated items of industry forces, resource competitive strategies, organization structure, and hotel performance higher than hoteliers from medium and large hotels.

For the industry forces items, only one item under the rivalry among existing hotel firms - 'my hotel has fewer competitors' – was significant (F-value=3.96, $p \leq .05$).

Hoteliers from small hotels (mean =3.43) perceives themselves as having fewer competitors than hoteliers from large hotels (mean =3.03). At the same time, hoteliers from medium hotels (mean=3.43) perceived themselves as having fewer competitors than hoteliers from large hotels (mean =3.03). The 'New hotels advertise heavily to overcome existing brand preferences' item of new hotel entrants was statically significant (F-value=14.07, $p \leq .01$). Hoteliers from small hotels (mean=3.93) rated the item higher than hoteliers from medium (mean=3.39) and large (mean=3.50) hotels.

Table 13

ANOVA Comparison between Hotel Size and Industry Forces,

Resource Competitive Strategies, Organization Structure, and Hotel Performance

Variable	Hotel Size[a] Small (S)(n=145) Mean (SD)	Medium (M)(n=109) Mean (SD)	Large (L)(n=60) Mean (SD)	Significant Different Mean	F-Ratio
Industry Forces					
Rivalry among existing firms					
My hotel has fewer competitors.	3.43 (1.04)	3.43 (.97)	3.03 (.86)	S>L, M>L	3.96*
The competition in my area is less fierce.	3.33 (1.02)	3.35 (.95)	3.15 (.88)		.11
Individual customers					
Individual customers have less bargaining power over my hotel room rate.	3.51 (.98)	3.30 (1.03)	3.61 (.94)		2.34
Individual customers show loyalty to my hotel.	4.42 (.76)	4.26 (.78)	4.36 (.55)		1.50
Entrants of new hotel firms					
It is difficult for new hotel entrants to enter the market.	3.68 (1.08)	3.54 (.88)	3.58 (1.13)		.68
New hotels advertise heavily to overcome existing brand preferences.	3.93 (.82)	3.39 (.86)	3.50 (.89)	S>M, S>L	14.07**
Resource Competitive Strategies					
Brand image strategy					
My hotel makes conscious efforts to differentiate brand image from the competitors.	4.42 (.75)	4.12 (.68)	4.35 (.60)	S>M	5.77**
My hotel continually improves brand images to satisfy customer demands.	4.51 (.65)	4.12 (.73)	4.33 (.70)	S>M	9.78**
Customers are constantly satisfied with my existing hotel's brand image.	4.18 (.74)	3.98 (.71)	4.05 (.76)		2.47

<u>Human resource strategy</u>					
My hotel has an adequate number of skilled staff members.	4.22 (.65)	3.99 (.71)	4.10 (.75)	S>M	3.44*
My hotel makes sufficient investment in human resource training and development.	3.95 (.77)	3.93 (.83)	4.16 (.80)		1.87
My hotel staff is effective in completing their tasks.	4.04 (.58)	4.07 (.67)	4.05 (.69)		.05
<u>Information technology strategy</u>					
My hotel uses information technology as a competitive strategy.	4.32 (.59)	4.04 (.69)	3.98 (.59)	S>M, S>L	8.91**
My hotel has a strong belief in advanced information technology.	4.08 (.82)	4.04 (.68)	3.93 (.68)		.84
My hotel uses new information technology to accommodate customers' needs.	4.25 (.59)	3.95 (.75)	4.11 (.69)	S>M	6.24**
Organizational Structure					
My hotel has heavy dependence on informal relations of co-operation for getting work done.	3.90 (.82)	3.40 (.89)	3.61 (.97)	S>M	10.18**
My hotel has a strong emphasis on adapting freely to changing circumstances without too much concern for past experience.	3.52 (.92)	3.37 (.75)	2.98 (.94)	S>L	8.15**
My hotel has a strong tendency to let the individual's personality define proper on-the- job behavior.	3.27 (1.27)	3.15 (1.09)	2.71 (1.43)	S>L	4.27*
Behavioral Performance					
The different ways of delivering services to customers	3.99 (.65)	3.84 (.77)	3.96 (.66)		1.49
My hotel's customer satisfaction level	4.22 (.66)	4.25 (.68)	4.08 (.69)		1.35
My hotel's employee performance	3.96 (.71)	3.97 (.67)	3.78 (.71)		1.70
Financial Performance					
My hotel's average annual occupancy rate	3.77 (.74)	3.73 (.77)	3.83 (.66)		.35
My hotel's net profit after tax	3.94 (.82)	3.83 (.81)	3.88 (.69)		.60
My hotel's return on investment (ROI)	3.86 (.75)	3.88 (.74)	3.76 (.64)		.56

a: Small (1-100 beds), medium-size hotels (101-300 beds), and large hotels (> 300 beds).
*ρ<.05, **ρ<.01

From Table 13, five out of nine resource competitive strategies items were significantly different ($p \leq .05$ and $p \leq .01$ level). Hoteliers from small hotels (mean=4.42) rated item of 'my hotel makes conscious efforts to differentiate brand image from the competitors' higher than hoteliers from medium hotels (mean=4.12), with F-value=5.77 and $p \leq .01$. Hoteliers from small hotels (mean=4.51) further rated the item 'my hotel continually improve brand images to satisfy customer demands' higher than hoteliers from medium hotels (mean=4.12), with F-value=9.78 and $p \leq .01$. Only one item of human resource strategies – 'my hotel has an adequate number of skilled staff members' was significantly different (F-value= 3.44, $p \leq .05$). Hoteliers from small hotels (mean=4.22) rated this item higher than hoteliers from medium hotels (mean=3.99). For information technology strategy items, two items were statistically significant ($p \leq .01$). Hoteliers from small hotels (mean=4.32) rated item 'my hotel uses information technology as a competitive strategy' higher than hoteliers from medium (mean=4.04) and large (mean=3.98) hotels (F-value=8.91, $p \leq .01$). Meanwhile, hoteliers from small hotels (mean=4.25) indicated higher rating of 'my hotel uses new information technology to accommodate customers' needs' than hoteliers from medium hotels (mean=3.95), (F-value=6.24, $p \leq .01$).

All three items from the organization structure were significantly different with any hotel size ($p \leq .05$ and $p \leq .01$ level). Hoteliers from small hotels (mean=3.90) rated item 'my hotel has heavy dependence on informal relations of co-operation for getting work done' higher than hoteliers from medium hotels (mean=3.40), (F-value=10.18, $p \leq .01$). Hoteliers from small hotels (mean=3.52) rated item 'my hotel has a strong emphasis on adapting freely to changing circumstances without too much concern for past experience' higher than hoteliers from large hotels (mean=2.98), (*F*-value=8.15, $p \leq .01$). Lastly, hoteliers from small hotels (mean=3.27) perceived item 'my hotel has a strong tendency to let the individual's personality define proper on-the-job behavior' higher than hoteliers from large hotels (mean=2.71), (*F*-value=4.27, $p \leq .05$).

However, all items of bargaining power of individual hotel customers, behavioral performance, and financial performance were not significantly different. From all these findings, H_1: there is a significant difference between hotel size and industry forces, resource competitive strategies, organization structure, and hotel performance was partially supported.

Significant Difference between Hotel Affiliation and Industry Forces, Resource Competitive Strategies, Organization Structure, and Hotel Performance

The hotels were separated into two groups: chain (n=128) and independent (n=183). The *t*-test was used to test the Hypothesis 2: there is a significant difference between hotel affiliation and industry forces, resource competitive strategies, organization structure, and hotel performance. Table 14 represented the outcome of these findings.

Nine out of twenty-four items were significantly different (at either $p \leq .05$ or $p \leq .01$ level). For industry force items, the finding showed that there is a significant difference between chain and independent hotels on 'individual customers show loyalty to my hotel' (*t*-value = -2.40, $p \leq .05$). Hoteliers from chain hotels (mean=4.23) rated this item lower than hoteliers from independent hotels (mean=4.43). For two items of new hotel entrants, the item 'it is difficult for new hotel entrants to enter the market' was significant (t-value = -3.50, $p \leq .01$). Hoteliers from chain hotels (mean=3.38) rated this item lower than hoteliers from independent hotels (mean=3.79). Another item of new hotel entrants 'new hotel advertise heavily to overcome exiting brand preference' was also significantly different (t-value = -2.98, $p \leq .01$). Hoteliers from chain hotels (mean=3.47) rated this item lower than hoteliers from independent hotels (mean=3.77).

Table 14

T-Test Comparison between Hotel Affiliation and Industry Forces,

Resource Competitive Strategies, Organization Structure, and Hotel Performance

Variable	Hotel Affiliation		*t*-value
	Chain n=128 Mean (SD)	Independent n=183 Mean (SD)	
Industry Forces			
Rivalry among existing firms			
My hotel has fewer competitors.	3.24 (.97)	3.42 (1.00)	-1.60
The competition in my area is less fierce.	3.29 (1.00)	3.34 (.95)	-.42
Individual customers			
Individual customers have less bargaining power over my hotel room rate.	3.35 (.91)	3.54 (1.04)	-1.69
Individual customers show loyalty to my hotel.	4.23 (.73)	4.43 (.73)	-2.40*
Entrants of new hotel firms			
It is difficult for new hotel entrants to enter the market.	3.38 (.97)	3.79 (1.04)	-3.50**
New hotels advertise heavily to overcome existing brand preferences.	3.47 (.93)	3.77 (.81)	-2.98**
Resource Competitive Strategies			
Brand image strategy			
My hotel makes conscious efforts to differentiate brand image from the competitors.	4.32 (.73)	4.30 (.69)	.14
My hotel continually improves brand images to satisfy customer demands.	4.38 (.76)	4.32 (.69)	.66
Customers are constantly satisfied with my existing hotel's brand image.	3.96 (.73)	4.17 (.74)	-2.50*
Human resource strategy			
My hotel has an adequate number of skilled staff members.	4.07 (.70)	4.13 (.69)	-.66

My hotel makes sufficient investment in human resource training and development.	4.02 (.77)	3.94 (.81)	.84
My hotel staff is effective in completing their tasks.	4.06 (.61)	4.04 (.65)	.18
Information technology strategy			
My hotel uses information technology as a competitive strategy.	4.18 (.62)	4.13 (.66)	.75
My hotel has a strong belief in advanced information technology.	4.00 (.75)	4.05 (.74)	-.63
My hotel uses new information technology to accommodate customers' needs.	4.19 (.62)	4.06 (.71)	1.72
Organizational Structure			
My hotel has heavy dependence on informal relations of co-operation for getting work done.	3.45 (.86)	3.83 (.90)	-3.71**
My hotel has a strong emphasis on adapting freely to changing circumstances without too much concern for past experience.	3.25 (.86)	3.44 (.84)	-1.90
My hotel has a strong tendency to let the individual's personality define proper on-the- job behavior.	2.84 (1.25)	3.32 (1.23)	-3.37**
Behavioral Performance			
The different ways of delivering services to customers	3.97 (.69)	3.90 (.70)	.93
My hotel's customer satisfaction level	4.14 (.67)	4.25 (.68)	-1.48
My hotel's employee performance	3.94 (.71)	3.91 (.68)	.40
Financial Performance			
My hotel's average annual occupancy rate	3.89 (.79)	3.67 (.68)	2.61**
My hotel's net profit after tax	4.03 (.72)	3.77 (.81)	2.92**
My hotel's return on investment (ROI)	3.99 (.72)	3.73 (.70)	3.08**

*$p<.05$, **$p<.01$

From the resource competitive strategies, brand image strategy item 'customers are constantly satisfied with my existing hotel's brand image' was statistically significant (t-value = -2.50, $p \leq .05$). Hoteliers from chain hotels (mean=3.96) rate this item lower than the hoteliers from independent hotels (mean=4.17). Organization structure item 'my hotel has heavy dependence on informal relations of co-operation for getting work done' was significant (t-value = -3.71, $p \leq .01$). Hoteliers from chain hotels (mean=3.45) rate this item lower than hoteliers from independent hotels (mean=3.83). Another item of organization structure 'My hotel has a strong tendency to let the individual's personality define proper on-the- job behavior' was statistically significant (*t*-value = -3.37, $p \leq .01$). Hoteliers from chain hotels (mean=2.84) rated this item lower than hoteliers from independent hotels (mean=3.32).

Three items of financial performance – 'annual occupancy rate' (*t*-value = 2.61, $p \leq .01$), 'net profit after tax' (*t*-value = 2.92, $p \leq .01$), and 'return in investment' (*t*-value = 3.08, $p \leq .01$) – were statistically significant. Hoteliers from chain hotels (mean=3.89) rated annual occupancy higher than hoteliers from independent hotels (mean=3.67). Hoteliers from chain hotels (mean=4.03) rated net profit after tax higher than hoteliers from independent hotels (mean=3.77). Lastly, hoteliers from chain hotels (mean=3.99) rated return on investment higher than hoteliers from independent hotels (mean=3.73).

In contrast, items of rivalry among existing firms, human resource strategy, information technology strategy, and behavioral performance were not significantly different. For hotel performance, the non-significant outcome was similar as the study by Giraldez and Martin (2004). No clear differences in performance existed between chain and independent hotels. Therefore, H_2: there is a significant difference between hotel affiliation and industry forces, resource competitive strategies, organization structure, and hotel performance was partially supported.

The Structural Model

The structural paths were estimated to test the hypotheses between constructs. Table 14 presented the structural model fit with χ^2 = 567.69, df = 174, $\rho < .00$; CFI= .91; GFI = .89; RMSEA = .073; NFI = .87; TLI = .89.

The Impact of Industry Forces on Resource Competitive Strategies

Table 15 indicated the hypothesis that tested on the impact of industry forces on brand image strategy. The results showed that the low bargaining power of individual hotel customers had a positive impact on a brand image strategy ($\gamma_{21} = .22$, $\rho \leq .01$), which was supported by H_{4a}: advantage of low bargaining power of individual hotel customers would have a positive impact on implementing a competitive brand image strategy. Meanwhile, the less threat of new hotel entrants was positive and significant on brand image strategy ($\gamma_{31} = .31$, $\rho \leq .001$). The findings supported H_{5a}: advantage of less threat of new hotel entrants would have a positive impact on implementing a competitive brand image strategy. In contrast, few rivalries among existing hotels were not statically significant on brand image strategy ($\rho > .05$), which did not support H_{3a}: advantage of few rivalries among existing hotels would have a positive impact on implementing a competitive brand image strategy.

Table 15

Structural Path Estimates

Path Coefficients	Standardized Loading (t-value)	Hypotheses
Rivalry → Brand image strategy (γ_{11})	.01 (.20)	H_{3a} : Not supported
Customers → Brand image strategy (γ_{21})	.22 (2.81**)	H_{4a} : Supported
New entry → Brand image strategy (γ_{31})	.31 (4.16***)	H_{5a} : Supported
Rivalry → HR strategy (γ_{12})	.01 (.21)	H_{3b} : Not supported
Customers → HR strategy (γ_{22})	.44 (5.27***)	H_{4b} : Supported
New entry → HR strategy (γ_{32})	.18 (2.46*)	H_{5b} : Supported
Rivalry → IT strategy (γ_{13})	.07 (1.00)	H_{3c} : Not supported
Customers → IT strategy (γ_{23})	.20 (2.64**)	H_{4c} : Supported
New entry → IT strategy (γ_{33})	.27 (3.79***)	H_{5c} : Supported
Brand image → Behavioral performance (β_{11})	-.02 (.30)	H_{6a}: Not supported
Brand image → Financial performance (β_{12})	-.03 (.40)	H_{6b} : Not supported
HR → Behavioral performance (β_{21})	.53 (6.13***)	H_{7a}: Supported
HR → Financial performance (β_{22})	.15 (2.04*)	H_{7b} : Supported
IT → Behavioral performance (β_{31})	.14 (2.15*)	H_{8a}: Supported
IT → Financial performance (β_{32})	.22 (3.09**)	H_{8b} : Supported

Model Fit Indices: χ^2 = 567.69 (df=174, p=0.00), GFI =.89, TLI=.89, CFI=.91, RMSEA=.073

* ρ <.05, ** ρ <.01, *** ρ <.001

Table 15 presented the impact of industry forces on human resource strategy, which were testing H_{3b}, H_{4b}, and H_{5b}: the industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and threats of new hotel entrants – would indicate a competitive human resource strategy. The results indicated that the low bargaining power of individual hotel customers had a positive impact on human resource strategy (γ_{22} = .44, $\rho \leq .001$), which supported H_{4b}: advantage of low bargaining power of individual hotel customers would have a positive impact on implementing a competitive human resource strategy. The less threat of new hotel entrants was also positive and significant on the competitive human resource strategy (γ_{32} = .18, $\rho \leq .05$), which supported H_{5b}: advantage of less threat of new hotel entrants would have a positive impact on implementing a competitive human resource strategy. On the other hand, rivalry among existing hotel firms was not significant to the competitive human resource strategy ($p > .05$). This result did not support H_{3b}: advantage of few rivalries among existing hotels firms would have a positive impact on implementing a competitive human resource strategy.

H_{3c}, H_{4c}, and H_{5c} were to test the impact of industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and new hotel entrants – on a competitive information technology strategy. The findings found that the low bargaining power of individual hotel customers was positive and significant on the competitive information technology strategy (γ_{23} = .20, $\rho \leq .01$). This finding supported H_{4c}: advantage of low bargaining of individual hotel customers would have a positive impact on implementing a competitive information technology strategy. Meanwhile, the less threat of new hotel entrants was positive and significant on a competitive information technology strategy (γ_{33} = .27, $\rho \leq .001$), which supported H_{5c}: advantage of less threat of new hotel entrants would have a positive impact on implementing a competitive information technology strategy. However, rivalry of existing hotels was not significant. This finding did not support H_{3c}: advantage of few rivalries among existing hotel firms would have a positive impact on implementing a competitive information technology strategy.

The Impact of Resource Competitive Strategies on Hotel Performance

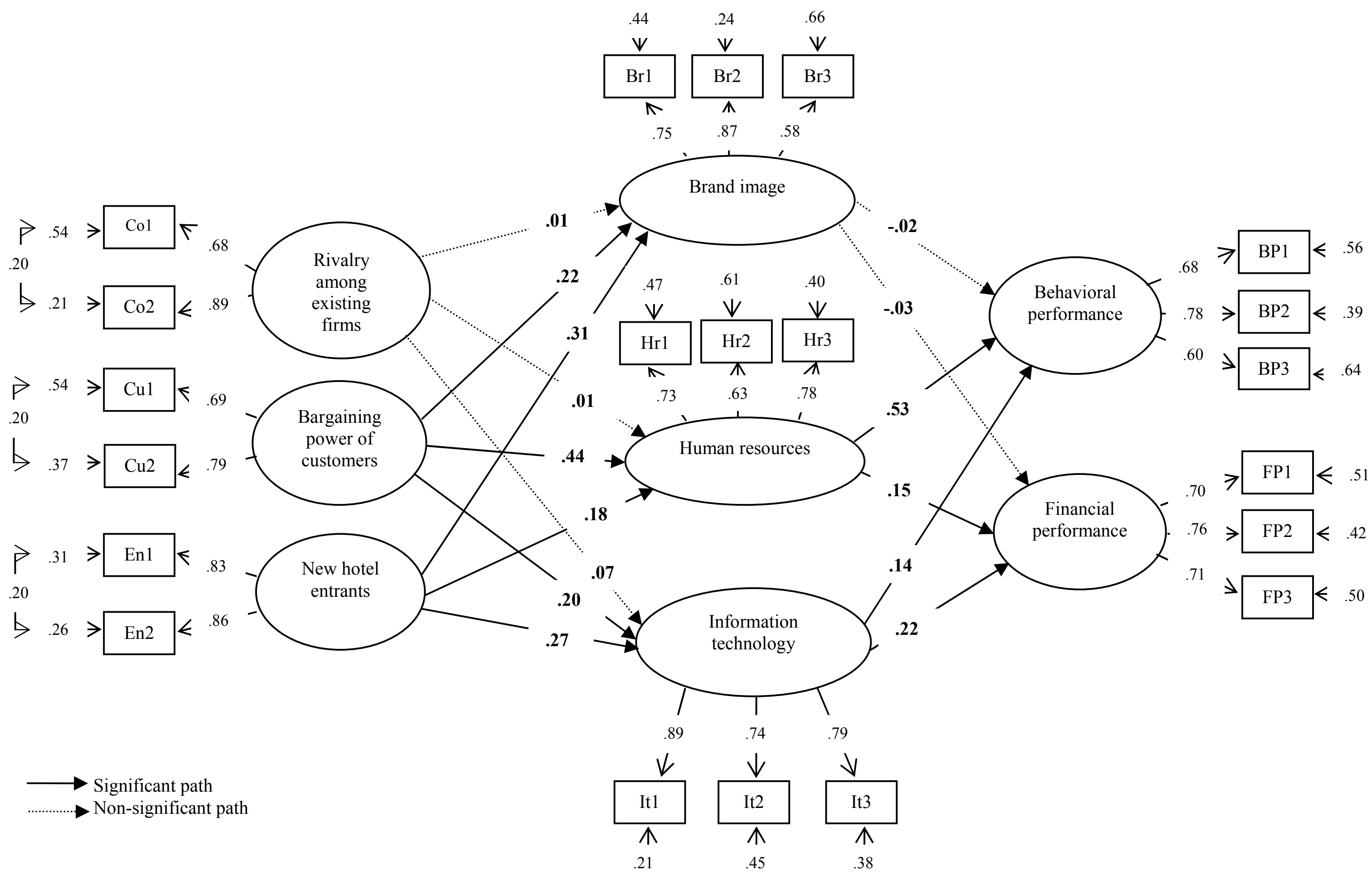
Table 16 further showed the impact of resource competitive strategies on hotel performance. The findings found that the competitive human resource strategy had a positive impact on behavioral performance ($\beta_{21} = .53, \rho \leq .001$) and financial performance ($\beta_{22} = .15, \rho \leq .05$). These findings supported H_{7a}: the competitive human resource strategy would have a positive impact on hotel behavioral performance, and H_{7b}: the competitive human resource strategy would have a positive impact on hotel financial performance. Moreover, the competitive information technology strategy had a positive impact on behavioral performance ($\beta_{31} = .14, \rho \leq .05$) and financial performance ($\beta_{32} = .22, \rho \leq .01$). These findings supported H_{8a}: the competitive information technology strategy would have a positive impact on hotel behavioral performance, and H_{8b}: the competitive information technology strategy would have a positive impact on hotel financial performance.

In contrast, there was no statistically significance on the impact of competitive brand image strategy on hotels' behavioral and financial performance. These results did not support H_{6a}: the competitive brand images strategy would have a positive impact on hotel behavioral performance, and H_{6b}: the competitive brand images strategy would have a positive impact on hotel financial performance.

From the results of Table 16, the standardized path coefficients of the hotel competitive advantage model were described in Figure 9.

Figure 9

The Standardized Structural Path Coefficients of the Hotel Competitive Advantage Model



Moderating Effect of Hotel Affiliation

Table 16 showed the existence of moderating effect by investigating a multi-group approach. The hotel affiliation was categorized into two sub groups: chain (n=138) and independent (n=183). The unconstrained mode (base model or free model) was to allow all hypothesized structural model paths vary across the chain and independent hotel groups. Later, the constrained model, which only the hypothesized structural paths was constrained to be equal across the two subgroups were compared (Joreskog & Sorbom, 1993).

The Relationship between Industry Forces and Resource Competitive Strategies

The three sub-models of the moderating effect of hotel affiliation were tested on the relationship between industry forces and resource competitive strategies – brand image (Model 1), human resources (Model 2), and information technology (Model 3), see Table 16.

Model 1 was to test the moderating effect of hotel affiliation on the relationship between industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and new hotel entrants - and brand image strategy (testing H_{9a}, H_{10a}, and H_{11a}). The Chi-square difference between free and constraint models of the path between rivalry among existing hotels firms and brand image strategy was not statistically significant ($\Delta\chi^2 = .14$, df=1, p>.10). This finding did not support H_{9a}: there is a moderating effect of hotel affiliation on the relationship between rivalry among existing hotel firms and brand image strategy. Moreover, the Chi-square difference between free and constraint models of the path between bargaining power of individual hotel customers and brand image strategy was not significant ($\Delta\chi^2$ = .71, df=1, p>.10), which did not supported H_{10a}: there is a moderating effect of hotel affiliation on the relationship between bargaining power of individual hotel customers and brand image strategy. Furthermore, the Chi-square difference between free and constraint models of the path between threat of new hotel entrants and brand image strategy was not significant ($\Delta\chi^2$ = .32, df=1, p>.10), which did not supported H_{11a}: there is a moderating effect of hotel affiliation on the relationship between threat of new entrants and brand image strategy.

Table 16

The Chi-square Difference Test of Hotel Affiliation Moderating Effect on the

Relationship between Industry Forces and Resource Competitive Strategies

Model	Chi-square Statistics		Chi-square Difference	Hypothesis Testing	Standard estimate (t-value) Chain (n=138)	Independent (n=183)
Model 1: Industry forces to brand image strategy						
M_f: Free Model	132.93 (df=53)					
M_{c1}: Rivalry $\longrightarrow$ Brand image	133.07 (df=54)	M_{c1} - M_f	$\Delta\chi^2$ = .14, df=1, p>.10	H_{9a}: No	.08 (1.31)	.02 (.20)
M_{c2}: Customers $\longrightarrow$ Brand image	133.64 (df=54)	M_{c2} - M_f	$\Delta\chi^2$ = .71, df=1, p>.10	H_{10a}: No	.10 (1.54)	.11 (1.64)
M_{c3}: New entrants $\longrightarrow$ Brand image	133.25 (df=54)	M_{c3} - M_f	$\Delta\chi^2$ = .32, df=1, p>.10	H_{11a}: No	.05 (.06)	.04 (.05)
Model 2: Industry forces to human resource strategy						
M_f: Free Model	144.63 (df=53)					
M_{c1}: Rivalry $\longrightarrow$ Human resource	145.75 (df=54)	M_{c1} - M_f	$\Delta\chi^2$ = 1.12, df=1, p>.10	H_{9b}: No	.09 (1.77)	.03 (.63)
M_{c2}: Customers $\longrightarrow$ Human resource	149.75 (df=54)	M_{c2} - M_f	$\Delta\chi^2$ = 5.12, df=1, p≤.05	H_{10b}: Supported	.36 (4.91***)	.16 (2.52**)
M_{c3}: New entrants $\longrightarrow$ Human resource	145.98 (df=54)	M_{c3} - M_f	$\Delta\chi^2$ = 1.35, df=1, p>.10	H_{11b}: No	.08 (1.42)	.04 (.66)
Model 3: Industry forces to information technology strategy						
M_f: Free Model	146.07 (df=53)					
M_{c1}: Rivalry $\longrightarrow$ Information technology	146.78 (df=54)	M_{c1} - M_f	$\Delta\chi^2$ = .71, df=1, p>.10	H_{9c}: No	.02 (.37)	.09 (1.54)
M_{c2}: Customers $\longrightarrow$ Information technology	146.13 (df=54)	M_{c2} - M_f	$\Delta\chi^2$ = .06, df=1, p>.10	H_{10c}: No	.10 (1.16)	.11 (1.68)
M_{c3}: New entrants $\longrightarrow$ Information technology	149.32 (df=54)	M_{c3} - M_f	$\Delta\chi^2$ = 3.25, df=1, p≤.10	H_{11c}: Supported	.12 (1.69*)	.19 (2.88***)

*p<.10, **p<.05, ***p<.01 level

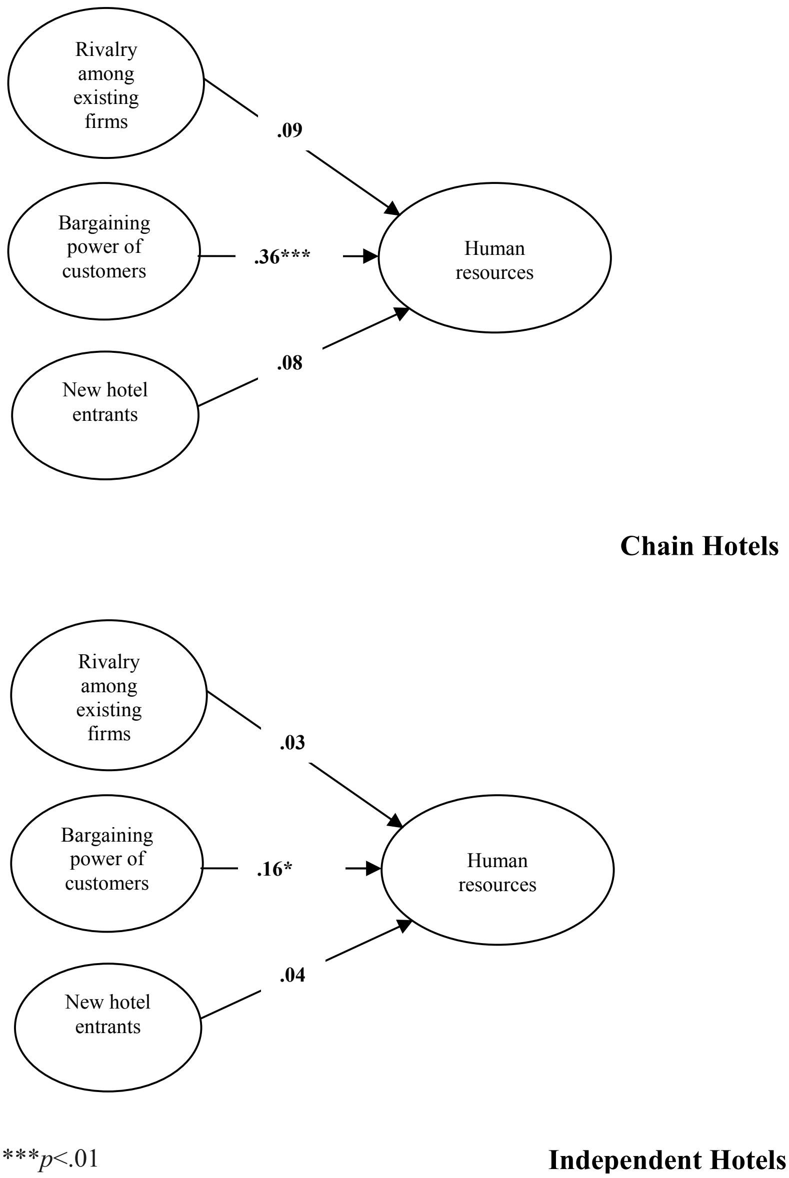
From Table 16, Model 2 was to test the moderating effect of hotel affiliation on the relationship between industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and new hotel entrants - and human resource strategy, which corresponded to H_{9b}, H_{10b}, and H_{11b}. The Chi-square difference between free and constraint models of the path between bargaining power of individual hotel customers and human resource strategy was statistically significant ($\Delta\chi^2 = 5.12$, df=1, $p \leq .05$). This finding supports H_{10b}: there is a moderating effect of hotel affiliation on the relationship between bargaining power of individual hotel customers and human resource strategy. Hotelier perceived that the relationship between low bargaining power of individual hotel customers on human resource strategy is stronger for chain hotels (b=.36, t-value=4.91, $p \leq .01$) than for independent hotels (b=.16, t-value=2.52, $p \leq .05$).

On the other hand, the Chi-square difference between free and constraint models of the path between rivalry among existing hotel firms and human resource strategy was not significant ($\Delta\chi^2 = 1.12$, df=1, $p > .10$), which did not supported H_{9b}: there is a moderating effect of hotel affiliation on the relationship between rivalry among existing hotel firms and human resource strategy. Furthermore, the Chi-square difference between free and constraint models of the path between threat of new hotel entrants and human resource strategy was not significant ($\Delta\chi^2 = 1.35$, df=1, $p > .10$), which did not supported H_{11b}: there is a moderating effect of hotel affiliation on the relationship between threat of new hotel entrants and human resource strategy.

From the moderating effect significance of hotel affiliation on the relationship between the bargaining power of individual hotel customers and human resource strategy, the standardized coefficients were represented by between chain and independent hotels as Figure 10.

Figure 10

Standardized Parameter Coefficients for Chain and Independent Hotels on Bargaining Power of Customers and Human Resource Strategy



*p<.10, **p<.05, ***p<.01

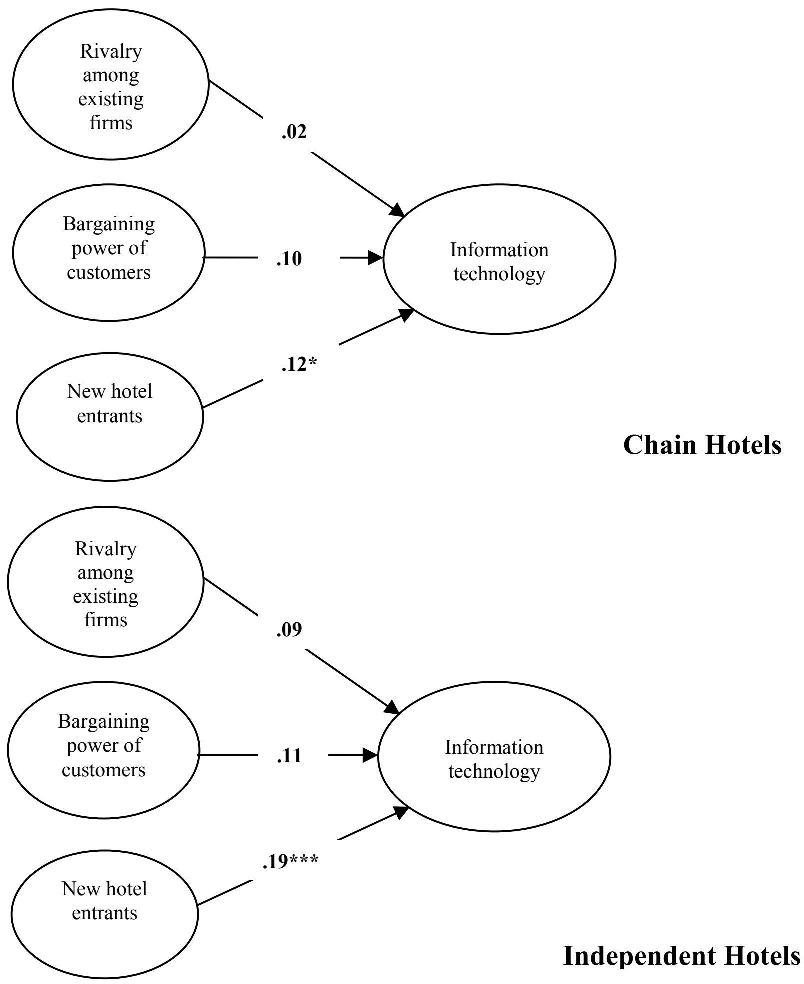
Model 3 was to test Hypotheses 9c, 10c, and 11c: there is a moderating effect of hotel affiliation on the relationship between industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and threat of new hotel entrants - and information technology strategy. The Chi-square difference between free and constraint models of the path between threat of new hotel entrants and information technology strategy was statistically significant ($\Delta\chi^2 = 3.35$, df=1, $p \leq .10$), which supported H_{11c}: there is a moderating effect of hotel affiliation on the relationship between threat of new hotel entrants and information technology strategy. The relationship between less threat of new hotel entrants on information technology strategy was stronger for independent hotels (b=.19, *t*-value=2.88, $p \leq .01$) than for chain hotels (b=.12, *t*-value=1.69, $p \leq .10$).

However, the Chi-square difference between free and constraint models of the path between rivalry among existing hotel firms and information technology strategy was not significant ($\Delta\chi^2 = .71$, df=1, $p > .10$), which did not supported H_{9c}: there is a moderating effect of hotel affiliation on the relationship between rivalry among existing hotel firms and information technology strategy. Furthermore, the Chi-square difference between free and constraint models of the path between bargaining power of individual hotel customers and information technology was not significant ($\Delta\chi^2 = .06$, df=1, $p > .10$), which did not supported H_{10c}: there is a moderating effect of hotel affiliation on the relationship between bargaining power of individual hotel customers and information strategy.

Figure 11 showed the standardized coefficients between chain and independent hotels on the relationship between less threat of new hotel entrants and information technology strategy.

Figure 11

Standardized Parameter Coefficients for Chain and Independent Hotels on New Hotel Entrants and Information Technology Strategy



*$p<.10$, **$p<.05$, ***$p<.01$

The Relationship between Resource Competitive Strategies and Hotel Performance

The two sub-models were to investigate the moderating effect of hotel affiliation on the relationship between resource competitive strategies and hotel performance – behavioral (Model 4) and financial (Model 5), testing hypotheses $H_{12a\text{-}b}$, $H_{13a\text{-}b}$, and $H_{14a\text{-}b}$. The findings were represented in Table 17.

Table 17

The Chi-square Difference Test of Hotel Affiliation Moderating Effect on the Relationship between Resource Competitive Strategies and Hotel Performance

Model	Chi-square Statistics		Chi-square Difference	Hypothesis Testing	Standard estimate (t-value)	
					Chain (n=138)	Independent (n=183)
<u>Model 4</u>: Resource competitive strategies to behavioral performance						
M_f: Free Model	404.03 (df=110)					
M_{c1}: Brand image ⟶ Behavioral performance	409.37 (df=111)	M_{c1} - M_f	$\Delta\chi^2 = 5.34$, df=1, $p \leq .05$	H_{12a}: Supported	.25 (3.23***)	.15 (2.02**)
M_{c2}: Human resource ⟶ Behavioral performance	447.00 (df=111)	M_{c2} - M_f	$\Delta\chi^2 = 14.97$, df=1, $p \leq .01$	H_{13a}: Supported	.51 (7.02***)	.15 (2.08**)
M_{c3}: Information technology ⟶ Behavioral performance	405.77 (df=111)	M_{c3} - M_f	$\Delta\chi^2 = 1.74$, df=1, $p > .10$	H_{14a}: No	.07 (1.15)	.01 (.04)
<u>Model 5</u>: Resource competitive strategies to financial performance						
M_f: Free Model	340.05 (df=110)					
M_{c1}: Brand image ⟶ Financial performance	343.51 (df=111)	M_{c1} - M_f	$\Delta\chi^2 = 3.46$, df=1, $p \leq .10$	H_{12b}: Supported	.23 (3.05***)	.20 (3.14***)
M_{c2}: Human resource ⟶ Financial performance	342.34 (df=111)	M_{c2} - M_f	$\Delta\chi^2 = 2.29$, df=1, $p > .10$	H_{13b}: No	.10 (1.07)	.01 (.05)
M_{c3}: Information technology ⟶ Financial performance	344.94 (df=111)	M_{c3} - M_f	$\Delta\chi^2 = 4.89$, df=1, $p \leq .05$	H_{14b}: Supported	.17 (2.92***)	.15 (2.18**)

*p<.10, **p<.05, ***p<.01 level

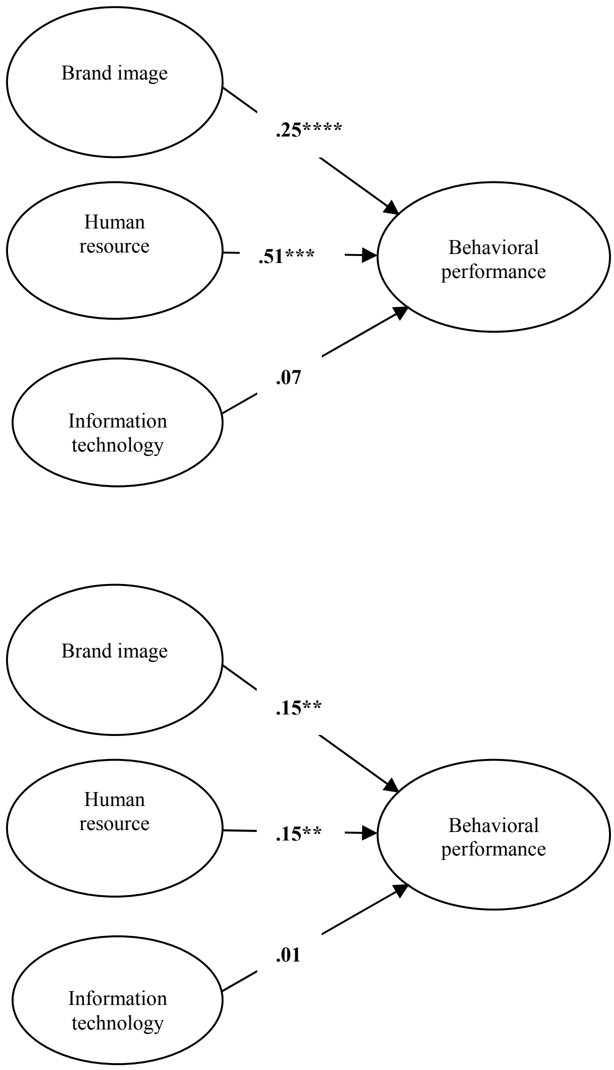
From Table 17, Model 4 was to test the moderating effect of hotel affiliation on the relationship between resource competitive strategies and hotel behavioral performance, testing H_{12a}, H_{13a}, and H_{14a}. The Chi-square difference between free and constraint models of the path between brand image strategy and behavioral performance was statistically significant ($\Delta\chi^2 = 5.34$, df=1, $p \leq .05$). This finding supports H_{12a}: there is a moderating effect of hotel affiliation on the relationship between brand image strategy and hotel behavioral performance. The relationship between competitive brand image strategy and hotel behavioral performance was stronger in chain hotels (b=.25, *t*-value=3.23, $p \leq .01$) than in independent hotels (b=.15, *t*-value=2.02, $p \leq .05$).

Another path comparison was to investigate the Chi-square difference between free and constraint models of the path between human resource strategy and hotel behavioral performance, see Table 17. The Chi-square difference was found, indicating $\Delta\chi^2 = 14.97$, df=1, $p \leq .01$. This finding supported H_{13a}: there is a moderating effect of hotel affiliation on the relationship between human resource strategy and hotel behavioral performance. The relationship between competitive human resource strategy and hotel behavioral performance was stronger in chain hotels (b=.51, *t*-value=7.02, $p \leq .01$) than in independent hotels (b=.15, *t*-value=2.08, $p \leq .05$). Figure 12 showed the standardized coefficients between chain and independent hotels on the relationship between competitive brand image strategy and hotel behavioral performance, and between competitive human resource strategy and hotel behavioral performance.

Figure 12

Standardized Parameter Coefficients for Chain and Independent Hotels on

Resource Competitive Strategies and Behavioral Performance



Chain Hotels

Independent Hotels

**p*<.10, ***p*<.05, ****p*<.01

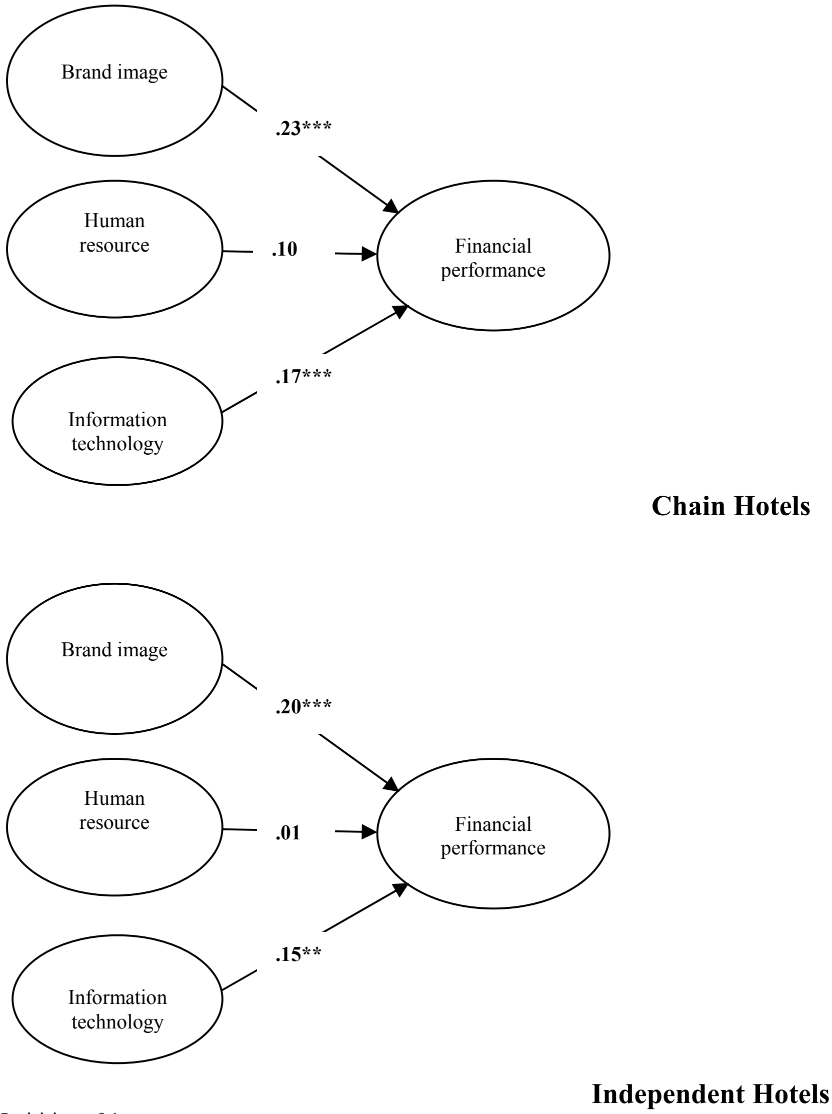
From Table 17, Model 5 was to test Hypotheses 12b, 13b, and 14b: there is a moderating effect of hotel affiliation on the relationship between resource competitive strategies and hotel financial performance. The Chi-square difference between free and constraint models of the path between brand image strategy and hotel financial performance was statistically significant ($\Delta\chi^2 = 3.46$, df=1, $p \leq .10$), which support H_{12b}: there is a moderating effect of hotel affiliation on the relationship between competitive brand image strategy and hotel financial performance. The relationship between competitive brand image strategy and hotel financial performance in chain hotels (b=.23, *t*-value=3.05, $p \leq .01$) was stronger than in independent hotels (b=.20, *t*-value=3.14, $p \leq .01$).

This finding further concluded that the Chi-square difference between free and constraint models of the path between information technology strategy and hotel financial performance to be statistically significant ($\Delta\chi^2 = 4.89$, df=1, $p \leq .05$). This result supported H_{14b}: there is a moderating effect of hotel affiliation on the relationship between competitive information technology strategy and hotel financial performance. The relationship between competitive information technology strategy and hotel financial performance was stronger in chain hotels (b=.17, *t*-value=2.92, $p \leq .01$) than in independent hotels (b=.15, *t*-value=2.18, $p \leq .05$). Figure 13 presented the standardized coefficient for chain and independent hotels between brand image strategy and hotel financial performance and between information technology strategy and hotel financial performance.

Figure 13

Standardized Parameter Coefficients for Chain and Independent Hotels on

Resource Competitive Strategies and Financial Performance



*$p<.10$, **$p<.05$, ***$p<.01$

However, the moderating effect of hotel affiliation on the relationship between information technology strategy and hotel behavioral performance was not found ($\Delta\chi^2 =$

1.74, df=1, p>.10), which did not support H_{14a}: there is the moderating effect of hotel affiliation on the relationship between information technology strategy and hotel behavioral performance. Furthermore, there was no moderating effect of hotel affiliation on the relationship between human resource strategy and hotel financial performance, which did not support H_{13b}: there is the moderating effect of hotel affiliation on the relationship between human resource strategy and hotel financial performance ($\Delta\chi^2$ = 2.29, df=1, p>.10).

Moderating Effect of Organization Structure

The moderating effects of organization structure on the relationship between the advantage of industry forces and competitive resource competitive strategies were tested by using hierarchical multiple regression analysis. All variables were computed to grand-centered to minimize the threat of multicollinearity in equation when all variables are included interaction term (Aiken & West, 1991). The main effects - industry forces (rivalry among existing hotel firms, bargaining power of individual hotel firms, and threats of new hotel entrants) and organization structure – were entered as the first block, followed by the interaction terms (industry forces*organization structure) as the second block. The organization structure was coded as '0' for mechanistic structure and '1'for organic structure. The total of six hierarchical multiple regression models were tested to assess the moderating effect of organization structure and industry forces on resource competitive strategies. The R^2 difference between the models with- and without-moderating effect variables showed the moderating effect significance.

The Relationship between Industry Forces and Brand Image Strategy

Table 18 showed the moderating effect of organization structure and industry forces on resource competitive strategies. Model 1 indicated the main effects of rivalry among existing hotel firms, bargaining power of hotel customers, threat of new hotel entrants, and organization structure on the brand image strategy. Meanwhile, model 2 applied the same main effect including with the moderating effect of these three force factors and organization structure. The ΔR^2 between model 1 and 2 was statistically significant (ΔR^2= .04, $\rho \leq .001$). The result showed a statistical significance on the moderating effect of organization structure on the relationship between rivalry among existing hotels and a competitive brand image strategy (b= -.27, *t*-value=-3.66, $\rho \leq .001$). This supported H_{15a}: there is a moderating effect of organization structure on the relationship between rivalry among existing hotel firms and a competitive brand image strategy.

However, there was no statistically significant on the moderating effect of organization structure on the relationship between bargaining power of hotel customers and competitive brand image strategy; which did not support H_{16a}: there is a moderating effect of organization structure on the relationship between bargaining power of individual hotel customers and a competitive brand image strategy. Furthermore, the moderating effect of organization structure on the relationship between threat of new hotel entrants and a competitive brand image strategy was not significant. Thus, this finding did not support H_{17a}: there is a moderating effect of organization structure on the relationship between new hotel entrants and a competitive brand image strategy.

Table 18

Moderating Effect of Organization Structure on the Relationship between Industry Forces and Brand Image Strategy

Variables	Brand image strategy				Hypothesis
	Model 1		Model 2		
	b	*t*-value	*b*	*t*-value	
Constant	4.31	88.57***	4.31	85.91***	
Main Effect					
Competitors	.05	1.39	.19	3.67***	
Customers	.17	3.52***	.17	2.52*	
New entrants	.13	2.81**	.05	.74	
Org. structure (OS)	-.13	-1.98*	-.12	-1.88	
Moderating effect					
Competitors*Org. structure			-.27	-3.66***	H_{15a}: Supported
Customers* Org. structure			.01	.17	H_{16a}: No
New entrants* Org. structure			.11	1.20	H_{17a}: No
R^2	.09		.13		
F-Model	8.01***		6.78***		
ΔR^2			.04***		
Δ F-Model			4.76***		

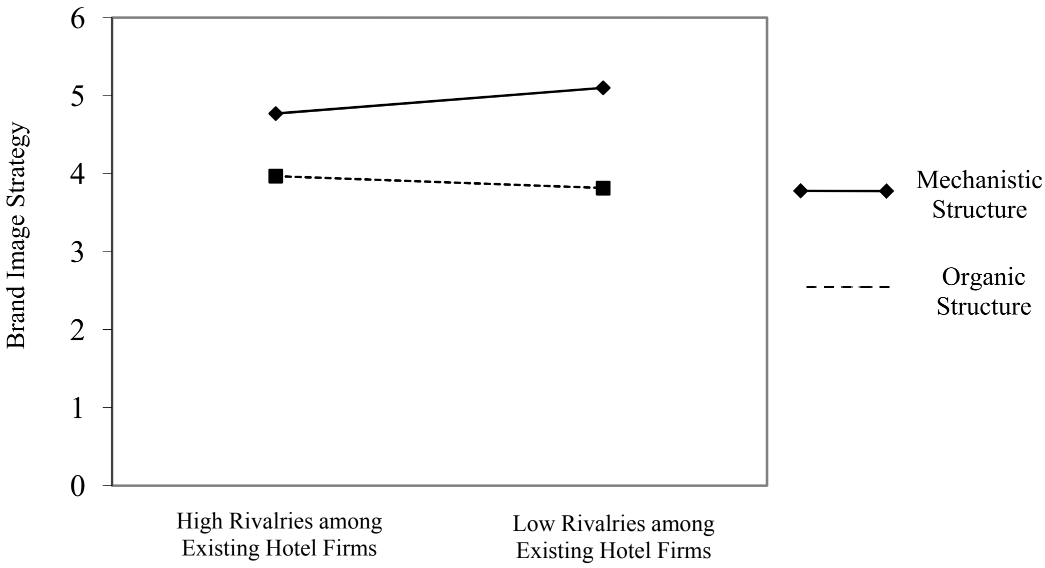
*$p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

From the Model 1 and 2, the significant moderating effect of rivalry among existing hotel firms and organization structure was further evaluated by using graph, see Figure 14. Whether hotels had low or high rivalries among existing hotel firms, mechanistic structure performed the stronger brand image strategy than organic structure. Mechanistic structure indicated higher competitive brand image strategy with the low rivalries among existing hotels firms than high rivalries among existing hotel firms. In contrast, hotel firms with organic structure tended to have less competitive brand image strategy when hotels had low rivalries among existing hotel firms.

Figure 14

Moderating Effect of Organization Structure on the Relationship between

Rivalry among Existing Hotel Firms and Brand Image Strategy



The Relationship between Industry Forces and Human Resource Strategy

Model 3 and Model 4 compared the moderating effect of organization structure on the relationship between industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and threat of new hotel entrants - and human resource strategy, see Table 19. Model 3 only included the main effect variables and Model 4 included both of main effect and moderating effect variables into this model. The ΔR^2 between model 3 and 4 was statistically significant (ΔR^2= .06, $\rho \leq .001$). The finding provided evidence that there was a statistical significance of the moderating effect of organization structure on the relationship between bargaining power of hotel customers and a competitive human resource strategy (b= -.19, *t*-value=-2.01, $\rho \leq .05$).

This supported H_{16b}: there is a moderating effect of organization structure on the relationship between bargaining power of hotel customers and a competitive human resource strategy. The result further showed the significant moderating effect of organization structure on the relationship between threat of new hotel entrants and a competitive human resource strategy (b= .32, *t*-value=3.51, $\rho \leq .001$), which supported H_{17b}: there is a moderating effect of organization structure on the relationship between threat of new hotel entrants and a competitive human resource strategy.

In contrast, the result did not show any significance on the moderating effect of organization structure on the relationship between rivalry among existing hotel firms and a competitive human resource strategy. Therefore, this finding did not support H_{15b}: there is a moderating effect of organization structure on the relationship between rivalry of existing hotel firms and a competitive human resource strategy.

Table 19

Moderating Effect of Organization Structure on the Relationship between

Industry Forces and Human Resource Strategy

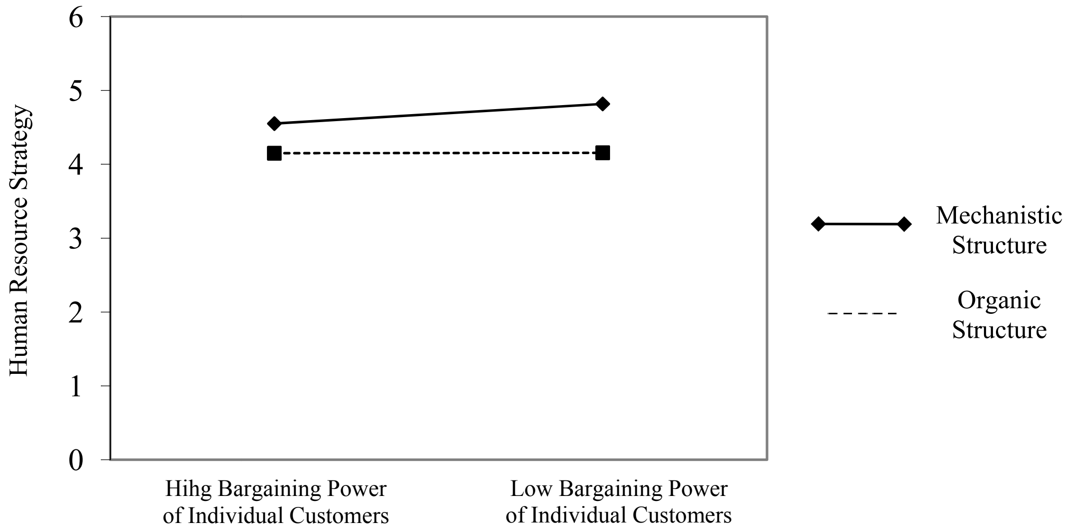
Variables	Human Resource Strategy				Hypothesis
	Model 3		Model 4		
	b	*t*-value	*b*	*t*-value	
Constant	3.95	82.79***	3.92	79.71***	
Main Effect					
Competitors	.02	.77	.05	1.26	
Customers	.14	2.90***	.20	3.40***	
New entrants	.06	1.31	-.13	-1.80	
Org. structure	.20	2.90***	.21	3.18***	
Moderating effect					
Competitors*Org. structure			-.04	-.66	H_{15b}: No
Customers*Org. structure			-.19	-2.01*	H_{16b}: Supported
New entrants*Org. structure			.32	3.51***	H_{17b}: Supported
$\boldsymbol{R^2}$	.09		.13		
F-Model	7.95***		6.81***		
$\boldsymbol{\Delta R^2}$			.06***		
Δ F-Model			4.90***		

*$p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Figure 15 presented the relationship between moderating effect of organization structure on the relationship between bargaining power of individual hotel customers and human resource strategy. The result showed that mechanistic structure indicated the more competitive human resource strategy than organic structure, regardless of the bargaining power of individual hotel customers. In other words, hotels where customers had low bargaining power increased their competitive human resource strategy more than hotels with high bargaining power customers. Meanwhile, with the organic structure, the competitive human resource strategy showed the same level of competiveness regardless of how high or how low the bargaining power of individual hotel customers.

Figure 15

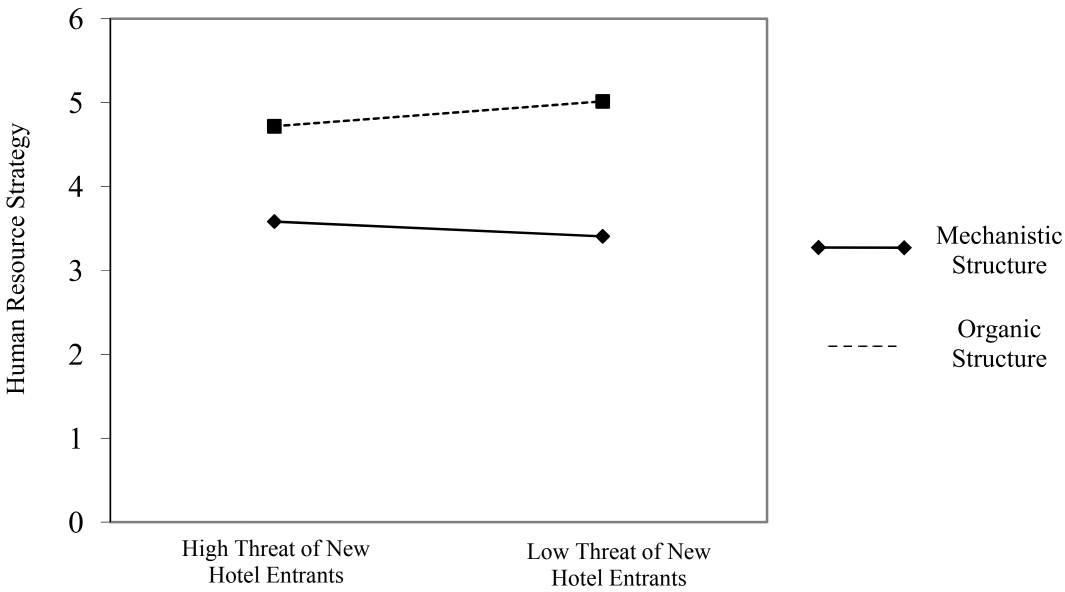
Moderating Effect of Organization Structure on the Relationship between Bargaining Power of Individual Hotel Customers and Human Resource Strategy



Surprisingly the result of moderating effect of organization structure on the relationship between threat of new hotel entrants and human resource strategy provided different outcome from the previous findings. Figure 16 showed that hotel with organic structure provided the better competitive human resource strategy than hotels with mechanistic structure. With the less threat of new hotel entrants, hotels with organic structure performed more competitive human resource strategy than the hotels with mechanistic structure. With the organic structure, hotels with less threat of new hotel entrants performed better at competitive human resource strategy than hotels with high threat of new hotel entrants. On the other hand, with the mechanistic structure, hotels with high threat of new hotel entrants performed slightly better in competitive human resource strategy than hotels with less threat of new hotel entrants.

Figure 16

Moderating Effect of Organization Structure on the Relationship between New Hotel Entrants and Human Resource Strategy



The Relationship between Industry Forces and Information Technology Strategy

From the Model 5 and Model 6, the results were to test the moderating effect of organization structure on the relationship between industry forces and a competitive information technology strategy, see Table 20. By comparing the R^2 between Model 5 and Model 6, the results did not show any ΔR^2 significance (ρ >.05). Therefore, these findings did not support H_{15c}: there is a moderating effect on the relationship between rivalry among existing hotel firms and information technology strategy, H_{16c}: there is a moderating effect on the relationship between bargaining power of individual hotel customers and information technology strategy, and H_{17c}: there is a moderating effect on the relationship between threat of new hotel entrants and information technology strategy.

Table 20

Moderating Effect of Organization Structure on the Relationship between Industry Forces and Information Technology Strategy

Variables	Information Technology				Hypothesis
	Model 5		Model 6		
	b	*t*-value	*b*	*t*-value	
Constant	4.04	80.24***	4.02	76.12***	
Main Effect					
Competitors	-.04	-1.20	-.02	-.52	
Customers	.13	2.56*	.15	2.14*	
New entrants	.08	1.79	.01	.24	
Org. structure	.14	2.00*	.14	2.07*	
Moderating Effect					
Competitors*Org. structure			-.02	-.32	H_{15c}: No
Customers*Org. structure			-.05	-.53	H_{16c}: No
New entrants*Org. structure			.11	1.16	H_{17c}: No
R^2	.06		.07		
F-Model	5.42***		3.30***		
ΔR^2			.01		
Δ F-Model			.51		

The Relationship between Resource Competitive Strategies and Behavioral Performance

Table 21 represented the moderating effect of organization structure on the relationship between resource competitive strategies - brand image, human resources, and information technology – and hotel behavioral performance.

Table 21

Moderating Effect of Organization Structure on the Relationship between

Resource Competitive Strategies and Behavioral Performance

Variables	Behavioral Performance				Hypothesis
	Model 1		Model 2		
	b	*t*-value	*b*	*t*-value	
Constant	4.02	94.83***	4.02	93.78***	
Main Effect					
Brand image	.07	1.33	.05	.69	
Human resource (HR)	.33	6.08***	.47	6.23***	
Information technology (IT)	.08	1.49	-.04	-.62	
Organization structure	.02	.40	.02	.37	
Moderating Effect					
Brand*Org. structure			.01	.15	H_{18a}: No
HR*Org. structure			-.31	-2.89***	H_{19a}: Supported
IT*Org. structure			.28	2.58**	H_{20a}: Supported
$\boldsymbol{R^2}$	.18		.22		
F-Model	18.20***		12.50***		
$\Delta \boldsymbol{R^2}$			.03***		
Δ F-Model			4.71***		

*$p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

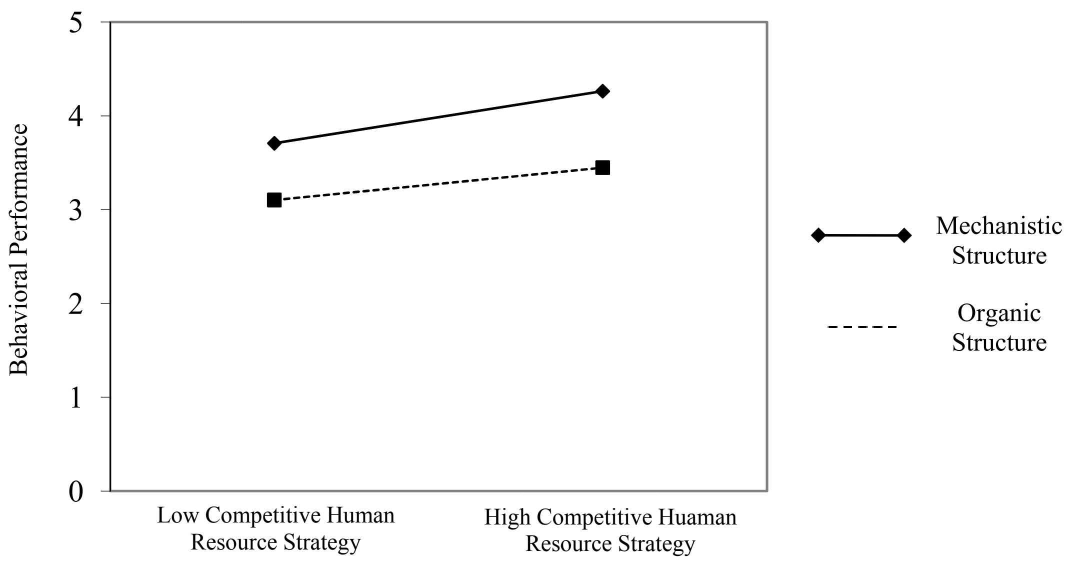
Model 1 and Model 2 compared the moderating effect of organization structure on the relationship of competitive resources strategies –brand image, human resources, and information technology – and hotel behavioral performance. Model 1 only included the main effects –brand image strategies, human resource strategies, information technology strategies, and organization structure. Model 2 included the moderating effect of competitive strategies and organization structure. The results showed that the ΔR^2 between model 1 and 2 was statistically significant ($\Delta R^2 = .03$, $\rho \leq .001$). These findings indicated that there is the moderating effect of organization structure on the relationship between human resource strategy and hotel behavioral performance (b= -.31, *t*-value=-

2.89, $\rho \leq .001$). This supported H_{19a}: there is a moderating effect of organization structure on the relationship between human resource strategy and hotel behavioral performance.

Figure 17 demonstrated that hotels with the mechanistic structure directed the better behavioral performance than hotels with the organic structure, regardless of the competitiveness of the human resource strategy. The behavioral hotel performance increased more with high competitive human resource strategy than with low competitive human resource strategy in both of the mechanistic and organic structure.

Figure 17

Moderating Effect of Organization Structure on the Relationship between Human Resource Strategy and Behavioral Performance

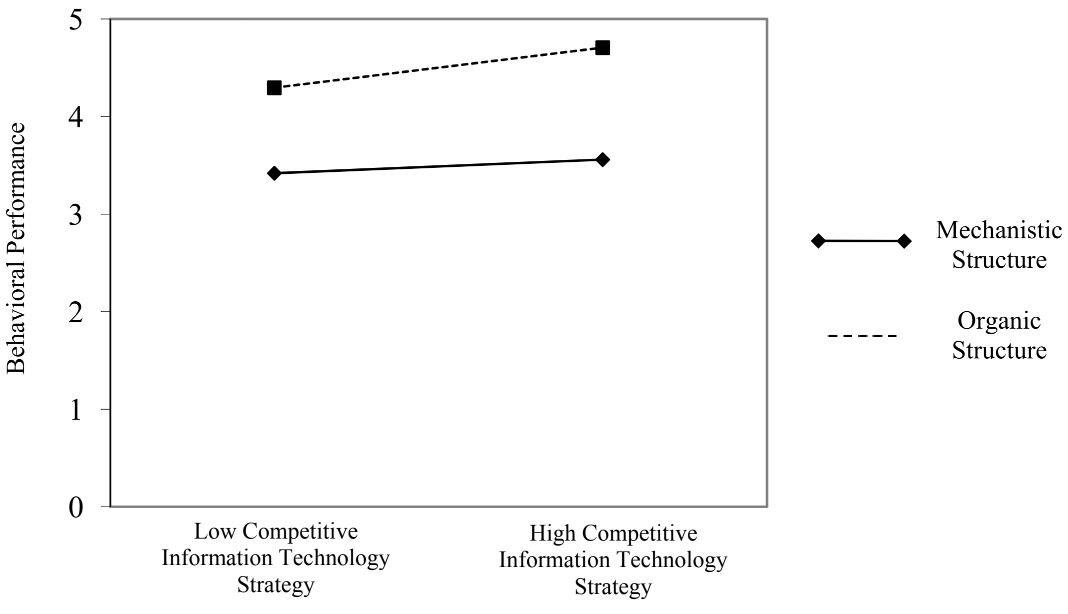


The result also found the statistical significance in the moderating effect of organization structure on the relationship between information technology strategy and hotel behavioral performance (b= .28, t-value=2.58, $\rho \leq .01$). This result supported H_{20a}: there is a moderating effect of organization structure on the relationship between information technology strategy and hotel behavioral performance.

The moderating effect of organization structure on the relationship between human resource strategy and hotel behavioral performance was described in Figure 18. The organic structure indicated higher behavioral performance than the mechanistic structure. With the high competitive information technology strategy, organic structure performed well more than low competitive information technology strategy and with mechanistic structure. On the other hand, behavioral performance increased slightly with organic structure, regardless of the competitive information technology strategy.

Figure 18

Moderating effect of Organization Structure on the Relationship between Information Technology Strategy and Behavioral Performance



However, there was no moderating effect of organization structure on the relationship between a competitive brand image strategy and hotel behavioral performance (ρ>.05). This finding did not support H_{18a}: there is a moderating effect of organization structure on the relationship between brand image strategy and hotel behavioral performance.

The Relationship between Resource Competitive Strategies and Financial Performance

Table 22 indicated the findings of moderating effect of organization structure on the relationship between resource competitive strategies and hotel financial performance. Model 3 and Model 4 were to assess the moderating effect of organization structure on the relationship between competitive resource competitive strategies on hotel financial performance. Model 3 represented the main effects of brand image, human resources, information technology, and organization structure. Model 4 included the moderating effect of competitive three strategies and organization structure into the model. The ΔR^2 between model 3 and 4 was not statistically significant (ΔR^2= .00, ρ>.05). These findings did not support H_{18b}: there is a moderating effect of organization structure on the relationship between brand image strategy and hotel financial performance, H_{19b}: there is a moderating effect of organization structure on the relationship between human resource strategy and hotel financial performance, and H_{20b}: there is a moderating effect of organization structure on the relationship between information technology strategy and hotel financial performance.

Table 22

Moderating effect of Organization Structure on the Relationship between Resource Competitive Strategies and Financial Performance

Variables	Financial Performance				Hypothesis
	Model 3		Model 4		
	b	*t*-value	*b*	*t*-value	
Constant	3.78	73.77***	3.77	71.64***	
Main Effect					
Brand image	.01	.22	.09	1.05	
Human resource (HR)	.09	1.37	.03	.34	
Information technology (IT)	.16	2.46**	.20	2.14*	
Organization structure	.12	1.75	.12	1.78	
Moderating Effect					
Brand*Org. structure			-.16	-1.25	H_{18b}: No
HR*Org. structure			.11	.84	H_{19b}: No
IT*Org. structure			-.08	-.58	H_{20b}: No
R^2	.06		.07		
F-Model	5.48***		3.57***		
ΔR^2			.00		
Δ F-Model			1.02		

*p<.05, **p<.01, and ***p<.001

All in all, some significant differences were found on the relationship between industry forces, resource competitive strategies, organization structure, and hotel performance by hotel size and affiliation. Furthermore, some statistical findings indicated that the impact of industry forces on resource competitive strategies, and resource competitive strategies on hotel performance. There were significant findings of hotel affiliation moderating effect on the relationship between industry forces and resource competitive strategies, and between resource competitive strategies and hotel performance. Lastly, there were some moderating effects of organization structure on the relationship between industry forces and resource competitive strategies, and between resource competitive strategies and hotel performance.

In conclusion, the results of this study and hypotheses testing were summarized in Table 23 as follows:

Table 23

Hypotheses Testing Results

Hypothesis	Result
H1: there is a significant difference between hotel size (small, medium, and large) and industry forces, resource competitive strategies, organization structure, and hotel performance.	H1: Partially supported
H2: there is a significant difference between hotel affiliation (chain and independent) and industry forces, resource competitive strategies, organization structure, and hotel performance.	H2: Partially supported
H3a-c: Advantage of few rivalries among existing hotel firms would have a positive impact on implementing competitive strategies – (a) brand image, (b) human resource, and (c) information technology.	H3a: Not supported H3b: Not supported H3c: Not supported
H4a-c: Advantage of low bargaining power of individual hotel customers would have a positive impact on implementing competitive strategies – (a) brand image, (b) human resource, and (c) information technology.	H4a: Supported H4b: Supported H4c: Supported
H5a-c: Advantage of less threat of new hotel entrants would have a positive impact on implementing competitive strategies – (a) brand image, (b) human resource, and (c) information technology.	H5a: Supported H5b: Supported H5c: Supported
H6a-b: The competitive brand image strategy would have a positive impact on hotel performance – (a) behavioral and (b) financial.	H6a: Not supported H6b: Not supported
H7a-b: The competitive human resource strategy would have	H7a: Supported

a positive impact on hotel performance – (a) behavioral and (b) financial.	H7b: Supported
H8a-b: The competitive information technology strategy would have a positive impact on hotel performance – (a) behavioral and (b) financial.	H8a: Supported H8b: Supported
H9a-c: There is a moderating effect of hotel affiliation on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, and (c) threat of new hotel entrants - and brand image strategy.	H9a: Not supported H9b: Not supported H9c: Not supported
H10a-c: There is a moderating effect of hotel affiliation on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, and (c) threat of new hotel entrants - and human resource strategy.	H10a: Not supported H10b: Supported H10c: Not supported
H11a-c: There is a moderating effect of hotel affiliation on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, and (c) threat of new hotel entrants - and information technology strategy.	H11a: Not supported H11b: Not supported H11c: Supported
H12a-b: There is a moderating effect of hotel affiliation on the relationship between brand image strategy and hotel performance – (a) behavioral and (b) financial.	H12a: Supported H12b: Supported
H13a-b: There is a moderating effect of hotel affiliation on the relationship between human resource strategy and hotel performance – (a) behavioral and (b) financial.	H13a: Supported H13b: Not supported
H14a-b: There is a moderating effect of hotel affiliation on the relationship between information technology strategy and hotel performance – (a) behavioral and (b) financial.	H14a: Not supported H14b: Supported
H15a-c: There is a moderating effect of organization structure on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of	H15a: Supported H15b: Not supported H15c: Not supported

individual hotel customers, and (c) threat of new hotel entrants - and brand image strategy.	
H16a-c: There is a moderating effect of organization structure on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, and (c) threat of new hotel entrants - and human resource strategy.	H16a: Not supported H16b: Supported H16c: Not supported
H17a-c: There is a moderating effect of organization structure on the relationship between industry forces – (a) rivalry among existing hotel firms, (b) bargaining power of individual hotel customers, and (c) threat of new hotel entrants - and information technology strategy.	H17a: Not supported H17b: Supported H17c: Not supported
H18a-b: There is a moderating effect of organization structure on the relationship between brand image strategy and hotel performance – (a) behavioral and (b) financial.	H18a: Not supported H18b: Not supported
H19a-b: There is a moderating effect of organization structure on the relationship between human resource strategy and hotel performance – (a) behavioral and (b) financial.	H19a: Supported H19b: Not supported
H20a-b: There is a moderating effect of organization structure on the relationship between information technology strategy and hotel performance – (a) behavioral and (b) financial.	H20a: Supported H20b: Not supported

CHAPTER V

DISCUSSION AND CONCLUSION

In this chapter, the results' discussion relating to with the objectives of this study was represented. Later, the academic and managerial implications were proposed. Lastly, the limitations and future research were explained at the end of this chapter.

Discussion

The objectives of this study were to: (1) build a theoretical model – the Hotel Competitive Advantage Model – measuring hotel performance from the industry forces and resource-based approaches; (2) assess the structural relationships among industry forces, resource competitive strategies, and hotel performance; (3) explore the significant difference between hotel size and affiliation to industry forces, resource competitive strategies, organization structure, and hotel performance; (4) evaluate the moderating effect of hotel affiliation on the relationship between industry forces and resource competitive strategies, and between resource competitive strategies and hotel performance; (5) evaluate the moderating effect of organization structure on the relationship between industry forces and resource competitive strategies, and between resource competitive strategies and hotel performance; and (6) make recommendations to hotel firms for achieving superior performance.

Building the Theoretical Model – The Hotel Competitive Advantage Model

This study integrates two approaches: industry five force factors (Porter, 1985) and resources-based approach (Barney, 1991) for building the theoretical model measuring hotel performance. The result shows the appropriate measurement model from the confirmatory factor analysis, structural model from structural equation model outcome, and model fit indices of measurement. The results further indicate the causal links between constructs and represented some significant relationship between constructs. The industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and threat of new hotel entrants – as well as organization structure can be taken into account for strategy implementation. At the same time, the resource competitive strategies – brand image, human resources, and information technology – including the organization structure indicate good predictors measuring hotel performance. Beside these constructs, the hotel characteristics such as hotel size and hotel affiliation also play the major roles of effectiveness of hotels' performance.

Hotel Size

Hotel size is one of the hotel characteristics that have the impact on industry forces, resource competitive strategies, organization structure, and hotel performance. The result supported previous findings of Pine and Phillips (2005) and Claver-Cortes et al. (2007). Hoteliers from small hotels perceive low rivalries among existing hotels firms, and less threat of new hotel entrants than hoteliers from medium and large hotels. Small hotels share smaller market share; hence, the rivalry might not have any influences on their business operations. However, comparing with medium and large hotels, these hotels deal with larger economic scales, so these hotels may face disadvantages of rivalry among existing hotel firms and threats of new hotel entrants more than small hotels. Small hotels may not have to invest much on advertising because the normal marketing campaign is word-of-mouth and retain loyal customers. Meanwhile, large-scale hotels have to put an effort on advertising to overcome existing brand preferences and to bring customers to occupy the vacant rooms. Small hotels may have limited customer segmentation, and this can help them to focus on the specific customer groups.

For differences of resource competitive strategies, hoteliers from small hotels perceive brand image strategy as more competitive than hoteliers from medium hotels. It is more feasible for small hotels to build and develop brand image for customers than medium and large hotels. With the remaining of the customer market segmentation, small hotels tend to differentiate and continually improve brand image with the limited segments from other competitors and with other size hotels. Effective brand image strategy can increase customer satisfaction, and these customers can become regular customers for small hotels. Furthermore, hoteliers from small hotels perceive that they have the more competitive human resource strategy than hoteliers from medium size hotels by having an adequate number of skilled staff members. Hoteliers from small hotels identify the competitive information technology higher than medium and large hotels hoteliers do. Hoteliers from small hotels perceive that their hotels apply advanced information technology to accommodate customers' needs more than hoteliers from medium and large hotels. Even though small hotels may not have up-to-date or more advanced information technology, the existing information technology at small hotels has met the requirement of customers' standard and perceptions. Comparing the hotel room price and information technology services, hoteliers from small hotels believe that customers may satisfy with these two factors.

Most small hotels identify their organization structure as organic structure than medium and large size hotel, which leads more toward mechanistic structure. Small hotels have fewer numbers of employees and span of control within the organization. Therefore, organic structure is more appropriate for small hotel operations rather than mechanistic structure. All decision making processes and adapting to change circumstances without too much concern for past experience is more appropriate with organic structure than mechanistic structure. All these criteria of organization structure fit with small hotels than medium and large hotels. Medium and large hotels, on the other hand, perceive their organization structure lead toward as mechanistic structure. These hotels have more complex span of controls with many managerial levels within one department and with other departments within one hotel. Moreover, decision making with medium and large hotels follows the hierarchical managers for final decisions. With these complicated procedures, medium and large hotels apply mechanistic structure within their organization rather than organic structure. Mechanistic structure can help hoteliers control and monitor performance. With many employees concern to achieve the hotel goals, mechanistic structure will help hoteliers to monitor and compare performance. This will help hoteliers for future strategy development. If medium and large hotels apply organic structure in their operation, hoteliers may not have a standard measuring performance.

There is no significant difference on the industry forces between medium and large size hotels, except the factor of rivalry among existing hotel firms between medium and large size hotels. This might be due to the fact that regardless of hotel size, hotel firms are similar in structure and strategy, depending on the same environmental resources, and have the same constraints (Mathews, 2000). All hotels have to deal with the same changes and difficulties, depending on their concentration. Furthermore, there is no significant difference among hotel size on industry forces of the bargaining power of individual hotel customers. Lastly, there is no significant difference of hotel performance (behavioral and financial) on hotel size. This finding is the same as the study by Brown and Dev (1999) and Mathew (2000). There is no significant relationship between hotel size and capital productivities. Some financial performance is not significantly different across hotel size. Medium and large hotels may have high on expenses with average per room, hence, the average net profit, occupancy rate, and return on investment (ROI) may not be significantly different by hotel size.

Hotel Affiliation

The hotel characteristic is categorized by affiliation: chain and independent. There are some significant differences between hotel affiliation and industry forces, resource competitive strategies, organization structure, and hotel performance. These results supported the study of Claver-Cortes et al. (2007), Holverson and Revaz (2006), Mathew (2000), and Morrison (1997). Hoteliers from independent hotels perceive that their hotels have more bargaining power of individual hotel customers in the way that customers are loyal to the hotels than hoteliers from chain hotels. Since independent hotels have higher chance of developing flexible transactions between customers and employees, it is easier for independent hotels to retain customers and build customer relationship than for chain hotels. As a result, hoteliers from independent hotels feel that they have less threat of new hotel entrants than hoteliers from chain hotels. Independent hotels may be of smaller economic scale, so they will have less impact on threats of new hotel entrants than chain hotels; even new hotel entrants put an effort on advertising their new properties. Some independent hotels that have been established for a long time may have some regular customers. Therefore, threat of new hotels coming to the market may not have an impact on their operation. Chain hotels, in contrast, have some fixed expenses such as loyalty fees and advertisement fees from headquarter. The threat of new hotel entrants might have a major impact on chain hotels to position themselves against new hotels. This cause decreases in hotel revenues, and in return, it also causes a decline in performance. Some good locations may attract many chain hotel entries; however, some independent hotels have already been established there in the first place. Some existing independent hotels received higher revenues than new chain hotel arrivals (Chung & Kalnins, 2001).

Independent hotels have more loyal customers with the brand image than chain hotels. This result is related to individual customer as well. This means that brand image can be a good indicator of measuring customer loyalty. Meanwhile, chain hotels' customers may be sensitive when the room rate is changing, so it is easier for them to switch to another brand hotel because of the pricing. Independent hotels tend to have their organization structures as organic structure than chain hotels, which is more toward mechanistic structure because it is owned by independent owner. All decision makings are made by the individual owner. Most independent hotels have less constraints of decision making and getting-the-job-done than chain hotels. Independent hotels have only fewer numbers of properties, which hotel service standards and procedures may vary regarding the customer market segmentation. The organic structure is more applicable for independent hotels than chain hotels. On the other hand, chain hotels have to follow the headquarters' standard and procedures. Each brand property has to keep the same standard of products and services. Therefore, employees at chain hotels may face with more mechanistic structure than employees at independent hotels. Employees have to be restricted with the hotel's rules and policy. This study further found that chain hotels generated higher financial performance than independent hotels (Claver-Cortes et al., 2007). This is due to chain hotels have a larger economic scale of reservation systems, distribution channels, and value chain. These factors can increase the financial performance of chain hotels compare to independent hotels.

However, there is no significant difference between rivalry among existing firms and hotel affiliation. This may be due to the concept of noncompetitive phenomenon. Empirical evidence shows that there are some friendships among hotel managers for the competing hotels (Ingram & Roberts, 2000). There is no significant difference of resource competitive strategies of human resources and information technology by hotel affiliation. Competitive strategies can be duplicated by any hotels. Therefore, the perception of resource competitive strategies of human resource and information technology is not differentiated by hotel affiliation.

Impact of Industry Forces on Resource Competitive Strategies

A key resource for successful hotel firms is a competence in environmental scanning (Jenkins, 2005). This helps managers understand how certain environmental factors affect the firm's operations and performance (Crook et al., 2003). The industry forces – rivalry among existing hotel firms, bargaining power of individual hotel customers, and threats of new hotel entrants – are applied to investigate the impact of resource competitive strategies.

These findings indicate that industry forces have an impact on implementing resource competitive strategies. The results support the previous findings of Grant (1991), Dev and Hubbard (1989), Dube and Renaghan (1999). First of all, the advantage of low bargaining power of individual hotel customers indicates the positive influence on implementing brand image strategy. In general, customers make hotel reservations or use other hotel services with the well-known brand hotel. One way to reduce the bargaining power of customers is to increase positive customer perceptions of products or services. When customers are satisfied with hotel products and services, they will be loyal to the hotel products. This means the customers are going to be loyal to the hotel brand as well. Even though the hotel can increase the price of the hotel room rate or other services, customers are more likely to pay premium price. Result shows that hotels can build a strong brand image, which can differentiate themselves from other hotel brands.

In the case which the hotel cannot provide the preference products or services to the customers, they are more likely to switch of buying other products or services. Therefore, the hotel can response to customers' wants by expanding the level of products or services providing. This will help the hotel to capture more customers' market segmentation (Jenkins, 2005). For example, the budget hotels might consider providing Internet access or small shops for travel uses. In addition, the loyalty customer program is another marketing method of having a bargaining power over customers. Customer loyalty program is common in chain hotels, while independent hotel can also develop this marketing method to persuade customers of staying. The loyalty program reduces the likelihood of customers switching to a competitor (Crook et al., 2003). Even though independent hotels may not have a strong customer loyalty program compare to the chain hotels, they may aim on their regular customers. Retaining these regular customers can also reduce other threats that independent hotels may face as well, such as new hotel entrants.

The competitive brand image strategy of the hotel firms can also come from the advantage of less threat of new hotel entrants. There are some opportunities for new hotel entrants to come into the market because new hotel firms can develop a resource that no other hotel firms have. However, with the competition in brand image strategy, existing hotels can maintain regular customers and increase new customers for its business growth (Jenkins, 2005). New hotels entrants may not be able to break the market segment proportion from the existing hotel firms. Even some new hotels may try to promote the new hotel establishments by advertising or giving discount, loyal customers will not be influenced by this marketing campaign. Hotel business is a big investment for the new owners or investors. It will be very challenging for the new hotel business to enter the market as well. Advertising and discounting should be strong with economy and branding factors to convince customers on switching the brand. Since the existing hotel firms have an advantage over these new coming hotels. Only their competitive strategies can allow them to survive in the industry and share some market proportion from existing hotel firms.

Human resource process is a superior ability to have the available human resources with maximum skill and performance by integrating personnel selection, training and motivation processes between the hotel and service companies (Rodriguez-Diaz & Espino-Rodriguez, 2006). Most hotels can have a competitive advantage over other competitors by having an aggressive human resource strategy. This result was the same as previous findings of Kim and Oh (2004), and Wang and Shyu (2008). When hotels have the advantage of low bargaining power for individual customers, hotels will have strong human resource strategy implementation. The competitive human resource strategy can come from well-trained programs and effective employee performance in providing services to customers. In some cases, customers stay at certain hotels because of customer relationship between them and the hotel employees. As long as hotel employees meet customers' expectations and complete tasks effectively, these strengths can retain customers into the business. When hotel employees build customer relationship between customers and organization, hotels have a bargaining power over customers because of the strong human resource strategy.

Advantage of the less threat of new hotel entrants also has a positive impact on implementing human resource strategy. The new hotel entrants that would like to come into the industry have to hire and train new employees to be competitive in the business. New hotels have to put a lot of investment on new staff training and other human resource benefit in order to retain employees. Basically, it costs the hotel more on employee turnover than keeping employees. Meanwhile, the benefit program should satisfy employees for retaining in the business. At the same time, the existing hotels have staffs that have worked at the hotel business for a while. These employees understand the nature of service providing, and may only need some new performance improvement training programs rather than the new employees at new hotels. Even some employees at new hotels may have some working experiences in the service industry; they have to adapt themselves to the new hotel environment and internal structure as well. These changes are challenging for employees at the new hotel entrants. Building customer loyalty by providing excellent services from employees makes it difficult for new entrants to the market and to attract customers.

With the current environmental changes, threats that new hotel entrants might face are: some restrictions of high capital requirements, saturated distribution channels, large economies of scale, and restrictive government regulations (Crook et al., 2003). One way for the existing hotels to take advantages over new hotel entrants is to improve the good quality of human resource performance. Most of the hotel products and services are similar, so competitors have comparable resource endowments and comparable market share. The same market share hotels can compete head on and reduce profits or they can collude. These imitating strategies are not likely to attract new entrants into the industry because new hotels may not achieve profitability goal. The existing hotels can dominate the market by offering the higher value of products than competitors. Another alternative is collusion whilst maintaining entry barriers so that new entrants are not attracted by appealing profits (Jenkins, 2005). Some existing hotel firms have tried to make it harder for newcomers to enter by aggressively promoting their own brands, in hopes of creating differentiation and customer loyalty (Yang & Fu, 2007). Hoteliers have to constantly measure employee performance, to make sure they are at a consistent level, and develop good trainings when they are necessary.

The unstable economic conditions have helped to create a challenge for business environment and an economic imperative for implementing IT (Bakos & Treacy, 1986). Information technology is regarded as a strategic necessity in order to remain competitive (Crook et al., 2003). IT system is a high investment for hotels to offer to the customers. With bargaining power of individual hotel customers, many hotels would like to invest in advanced IT. These benefits provide convenience and offer satisfaction to customers. New hotel entrants have to put a lot of investment into these facilities, which may or may not get the profitability back in the short term. Hotel size can identify the power of advanced information technology over competitors. Larger hotels may be more competitive with IT than small size hotels because they have longer channel distribution and growing number of suppliers. Some hotels have advantage over other new hotels because they have stable and advanced IT for business operation. Meanwhile the new hotel entrants have to invest on the IT system and apply it on the whole hotel business units. If there is a significant change in technology or customers' perceptions, there is an opportunity for new hotel entrants. New hotel entrants can develop new resources that no other hotel firms have.

In contrast, rivalry among existing hotel firms had no influence on resource competitive strategies. This is due to competitors can copy these competitive strategies – brand image, human resources, and IT – at ease. Even though competitors can replicate all these competitive strategies, they cannot easily replicate an organization environment. Besides the competitive strategies, hotels have to find other strengths within the organization to compete with competitors. Whitla, Walters, and Davies (2007) argued that the major competitors are five major hotel groups – Inter-continental, Holiday Inn, Millennium & Copthorne, Hilton, and Le Meridien. "Even hotels are where they are, they are not always competitors because they could be on the other side of town or have a different type of hotels and there is a lot of regional companies and local companies, so in every different destination there will be other competitors (Whitla et al, 2007: 788)."

Another perspective would be the competitor identification. Different hotels differentiate their direct competitors in different categories such as location and segment. Therefore, hotels may identify the competitors in different concepts, which may not indicate the major impact on resource competitive strategies.

Impact of Resource Competitive Strategies on Hotel Performance

The three resource strategies - brand image, human resource, and information technology - play an important indicator for the success of hotel performance. These results supported previous findings of Jones (2007), Law and Jogaratnam (2005), and Wong and Kwan (2001). Resource differentiation is able to operate from a customer's perspective and is able to better assess the desires of the customer market.

The hotel business requires strong management strategy in human resources for measuring performance. Human resource strategy is the key factor to succeed for service organizations (Wang & Shyu, 2008). The hotels need a well-formulated mission statement, a clear set of strategic objectives, standardized training and development program, a well written job description, and a satisfied employee benefits (Wong & Kwan, 2001), in order to help hoteliers to evaluate and control employees' performance to meet the hotel standard. Without these human resource goals, employees may lack commitment, lose their performance, and be poorly motivated in working. A clear set of objectives and job descriptions will provide the authority and responsibility to employees of certain position at each level. Employees will understand their roles based on authority, responsibility, and job description and use them appropriately to meet the customers' expectations. In brand chain hotels, customers' service procedure of all same brand hotels would expect to be similar. Therefore, human resource strategy can make a difference in customers' satisfaction comparing one brand to another. The organized human resource management process (hiring, training, and human development) show the significant outcomes in terms of increasing net profit and return on investment (Wang & Shyu, 2008). This relates to the behavioral performance as well. Since employees are satisfed in the working environment, they have a high intention of staying at the same hotels. Hence, the expenses for human resource department for hiring and orientation procedure will decrease. As a result, the profitability increases. Every hotel has to fulfill the customers' expectations by maintaining expected service standards. Consequently, hoteliers must work to retain and motivate employees by providing a living wage, meaningful benefits, and job enrichment through participation in decision making (Dev & Hubbard, 1989).

The objective of human resource strategy is to link approached for managing people to business strategies. To improve hotel performance, human resource strategies should be associated with self-managing team, pay-for performance compensation, and empowerment program. These practices can create well-prepared employees who are more capable of responding to a variety of challenges than are most other employees (Crook et al., 2003). George and Hancer (2008) suggested that hoteliers should encourage the staff to see themselves as true contributors to the success of the hotel. Furthermore, Qu and Sit (2007) also suggested actions to improve of support superior service for hotel customers. These actions can be achieved through careful employee selection, ongoing training, executive site visits, inspections, meeting and promotion from within.

The competitive IT strategies increase the hotel behavioral performance by satisfying customers. Implementing IT facilitates the convenience to both employees and customers. For internal hotel organizations, advanced IT reduces the employee work procedure so that their work will be more sufficient and effective with time constraints. For instance, the reservation system can help the marketing department keep track of regular customers and show some statistical forecasting for future marketing development. IT can improve customer service levels by providing new forms of service delivery, improving customer intimacy, responding more rapidly to customer needs, and affording customers the opportunity to help themselves (Mulligan & Gordon, 2002). For example, check out process from the TV allows customers to verify their bill statement transactions before the actual check out. This procedure will reduce the check out time.

Competitive IT strategy increases hotel behavioral performance. IT strategies indicate high level of customer and employee satisfaction. IT offers a better service comparing with the competitors, and provides the shortcut of service procedures. When customers get faster service because of advance IT, the level of customer satisfaction will increase. Hotel can use benefit of IT in scheduling, controlling, optimizing, and measuring accomplishing activities. IT can get involved in all business units. Particularly at the service level, IT can advance customers' communication system services. Some target customers put emphasize in this service; hence, customers have less bargaining power to the hotels because they are willing to pay more in order to get the advanced service of IT. In this case, hoteliers can also increase the hotel revenue by offering the advance IT services to customers such as video conference at the Business Center Office or high speed Internet for business travelers.

IT strategies show the significance outcome of hotel performance achievement. Even though some hotels might have to invest on IT advancement, the outcome response shows good reasons the hotels to take on this project. In the case of limited budget hotels, they may not be able to invest a lot of money into this advancement. Limited budget hotels might consider outsourcing. Renting or contracting is another option for limited budget hotels to improve their facilities and amenities. This can help these limited budget hotels generate more income and expand their customers market into wider groups. IT can be used as an operational tool for the business internal quality control. IT can transmit important customers' data to where it is needed to provide customer service. IT also elevates the competitive advantage only if it is able to support the employees and enhance their capacity to offer superior service to the customers. IT can help the hotels to differentiate themselves from their competitors as well. For these reasons, hoteliers must adopt new IT that is capable of assisting the hotel employees to better serve customers.

The markets have not had any significant changes over the last twenty years. Management of resources in the context of changing environment remains important to the explanations of firm performance (Jenkins, 2005). There are many competitive strategies that hoteliers can focus on. Hoteliers should find the best solutions compromising all these strategies to achieve the highest performance. The hoteliers' interest is to understand the nature of varying resources of the hotels and to know which conditions would make it possible to turn them into lasting competitive advantage in hotel business. Furthermore, the performance of hotels would affect the revenues and costs of other hotels within the same chains (Whitla et al., 2007). The hotel standardization would be consistent across the same chain hotels.

Hotel Affiliation Moderating Effect

The results showed the moderating effect of hotel affiliation on the relationship between industry forces and resource competitive strategies, which supported the previous findings of Buhalis and Main, (1997) and Mathew (2000). Chain hotels have more advantages over bargaining power of individual customers on human resource strategy than independent hotels. Chain hotels have stronger human resource training programs and standardized training procedure. This competitiveness develops the strong bargaining power of customers. Even independent hotels may have some loyal customers' base, but the customer's base may not be big enough to compate with chain hotels. Customer relationship is an evidence to show the relationship between hotels and customers. For example, Marriot continues to develop promotions to maintain loyal existing customers while also attracting the new one. This includes improving employee skills with new language training so that employees can speak more than 50 languages with customers that come from 60 countries (Marriott International Inc., 2008).

The less threat of new hotel entrants and competitive IT strategy, however, is stronger in independent hotels than in chain hotels. Chain hotels have to replicate the same advanced IT from headquarter. This procedure can be predictable for new hotel entrants. Independent hotels have more opportunity of thinking outside the box on advanced IT. This can create strength for independent hotels competing with new hotel entrants in IT that is provided to internal employees and external customers. Entering the new markets with new IT might be a huge investment. Hence, entering the hotel business for chain hotels is more challenging than independent hotels.

The discussion about resource competitive strategies by hotel affiliation (chain and independent) is significant. The results show that competitive brand image strategies can lead chain hotels to better behavioral and financial performance than independent hotels. Most chain hotels have strong tendency of brand image for customers' differentiation. Each brand name targets different customers' types. Therefore, the brand chain hotels have strong and ground concept of brand image. Customers who have never use the hotel service are still able to perceive the differentiation among brand name, types of hotels, and price of each brand name (Yesawich, 1996). In contrast, the independent hotels might face some difficulties of brand image. Only the local customers or regular customers are most likely to differentiate brand image of independent hotels with others. Heavy advertisements and promotions are some opportunities that independent hotels can create brand image to customers. The strengths of brand image make chain hotels receive more achievements in behavioral and financial performance than independent hotels. Therefore, hoteliers should understand that the business goal is to maximize the market value of the assets, recognizing the role of brand name in hotels since market value is beneficial for position and flagging decisions (O'Neill & Xiao, 2006). Customers who use products or services at brand hotels can measure the standard of performance of employees and hotels because they would expect the same amenities and services across the same brand name with different properties (Whitla et al., 2007). Customers of brand chain hotels are also willing to pay at premium price to perceive the quality and standardized performance.

Furthermore, the relationship between competitive human resource strategy and hotel behavioral performance is stronger in chain hotels than in independent hotels. Chain hotels have some good training programs, which can be used in many properties. Therefore, the outcome of training achievement has been proved by many chain properties. With the same market segmentation, staff from the same brand chain hotels will receive the same training programs. Customers who visit the brand chain hotels expect to receive the same services from the same trained employees. As a result, behavioral performance of customer satisfaction and employee satisfaction in chain hotels is more reliable and measurable. Many chain hotels measure these behavioral performances regularly via employee survey and customer loyalty program. Some independent hotels may not have access for measuring these behavioral performances regularly. It is harder for the independent hotels to measure customer satisfaction and employee satisfaction.

Lastly, this finding further shows that the relationship between IT strategy and financial performance is stronger in chain hotels than in independent hotels. Chain hotels have a wider connection of chain value management than independent hotels, with the same market segmentation. IT in chain hotels provides the convenience to both of the employees and customers. Employees can access customers' profiles, so that they can provide the same services with some customers' request during their visit at the hotels. Information technology will also help employees to work easier and reduce the working ambiguity. This can lead to low turnover rate; as a result, increasing the financial performance for chain hotels. IT in independent hotels is rigid to the fact that some independent hotels do not have any capacity for IT investment. Even though some independent hotels may use outsourcing such as leasing or renting IT, it would costs the hotels and may effect on the financial performance. Meanwhile, IT can be coordinated so customers can access guest reservation systems and make booking from a central location (Whitla et al., 2007).

Organization Structure Moderating Effect

This study shows the moderating effect of organization structure on the relationship between low rivalries among existing hotel firms and brand image strategy. The relationship between low rivalries among existing hotel firms and the competitive brand image strategy is higher with mechanistic structure than with organic organization structure. In order to be competitive with existing hotel firms, mechanistic structure gives the opportunity to hoteliers to monitor the difference of brand image strategy. Mechanistic structure helps hoteliers to control and manage hotel operations; whereas, organic structure may cause hoteliers to lose control over the hotel policy and procedure. Perceiving brand image difference is very critical; therefore, hoteliers need the centralized standard across the same brand with other properties. Mechanistic structure helps hoteliers evaluate the branding performance in order for future development.

There is the moderating effect of organization structure on the relationship between bargaining power of individual hotel customers and the competitive human resource strategy. With low bargaining power of individual hotel customers, hotels with mechanistic structure provide more competitive human resource strategy than hotels with organic structure. Mechanistic structure provides hotels with stable and organization of staffing and human resource development. In contrast, organic structure indicates the similar outcome of competitive human resource strategy, regardless of bargaining power of individual hotel customers. This result applies to the same concept as brand image strategy. For the chain hotels, some training programs are from the headquarters. These programs provide the same standard across the brand and properties. Therefore, mechanistic structure will help hoteliers to evaluate and control the competitiveness of human resource strategy.

Furthermore, there is a moderating effect of organization structure on the relationship between less threat of new hotel entrants and the competitive human resource strategy. Organic structure generates more competitive human resource strategy than mechanistic structure on both of more and less threats of new hotel entrants. For organic structure, competitive human resource strategy is stronger for hotels with less threat of new hotel entrants than hotel with high threat of new hotel entrants. In contrast, with mechanistic structure, competitive human resource strategy is slightly decreased from the high threat of new hotel entrants toward less threat of new hotel entrants. With the circumstance of threat of new hotel entrants, hoteliers have to keep revising the strategy for certain situations. Human resource strategy is another strategy that hoteliers can revise and develop at short period of time. For example, when the hotels have new IT equipment, all employees are required to learn how to access this equipment. Hence, the organic structure will allow the hoteliers to develop the new training program for improving human resource competitiveness.

This study implies the moderating effect of organization structure on the relationship between resource competitive strategies and hotel firm's performance. These results were the same as previous studies of Tarigan (2005) and Jogaratnam and Tse (2006). Mechanistic structure has a positive effect on hotel performance than organic structure. The results find the moderating effect of organization structure on the relationship between human resource strategy and hotel behavioral performance. Regardless of competitive human resource strategy, hotels with mechanistic structure indicate better behavioral performance than hotels with organic structure. Since human resource strategy is the ground of the business success, all human resource trainings and development programs have to be standardized and followed by all employees. All employees have to follow all the hotel procedures to meet customers' satisfaction and daily work activities. Therefore, mechanistic structure would be more appropriate for human resource training and development. Mechanistic structure will help hoteliers to monitor and evaluate employees' performance, because hoteliers will have the standardized pattern for employees' performance evaluation.

This finding further finds the moderating effect of organization structure on the relationship between information technology strategy and hotel behavioral performance. IT advancement helps customers to meet their expectations as well as employees' to meet the job activities. Organic structure facilitates the competitive IT strategy to reach higher behavioral performance. Organic structure provides quicker response of decision making and decentralization. These procedures improve hotel behavioral performance in terms of customers' and employees' satisfaction.

Surprisingly, there is no moderating effect of organization structure on the relationship between three resource competitive strategies –brand image, human resources, and IT – and hotel financial performance. This result was the same as previous finding of Grinyer et al., (1980). This may be due to the fact that organization structure has a major influence more on behavioral performance than financial performance. Organization structure has more actions on decision making; it also has less formal instruction to get the job done effectively and sufficiently. Organization structure of each hotel is related to the internal employees' relationship, and employees and customers' relationship. All these relationship measurements rely on behavioral performance in terms of customers' satisfaction and employees' satisfaction. The financial performance may not be a good criterion measuring the effect of organization structure on competitive resources strategies.

Conclusion and Recommendations

There is no single factor for achieving business performance and success. To create a competitive advantage, the hotel firms are required to progress, to innovate, and to discover the best competitive opportunities and exploit them. Hoteliers have different perceptions of problems depending on whether they are viewed retrospectively or contemporaneously. Hoteliers should consider correcting some threats and weaknesses of the organization environmental factors in order to improve hotels' strengths and opportunities. Hoteliers could reduce industry external factors such as rivalry among existing hotel firms, bargaining power of individual hotel customers, and new hotel entrants. In the meantime, hoteliers should take internal resource advantage as an opportunity to make the hotel become more competitive over competitors. The three major hotel internal resources – brand image, human resources, and IT – can make a difference on hotel performance.

With new and dynamic environmental changes, hoteliers must be sensitive to change the environment and customers' demands and preferences, as well as be able to identify and foresee opportunities (Yang & Fu, 2007). Change is a part of the reality in business, and change should be welcomed instead of being avoided. Hoteliers should be more flexible and adapt all possible crises to any available opportunity. Hoteliers should keep in minds for decreasing all threats of industry forces as well as increasing internal competitive resources.

Managerial Implication

Some managerial recommendations are proposed as follows:

First, the hoteliers have to understand and apply the hotel structure with the competitive resources that the hotel has in order to improve the competency in the organization. In the case that hoteliers know their competitive position in the way that they have good chain management (e.g. supply chains and rivalry), then the hoteliers can drive the hotel into an advantage position over the competitors. Hoteliers can begin the strategic planning by updating and revising the business objectives in relation to performance reviews in key areas of human resource and IT development. Hoteliers should consider other alternative of training programs that might be most valuable and could provide superior achievement for employees and the hotel.

Secondly, the goals of business success are profitability. Other hotel performances besides monetary is also necessary. From the hoteliers' perspectives, employees' and customers' satisfaction also indicate the success of hotel business. Hoteliers have to find the right balance in making profitability and satisfying customers and employees. Sometime, the hoteliers cannot generate much profit because they put a number of investments on other customers' amenities or employees' benefits such as advanced IT system. Hoteliers have to make sure that they provide assurance to customers purchasing of intangible service products.

Thirdly, since there is no consistency on the conceptual model of business success, from the managerial perspective, it is important for hoteliers to understand the condition of applying the organization structure with certain conditions. Some business conditions are that mechanistic structure would perform more appropriate than organic structure. Hoteliers should be able to apply and modify the organization structure appropriately with the changing situations.

Lastly, hoteliers must be able to foresee opportunities not seen by others. This requires deep insight into the factors affecting customer demand, including trends in economics, politics, technology, and demographics. Hoteliers who are able to anticipate changes can best help guide the hotel to long-term success.

Limitations and Future Research

This study is conducted with some limitations. These limitations are listed as follows.

First of all, this study was conducted between October-December 2008. This seasonality may be influenced by one-time events within particular properties that may not apply to future property transactions. Future study could be conducted during different period of time. Some perceptions on this topic might be different over time.

Secondly, this study applies to only three industry forces of Porter (1980a). The other two industry forces, threats of substitutes and bargaining power of suppliers, were not investigated in this study. Moreover, other external environment factors (e.g. regulation and social forces) might also have an influence on hotels' success and achieving highest performance. Future research should further explore these aspects to gather new insightful outcomes.

Lastly, this study faces with low response rate issues. The non-response respondents might have different perceptions of these issues. Longitudinal study is proposed to further investigate this phenomenon.

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APPENDIX A

Survey Questionnaire

Dear the Hotel General Manager,

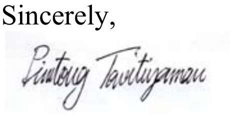
I am Pimtong Tavitiyaman, a Ph.D. candidate under the direction of Regents Professor Dr. Hailin Qu in the School of Hotel and Restaurant Administration at Oklahoma State University, Oklahoma USA. I would like to take this opportunity to invite you to participate in a research survey entitled “The Influence of Industry External Factors on Resource Competitive Strategies and Hotel performance”. The purpose of this study is to explore the relationships between industry external factors, strategies, and hotel firm’s performance. It will only take **about 5-10 minutes** of your valuable time to complete this survey.

There are no known risks associated with this survey that are greater than those ordinarily encountered in daily life**.** Your participation is voluntary and your answers will be kept **anonymous and confidential**. No specific respondent’s identity will be released or identified on the report. The data will be stored at the researcher office for approximately one year. Only the researcher will have the right for data access. While I would like you to answer all questions, you have the right to not respond to any or some parts of the questions, for whatever personal reasons you may have.

If you have any questions regarding the survey, you may contact me directly by email at pimtong.tavitiyaman@okstate.edu or by phone at 405-269-1059. If you have any questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, Oklahoma 74078, 405-744-1676 or irb@okstate.edu.

I would like to thank you in advance for your participation and for volunteering your valuable time.

Sincerely,



Pimtong Tavitiyaman
Ph.D. Candidate
School of Hotel and Restaurant Administration
Oklahoma State University
210 HESW
Stillwater, OK 74078

<u>Section I</u>: Please check (✓) the number that best describes your professional profile and hotel property

1. Your current position:
   ① Hotel Owner ② General Manager ③ Resident Manager
   ④ Division Manager ⑤ Supervisor ⑥ Other (please specify): _____________

2. Your working experience in the current position:
   ① Less than 3 years ② 3-6 years ③ 7-10 years ④ More than 10 years

3. Type of your lodging's affiliation:
   ① Chain ② Independent ③ Other (please specify): ______________

4. Type of your lodging:
   ① Hotel ② Motel/ Inn ③ Resort
   ④ Bed & Breakfast ⑤ Casino ⑥ Timesharing

5. Scale of your lodging:
   ① Luxury ② Up-upscale ③ Upscale
   ④ Mid-scale with F&B ⑤ Mid-scale without F&B ⑥ Budget

6. Location of your lodging:
   ① Airport ② Urban ③ Suburban ④ Highway ⑤ Resort area

7. The number of rooms in your lodging: ________________

<u>Section II</u>: Please indicate your level of agreement with the following statements by circling the appropriate number (1 = strongly disagree to 5 = strongly agree).

	Strongly Disagree ------Neutral--------- Strongly Agree
<u>Rivalry among existing firms</u>	
1. My hotel has fewer competitors.	1…......2..…....3…......4….…..5
2. The competition in my area is less fierce.	1…......2..…....3…......4….…..5
<u>Individual customers</u>	
3. Individual customers have less bargaining power over my hotel room rate.	1…......2..…....3…......4….…..5
4. Individual customers show loyalty to my hotel.	1…......2..…....3…......4….…..5
<u>Entrants of New Hotel Firms</u>	
5. It is difficult for new hotel entrants to enter the market.	1…......2..…....3…......4….…..5
6. New hotels advertise heavily to overcome existing brand preferences.	1…......2..…....3…......4….…..5

	Strongly Disagree ------Neutral--------- Strongly Agree
Organizational Structure 1. My hotel has heavy dependence on informal relations of co-operation for getting work done.	1….....2..…....3…......4……...5
2. My hotel has a strong emphasis on adapting freely to changing circumstances without too much concern for past experience.	1….....2..…....3…......4……...5
3. My hotel has a strong tendency to let the individual's personality define proper on-the- job behavior.	1….....2..…....3…......4……...5
<u>Competitive Strategies</u>	
1. My hotel makes conscious efforts to differentiate brand image from the competitors.	1….....2..…....3…......4……...5
2. My hotel continually improves brand images to satisfy customer demands.	1….....2..…....3…......4……...5
3. Customers are constantly satisfied with my existing hotel's brand image.	1….....2..…....3…......4……...5
4. My hotel has an adequate number of skilled staff members.	1….....2..…....3…......4……...5
5. My hotel makes sufficient investment in human resource training and development.	1….....2..…....3…......4……...5
6. My hotel staff is effective in completing their tasks.	1….....2..…....3…......4……...5
7. My hotel uses information technology as a competitive strategy.	1….....2..…....3…......4……...5
8. My hotel has a strong belief in advanced information technology.	1….....2..…....3…......4……...5
9. My hotel uses new information technology to accommodate customers' needs.	1….....2..…....3…......4……...5

<u>Section III</u>: Please circle the number that best describes your hotel performance in the following areas (from 1 = far below the industry norm to 5 = far above the industry norm)

	Far Below Industry Norm-------Far Above Industry Norm
1. The different ways of delivering services to customers are……………..	1….....2..…....3…......4……...5
2. My hotel's customer satisfaction level is………………	1….....2..…....3…......4……...5
3. My hotel's employee performance is…………………	1….....2..…....3…......4……...5
4. My hotel's average annual occupancy rate is…………	1….....2..…....3…......4……...5
5. My hotel's net profit after tax is……………….………	1….....2..…....3…......4……...5
6. My hotel's return on investment (ROI) is……….……	1….....2..…....3…......4……...5

<u>Section IV</u>: Please check (✓) the number that best describes your demographic characteristics.

1. Your gender: ① Male ② Female

2. Your age: ① 18-30 years old ② 31-45 years old
③ 46-60 years old ④ Over than 61 years old

3. Your highest level of education: ① High school ② College/Associate degree
③ Bachelor degree ④ Master/MBA degree
⑤ Other (please specify): ______________

--Thank you for your cooperation and support--

APPENDIX B

Research Approval from Institutional Review Board (IRB)

Oklahoma State University Institutional Review Board

Date:	Friday, October 17, 2008
IRB Application No	HE0873
Proposal Title:	The Effect of Industry Five Forces Factors on Resource Competitive Strategies and Hotel Firms' Performance
Reviewed and Processed as:	Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 10/16/2009

Principal Investigator(s):

Pimtong Tavitiyaman	Hailin Qu
36 S. Univ. Place Apt. 12	220 HES
Stillwater, OK 74075	Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

[X] The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,

Shelia Kennison, Chair
Institutional Review Board

VITA

Pimtong Tavitiyaman

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE IMPACT OF INDUSTRY FORCES ON RESOURCE COMPETITIVE STRATEGIES AND HOTEL PERFORMANCE

Major Field: Human Environmental Sciences

Biographical:

Personal Data: Thai citizen.

Education: Received Bachelor of Arts at Thammasat University, Bangkok Thailand in 1996. Received Master of Science at Oklahoma State University, Stillwater Oklahoma, U.S.A. in 2004. Completed the requirements for the Doctor of Philosophy with a major at Human Environmental Sciences at Oklahoma State University, Stillwater, Oklahoma in July 2009.

Experience: Worked at Le Royal Meridien Hotel, Bangkok Thailand in the position of Front Office Department and Accounting Department from 1996-2001.

Professional Memberships: Member of the International Council on Hotel, Restaurant, and Institutional Education (ICHRIE)

Name: Pimtong Tavitiyaman Date of Degree: July, 2009

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: THE IMPACT OF INDUSTRY FORCES ON RESOURCE COMPETITIVE STRATEGIES AND HOTEL PERFORMANCE

Pages in Study: 200 Candidate for the Degree of Doctor of Philosophy

Major Field: Human Environmental Sciences

Scope and Method of Study: the purposes of this study were to: (1) assess the impact of industry forces on resource competitive strategies; (2) investigate the impact of resource competitive strategies on hotel performance; and (3) assess the moderating effect of hotel affiliation and organization structure on the relationship between industry forces and resource competitive strategies and hotel performance. Respondents were hoteliers at hotels in the U.S. 317 participated this survey. ANOVA and independent sample T-Test was applied for the significant difference between hotel size and affiliation with eight constructs. Structural equation modeling by LISREL 8.52 and hierarchical multiple regression was used to examine the causal links among constructs.

Findings and Conclusions: Results indicated that there were some significant differences between hotel size and affiliation on industry forces, resource competitive strategies, organization structure, and hotel performance. The industry forces in terms of bargaining power of customers and new hotel entrants had a positive impact on implementing competitive human resource and information technology strategies. Furthermore, competitive human resource and information technology strategies had an impact on hotel superior performance. This study further found the moderating effect of hotel affiliation on the relationship between industry forces, resource competitive strategies, and performance. Moreover, there was the moderating effect of organization structure on the relationship between industry forces, resource competitive strategies, and performance. This study suggested that in order to be successful in the hotel business, hoteliers should consider all external (industry forces) and internal factors (e.g. hotel affiliation, competitive resources, and organization structure) for competitive strategy implementation. Hoteliers should be able to adapt all possible changes and be innovative in the business in order to achieve the high profitability and growth.

ADVISER’S APPROVAL: Dr. Hailin Qu