HOSPITALITY COMPETITIVENESS MEASUREMENT SYSTEM

Gabriel Héctor Carmona Olmos

ABSTRACT

Many hotels around the world, such as the ones in Morelia, Michoacán, Mexico, are essentially family businesses that need to develop and improve their managerial skills in order to face competition from chain hotels and franchises. Mostly of these hotels have a small percentage of foreign tourists, offer standard lodging service, and lack training and information management tools for their decision-making processes. For these hotels business relationship should be a priority and not the sentimental or family issues that lead to centralized, intuitive, and reactive decisions. At the same time, hotel chains and franchises need to improve their systems and procedures in order to compete in many countries with a successful business model, so it is necessary to measure their efforts and contrast its own performance with the rest of the competitors. The research answers the following questions: Which variables must be monitored by hotels in order to design a competitiveness measurement system? How can hotels develop a competitiveness measurement instrument that provides useful information for managerial activities and decisions? This paper offers a hospitality competitiveness measure system with administrative recommendations for a hotel or an entire hospitality industry.

INTRODUCTION

Competitiveness must be understood as the ability of an organization, public or private, profitable or not, to obtain and maintain comparative advantages that enable it to achieve, sustain and improve a specific position in the socioeconomic environment. The term competitiveness is used in business to consider how to plan and develop any business initiative, which causes an evolution in the business model and its owner's job. (Porter, 2005)

Hotels are important for their employment contribution and for their indirect effects on the environment. The presence of a hotel in a given area can support the development of additional tourism, improve the welfare of the people in the tourist influence areas, and revitalize a number of economic activities that could disappear without the presence of the hotel. It is relevant to ask: Which are the variables that must be monitored by the hotels in order to design a competitiveness measurement system? With this system hotels will be able to improve their performance.

Gabriel Héctor Carmona Olmos is professor of strategy and business management at the Instituto Tecnológico y de Estudios Superiores de Monterrey in México. He earned a PhD degree in management science from the Michoacán State Research Center in Morelia, México. He did research, published and developed a hospitality competitiveness measurement instrument that provides useful information for managerial activities and decisions that shows the relationship between infrastructure, marketing and sales, management, training, and information system, with competitiveness. He is conducting research activities with Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM), Instituto Politécnico Nacional (IPN), and Universidad Nacional Autónoma de México (UNAM) on how to measure and improve competitiveness at different industries.

The "Hospitality competitiveness measurement system" was applied in hotels in Morelia, Michoacán (Mexico), but the purpose of this paper is to extend it to any other hotel or hospitality industry around the world. It identifies efficient management practices performed by the owners and managers to be reflected in their level of competitiveness, impacting economic and social development. It is important to mention that in this paper we will use data from the hotels of Morelia, Michoacán. The research identifies the forces and constraints for competitiveness generated by managerial practices, such as evaluating if the objectives and goals of the hotels are measurable and well communicated, if managers plan effectively at different levels, and if the job specifications and descriptions are clear. Within the marketing aspect the following will be analyzed: the practice of market segmentation, the positioning of the hotel, the way sales activities are performed, and if there is an effective strategy for promotion and advertising. In terms of infrastructure, the research considers the facility's conditions, equipment, and how the organizational structure allows optimal processes that influence in the quality of services offered, as well as the training and administrative measures that develop technological skills and the information systems that generate indicators useful in the competitiveness improvement process.

TOURISM AND HOTELS ENVIRONMENT

In 2010, world tourism recovered more strongly than expected from the shock it suffered in late 2008 and 2009 as a result of the global financial crisis and economic recession. Worldwide, international tourist arrivals reached 940 million in 2010, up 6.6% over the previous year. Asia and the Pacific (+13%) were the first regions to recover and among the strongest growing regions in 2010. Africa maintained growth (+7%) and the Middle East returned to double digit growth (+14%). While the Americas rebounded (+6%) from the decline in 2009, Europe's (+3%) recovery was slower than in other regions. International tourism receipts are estimated to have reached US$ 919 billion (693 billion euros) in 2010, up from US$ 851 billion (610 billion euros) in the previous year. When ranked according to the two key tourism indicators – international tourist arrivals and international tourism receipts – it is interesting to note that eight of the top ten destinations appear in both lists, even though they show marked differences in terms of the characteristics of the tourists they attract, as well as their average length of stay and their spending per trip and per night. The two countries that are missing are Malaysia and Mexico, in 9th and 10th place on arrivals, but they face the challenge of becoming an attractive destiny for the tourism that spends a relevant amount of money on their trips. An important fact for this goal is the lodging infrastructure and the networking between tourism services providers. (World Tourism Organization, 2011)

Table 1: International Tourist Arrivals

		Million		Change (%)	
Rank	Country	2009	2010	2009/2008	2010/2009
1	France	76.8	76.8	-3.0	0.0
2	United States	55.0	59.7	-5.1	8.7
3	China	50.9	55.7	-4.1	9.4
4	Spain	52.2	52.7	-8.8	1.0
5	Italy	43.2	43.6	1.2	0.9
6	United Kingdom	28.2	28.1	-6.4	-0.2
7	Turkey	25.5	27.0	2.0	5.9
8	Germany	24.2	26.9	-2.7	10.9
9	Malaysia	23.6	24.6	7.2	3.9
10	Mexico	21.5	22.4	-5.2	4.4

Source: World Tourism Organization (UNWTO), 2011.

Table 2: International Tourist Receipts

		US($)				Local Currencies	
		Billion		Change (%)		Change (%)	
Rank	Country	2009	2010	2009/2008	2010/2009	2009/2008	2010/2009
1	United States	94.2	103.5	-14.7	9.9	-14.7	9.9
2	Spain	53.2	52.5	-13.7	-1.2	-9.0	3.9
3	France	49.4	46.3	-12.7	-6.2	-7.9	-1.3
4	China	39.7	45.8	-2.9	15.5	-2.9	15.5
5	Italy	40.2	38.8	-12.0	-3.6	-7.2	1.4
6	Germany	34.6	34.7	-13.2	0.1	-8.5	5.3
7	United Kingdom	30.1	30.4	-16.3	0.8	-1.3	1.7
8	Australia	25.4	30.1	2.5	18.6	10.3	0.8
9	Hong Kong (China)	16.4	23.0	7.5	39.5	7.0	39.8
10	Turkey	21.3	20.8	-3.2	-2.1	-3.2	-2.1

Source: World Tourism Organization (UNWTO), 2011.

World Tourism Organization research "Tourism 2020 Vision" projects that international arrivals are expected to reach nearly 1.6 billion by the year 2020. Of these worldwide arrivals in 2020, 1.2 billion will be intraregional and 0.4 billion will be long-haul travelers. East Asia and the Pacific, South Asia, the Middle East and Africa are forecasted to grow at over 5% per year, compared to the world average of 4.1%. More mature regions in Europe and the Americas (including Mexico) are anticipated to show lower-than-average growth rates. Europe will maintain the highest share of world arrivals, although this share will decline from 60% in 1995 to 46% in 2020. (World Tourism Organization, 2011)

"There are 5 forces that are driving firms and sectors at their global business operations: political, technological, market, costs, and competitive. Competition is stronger, and companies in newly industrialized or developing countries have the necessity and opportunity to enter in the world market". And the hotel industry is not the exception; hotel chains and franchises have begun their expansion process. The traditional family hotels businesses must develop and improve their management skills in order to face competition from chain hotels, at the time they are trying not to be displaced from a lodging business that is growing around the world. (Bell, McCulloch, Frantz, Geringer, Minor, 2004)

As an example, the hotel industry in Morelia, Michoacán, Mexico is made up mostly of family businesses, not franchises, so the implementation of quality systems is not institutionalized and procedures and manuals are hard to follow. It is a common practice to use a quality label that certifies the hotel operations, but without specific criteria. Also there is a high personnel turnover, in which an employee working in one hotel is able to find a job at another one in the best of cases.

In some countries there are a few educational institutions concerned with tourism and hospitality, so they use their empirical knowledge to function, while at the same time there is a lack of coordination to organize and avoid tourists cannibalism and clumping, and to provide useful information for decision making processes. It was not until 2006 that researches in Morelia concerning tourist profile were performed, and their results began to be exploited by the hotel managers.

DETECTED PROBLEM

Many hotels around the world, such as the ones in Morelia, Michoacán, Mexico, are essentially family businesses that need to develop and improve their managerial skills in order to face competition from chain hotels and franchises. Most of these hotels have a low share of foreign tourists, offer a lodging standard service, and have a lack of training and information management tools for their decision-making processes. For these hotels business relationship should be a priority and not the sentimental or family issues that lead to centralized, intuitive, and reactive decisions. At the same time hotel chains and franchises need to improve their systems and procedures in order to compete in many countries with a successful business model, so it is a

necessity to measure their competitiveness effort to contrast it with its own performance and with the rest of the competitors.

Research Questions

Which are the variables that must be monitored by the hotels in order to design a competitiveness measurement system?

How can hotels develop a competitiveness measurement instrument that provides useful information for managerial activities and decisions?

COMPETITIVENESS VARIABLES

The diagram below shows the relationship between the independent variables: infrastructure, marketing and sales, management, training, and information system, with the dependent variable, competitiveness. These variables were determined by a focus group study including the participation of hotel owners, managers, tourism authorities, and the Tourism Sub secretary of Michoacán State in Mexico.

Figure 1: Competitiveness Variables Diagram
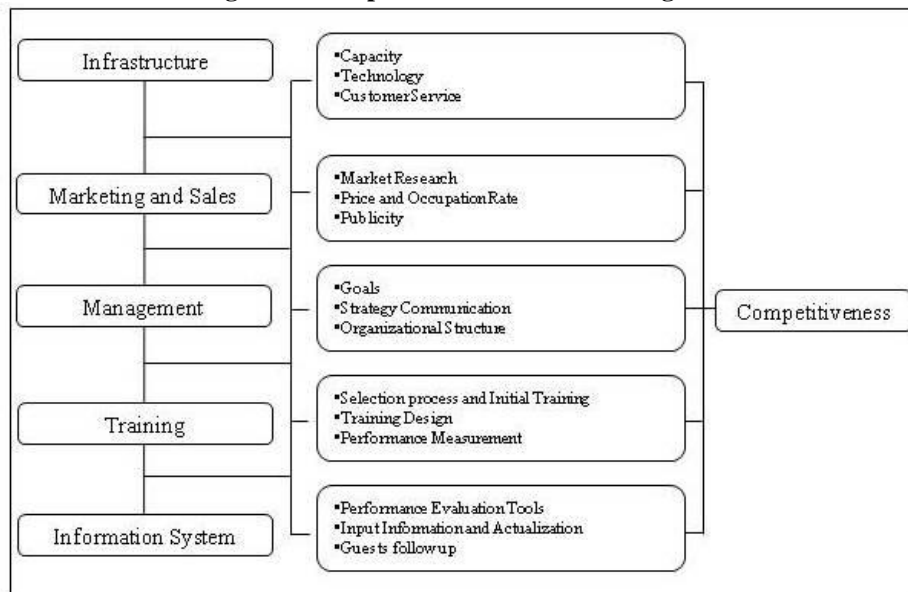
Source: Own elaboration.

COMPETITIVENESS MEASUREMENT INSTRUMENT

For each hotel to obtain information, data must be gathered using a questionnaire consisting of 36 Likert Scale affirmations under the following structure:

- Six questions are related to the hotel infrastructure, capacity, level of customer service and the technology used in their processes.

- Ten questions examine the hotel marketing and sales activities, such as market research practices, guests' segmentation, prices, advertising and promotional strategy, and their after-sales follow-up activities.
- Five questions are related to management practices of the owners and managers of hotels, considering the establishment and communication of strategies and goals, the degree of involvement of managers in planning, organizational structure and the definition of staff roles.
- Eight questions consider the training provided by the hotel to its staff regarding its selection system and initial training, design, content and duration of the training programs, performance measurement indicators, staff turnover, and its remuneration system.
- Six questions refer to the information system used by the hotel and its ability to measure the performance of the organization, the use of reports for decision making processes, practices to obtain input data, data mining, and to solve complaints.

Data Analysis

In order to establish the hotel administrative practices that promote competitiveness, the responses are ranked according to the Rensis Likert scaling system. An affirmation is presented to the participant to evaluate his reaction by choosing one of the five-point scale. Each point has a numeric value. The participant obtains a score with respect to the claim and a total score is obtained by summing the scores of all claims. (Hernandez Fernandez and Baptista, 1998, p. 256)

Example Question 1: The hotel has a complete infrastructure to fully satisfy the needs of its customers

Strongly agree	5
Agree	4
Neither agree nor disagree	3
Disagree	2
Strongly disagree	1

The questionnaire consists of 36 questions: 35 related to the independent variables and 1 question regarding the dependent variable, with the maximum score for an affirmation of 5, and therefore the maximum total score is 180 (36 * 5), and the minimum value in the scale is 1, resulting in a minimum total score of 36 (36 * 1). The score interval is between the extreme values of 36 and 180.

For each variable are defined dimensions and for each dimension are established indicators considered in the Likert scale.

To analyze the hotel competitiveness performance, the following semaphore chart, which considers the score range for each variable, has been developed.

- Green zone: The hotel has a good performance in the variable.
- Yellow zone: The hotel has a regular performance in the variable.
- Red zone: The hotel has an improvement opportunity in the variable measured.

Table 3: Competitiveness Semaphore Chart

Variable	Min Score	Max Score	Score Range	Green Zone	Yellow Zone	Red Zone
Infrastructure	6	30	(6-30)	(24-30)	(13-23)	(1-12)
Marketing and Sales	10	50	(10-50)	(40-50)	(21-39)	(1-20)
Management	5	25	(5-25)	(20-25)	(11-19)	(1-10)
Training	8	40	(8-40)	(32-40)	(17-31)	(1-16)
Information System	6	30	(6-30)	(24-30)	(13-23)	(1-12)
Competitiveness Personnel Impression	1	5	(1-5)	(4-5)	3	(1-2)
Hotel Competitiveness	36	180	(36-180)	(144-280)	(73-143)	(1-72)

Source: Own elaboration.

For the following recommendations, were reviewed the competitive hotel models developed by: Michael D. Hartline, Barbara Ross Wooldridge, y Keith C. Jones (2003), Paul A. Phillips (2004), Rodríguez y Espino (2006), Sharlene Anderson, Chris Guilding (2006); Keneth R. Lord, Michael O. Mensah and Sanjay Putrevu (2011) and Martti Lindman (2011).

According to the hotel results, the managers must take into consideration the following recommendations.

Table 4: Actions to improve competitiveness

Variable	Green Zone Score	Recommendations	Yellow Zone Score	Recommendations	Red Zone Score	Recommendations
Infrastructure	(24-30)	1) Identify new infrastructure and technology that the hotel must have in order to continue with its advantage. 2) Promote infrastructure as one of your competitive advantages. 3) Learn from the infrastructure and technology that other hotels around the world may offer.	(13-23)	1) Compare the hotel infrastructure and technology with its competitors. (Benchmarking) 2) Actualize the infrastructure needed for the essential processes and services for the hotel. 3) Actualize the technology needed for the essential processes and services for the hotel.	(1-12)	1) Verify all the lack of infrastructure and technology that the hotel presents. 2) Acquire the infrastructure needed for the essential processes and services for the hotel. 3) Acquire the technology needed for the essential processes and services for the hotel.
Marketing and Sales	(40-50)	1) Verify if you could attend new market segment(s) for your hotel. If possible initiate efforts with a new business concept. 2) Continue with your market research and verify if an expansion strategy is appropriate. You may franchise or perform a joint venture. 3) Continue with the marketing and sales training program. 5) Diversification of your hotel may be an option. 6) Keep the improvement in your internet hotel access. 7) Improve the frequent program for your guests and surprise them.	(21-39)	1) Verify the market segment(s) for your hotel, may be you have an opportunity in a new segment. 2) Increase market research periodicity and verify your marketing mix. 3) Verify your marketing and sales force organizational design. There could be some areas were you need to concentrate efforts. 4) Actualize the training program for your marketing and sales personnel. 5) Review your price strategy; you may be out of market. 6) Verify the goals, positioning strategy, budget and media mix of your marketing plan. 7) Verify if you offer a frequent program for your guests. 8) Identify prospects for the low demand period. 9) Review your internet site and improve its capacity to	(1-20)	1) Identify the market segment(s) for your hotel. 2) Perform a market research to generate an effective marketing mix. 3) Review your marketing and sales force organizational design. 4) Design a training program for your marketing and sales personnel. 5) Review your price strategy. 6) Generate a marketing plan which includes: goals, positioning strategy, budget, media mix, and internet access. 7) Design a frequent program for your guests. 8) Identify prospects for the low demand period.

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				perform sales on the web.		
Management	(20-25)	1) Look for new strategies to maintain your leadership in the market. 2) Continue measuring the performance of the hotel managers and employees. 3) Verify if you may perform an integration, diversification or expansion strategy to get into new markets.	(11-19)	1) Verify the hotel goals and objectives. Make sure all the hotel employees know them. 2) Identify if you have a manager problem at a specific area. Design a continuous improvement plan. 3) Verify the strategic plan is designed with the participation of the personnel. 4) Verify there is a relation between the responsibilities of each employee and the remuneration system. 5) Verify the hotel´s organizational chart and make a restructure if necessary. 6) Develop a recognition program for employees' improvements.	(1-10)	1) Clarify the hotel goals and objectives. Review your mission and vision. 2) Verify the performance of the hotel managers. 3) Generate a strategic plan and communicate it to all the personnel. 4) Communicate the job description and responsibilities to each employee. 5) Verify the hotel´s organizational chart and make a restructure if necessary.
Training	(32-40)	1) Continue with your training effort. Identify new knowledge, and capacities that your personnel may need to develop. 2) Develop training programs for both executives and employees. 3) Promote the relation between the remuneration system and the performance indicators.	(17-31)	1) Actualize your training courses with content provided by your clients and workers. 2) Use internal and external instructors in the training program. 3) Review the coordination between the hotel goals and its remuneration system. 4) Verify learning objectives, trainers and duration of your training program. You may have an opportunity to train your personnel more frequently in important hotel processes.	(1-16)	1) Design a useful training program. Verify learning objectives, trainers and duration. 2) Hire trainers with experience. 3) Generate a remuneration system, paying attention to the performance indicators. 4) Provide an initial training to your knew workers.
Information System	(24-30)	1) Make the hotel information system a competitive advantage. 2) Continue with your data mining activities to follow up the hotel guests. Perform a penetration strategy.	(13-23)	1) Verify if the information system and its reports are useful and opportune for your managers. 2) Verify the data mining activities to follow up the hotel guests. You may have the information, but it has no use purpose. 3) Redesign the information system if necessary.	(1-12)	1) Develop an information system for managers with useful and opportune reports. 2) Perform data mining activities to follow up the hotel guests. 3) Consider input data of the hotel main processes and activities for the information system.
Competitiveness Personnel Impression	(4-5)	1) Competitiveness as an important aspect for your hotel, managers and employees know it. Continue with this practice.	3	1) Verify competitiveness as an important aspect for your hotel. Develop a strategic plan with the participation of managers, employees and clients if possible.	(1-2)	1) Determine competitiveness as an important aspect for your hotel. Everybody needs to have conscious of competitiveness and his job.
Hotel Competitiveness	(144-280)	Overall evaluation score. Your hotel is competitive. Its main goal is to maintain its competitive advantage. Keep in mind that what was successful in the past may not be successful in the future.	(73-143)	Overall evaluation score. Your hotel has an opportunity to improve its competitive performance. Make a benchmarking effort in order to improve actions related to its strategy, infrastructure, marketing, management, training, and information system.	(1-72)	Overall evaluation score. Your hotel is below the standard level of competitiveness. Initiate important actions related to goals establishment, infrastructure, marketing, management, training and the hotel information system.

Source: Own elaboration.

Cluster Analysis

A cluster or conglomerates analysis is a multivariate technique that groups data that are similar. Its intention for a hotel industry analysis is to differentiate the highly competitive hotels from those that present great opportunities of improvement, in order to apply administrative actions. SPPS software is used for this purpose.

For an Industry Analysis purpose, the questionnaire should be applied to all the hotels under study, considering that it must be a census, or to a representative sample. The semaphore competitive chart will look as follows:

Table 5: Industry Competitiveness Semaphore Chart

Variable	Min Score	Max Score	Green Zone	Yellow Zone	Red Zone
Infrastructure	6n	30n	(24-30)n	(13-23)n	(1-12)n
Marketing and Sales	10n	50n	(40-50)n	(21-39)n	(1-20)n
Management	5n	25n	(20-25)n	(11-19)n	(1-10)n
Training	8n	40n	(32-40)n	(17-31)n	(1-16)n
Information System	6n	30n	(24-30)n	(13-23)n	(1-12)n
Competitiveness Personnel Impression	1n	5n	(4-5)n	3n	(1-2)n
Hotel Competitiveness	36n	180n	(144-280)n	(73-143)n	(1-72)n

Where: "n" is the number of hotels that participate in the study.
Source: Own elaboration.

With the data gathered from applying the measuring instrument to the industry hotels, you can obtain central tendency and variability of each independent variable and affirmation.

The recommendations for the hotels that participate in the industry will be the ones that appear in Table 4: Actions to improve competitiveness. The advantage will be that each hotel may compare its performance with the average of the industry.

CONCLUSIONS

The variables that must be monitored by the hotels in order to design a competitiveness measurement system are: infrastructure, marketing and sales strategies, management practices, training, and information systems. To measure these variables a competitiveness measurement instrument has been developed, a questionnaire that provides useful information for managerial activities and decisions. The questionnaire consists of 36 questions: 35 related to the independent variables and 1 question regarding the dependent variable, with the maximum affirmation score of 5, and therefore the maximum total score of 180 (36 * 5), and the minimum value in the scale is 1, resulting in a minimum total score of 36 (36 * 1). The total competitiveness score interval for a hotel is between the extreme values of 36 and 180. The hotel will find its score in a Competitiveness Semaphore Chart provided in this paper, which offers managerial actions in order to improve its competitiveness level. It is important to mention that the hospitality competitiveness measurement system may be applied to an entire industry analysis.

In terms of management practices it is important to define the hotel core competence, considering guests needs and identifying the alternatives that exist to satisfy them. A hotel must determine a consistent and appropriate mission that is shared by hotel members, ensuring that the objectives and activities of each department contribute to accomplishing the mission. It is important to make sure the structure is adequate to carry out the strategy and that each member of the hotel knows his or her job description.

In regard to marketing and sales activities, competitive hotels are those that are customer-oriented and that build their operations around guests' satisfaction. A hotel must define and understand the market segment which serves and look for the ones that offer the maximum profitability. It is important to perform market research as a regular practice, to design effective advertising and sales strategies, and to offer a fast loading website, updated with quality content. At the same time the hotel must develop a marketing plan to transmit the hotel central positioning idea and to generate a recurring program strategy for guests' retention and loyalty.

In terms of infrastructure is important to determine the core elements and additional services, to identify those that generate more value to the target market, and at the same time to ensure that the hotel has the appropriate technology.

A hotel should identify and promote attitudes, appearance, and performance of employees that contribute to the success of the organization. Training should be provided by internal and external instructors, at the same time the hotel must consider performance indicators that will be measured as result of the training. The remuneration system must recognize the performance of each employee.

In regard to information systems, competitive hotels are those that listen to their customers and employees. Information obtained through market research should include competitors' benchmarketing and guests' perceptions. An information portfolio may consider: after-sales service-quality scales studies, mystery shoppers, and focus groups. Additionally it is concluded that businesses require a control panel system to measure the core elements of the hotel operation while it generates useful reports for decision making processes. The information system should allow the hotel to perform longitudinal comparative studies.

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