ABSORPTION CAPACITY IN HOTEL COMPANIES IN SAN MIGUEL ALLENDE GUANAJUATO. MÉXICO

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Abstract- The present tourism dynamics and the tourist demands make it necessary to create strategic collaborative relationships that allow companies to offer quality services, to be profitable and to survive a versatile competition.In the present investigation we will analyze the SMEs of the hotel sector in Guanajuato, México, a destination without beach, in the town named San Miguel de Allende which was designated as a World Heritage site by UNESCO. It is compared with destinations such as Venice, Florence, Prague among the most historically and culturally significant in the world. San Miguel de Allende has been recognized in México as the place most visited by international tourists. Absorption capacity in hotel companies is addressed as continuous learning processes extracted from external sources, processed internally and applied in enterprises, as well as the relationship between these activities. Under an empirical research with a cross-sectional, non-experimental quantitative approach based on a sample of 79 micro, small and medium size enterprises (SMEs). The main objective of this research is to evaluate the absorption capacity that this type of company presents, as well as to recognize how consolidated the three processes (capacity of acquisition, assimilation and transformation) that it comprises are.

Index Terms— Capacity of absorption, competitiveness, hotel sector, tourism.

I. INTRODUCTION AND THEORICAL REVIEW

The SMEs in the Mexican economy are important mainly because of their contribution to the country's growth, employment generation and participation in Gross Domestic Product (GDP).

According to Cotler (2014), Mexican SMEs represent 99.5% of the country's total non-agricultural productive units, generating more than 75% of employment and contributing almost 35% of GDP in Mexico. However, SMEs face a multitude of challenges that must be solved through collective strategies, articulating with other companies to accelerate the learning process, achieve economies of scale, increase technological and innovation capacities, build competitive advantages and optimize negotiations with clients and suppliers (Contreras, López and Molina, 2011).

On the other hand, Chandler (1992), the potential for growth is associated with the use of external resources more efficiently than competition based on the ability to distinguish between opportunities and needs.

Regarding the importance of tourism in Mexico, some evidence data are as follows:

In the fourth quarter of 2016, the population employed in the tourism sector in Mexico exceeded 3 million 951 thousand jobs, which represented 8.4% of total employment. In that quarter, tourism employment increased by 3.9% compared to the same quarter of 2015, which meant 148,445 jobs, and also increased the employed population nationwide by 2.3%[1].

According to data provided by SECTUR Guanajuato in the particular case of San Miguel de Allende, the tourism observation in 2015 revealed that the economic spill in 2015 was of $ 3,713,147.107 pesos, it also disclosed the profile of the tourist of the place, where it points out that 20% represents the greater expense that the tourist makes which is in lodging. It also reveals that the average rate of service satisfaction in prices and lodging is of 8.2% on a scale of 1 to 10. On the other hand, the institution identified the main segments of visitors: tourism of rest or pleasure with 39%, cultural tourism 37%, family tourism with 11%, while gastronomic tourism, business, wedding and purchase, together obtained 13%. Its occupancy level for 2014 was 38% and for 2015 it rose to 42%.

Due to all of the above, the present investigation was carried out in the tourist companies that provide lodging services in San Miguel de Allende, Guanajuato, Mexico.

The changes in the preferences and demands of the tourists derived from the globalization of markets, technologies and the requirement that the companies strengthen their competitive advantage in a constant way. Cohen & Levinthal (1990) coined the term of absorptive capacity as a necessary element in the innovation capacity of a firm, which determines the positioning or permanence of the company in the market.

Absorption capacity is defined as the ability of companies to exploit external knowledge, based on prior knowledge that allows them to identify and potentiate the new knowledge that is useful for the organization. The stages of the process includes the identification, assimilation, exploitation and knowledge processing. (Cohen & Levinthal, 1990).

Later, Lane & Lubatkin (1998) make a variant focusing on the absorptive capacity of one organization towards another, instead of the company to a sector; to this capacity they named it relative absorptive capacity based on the specialized knowledge of the issuing companies and the knowledge of the receiver, as well as the questions specific to the organizational structure.

Absorption capacity according to (Zahra George, 2002) is divided into potential absorption capacity (acquisition and assimilation) and absorptive capacity made (transformation and exploitation), in addition it indicates that through routines and strategic organizational processes, companies acquire, assimilate, transform and exploit knowledge, which brings a competitive advantage to the company.

Dyer and Sing (1998) determine that absorption capacity in addition to being performed in a sequential and cumulative manner between different members of the organization, the model according to Espinoza et al. (2007) indicates that it has a temporal utility for practical purposes. In addition to the motivation and abilities of the individuals are key factors for the efficiency of knowledge absorption.

The acquisition involves identifying external knowledge useful for the firm, being essential to discriminate knowledge that does not generate value (Cohen & Levinthal, 1990), (Zahra & George, 2002), (Todorova & Dirisin, 2007). For this part of the process, (Bierley and Hämäläinen, 1995) identify suppliers, competitors, clients, publications and other organizations as external sources, while Zahra & George (2002) argue that they are inside and outside the organization.

The assimilation on its part according to Teece (1981), integrates the existing knowledge in the company with the knowledge acquired in the first part and being a fundamental point, to give value to this knowledge using it assertively within the organization. This allows, according to Alarcón J et al. (2014) to analyze, interpret and understand the information obtained from abroad.

Finally, exploitation (Cohen & Levinthal, 1990) (Lane and Lubarkin, 1998) is the ability to apply acquired and distinguished knowledge to the organization's objectives by determining the ability to innovate, which means redesigning and create new competencies (Zahra & George, 2002).

Among the studies carried out that address the subject is González-Campo & A. Hurtado-Ayala (2014), the research that was carried out in Colombian SMEs confirming the positive relationship between the capacity of absorption and innovation, however it is manifested that there are variables that determine the highest or lowest absorptive capacity such as company size, while small firms show evidence of performing the three phases, micro-enterprises have variants, where the acquisition of knowledge is null and defensive strategies, investing in technology when their competition makes technological changes .

In another study carried out in Spain to the tour operators and absorption capacity as a determinant of success in marketing and innovation Aguilar-Olaves, Herrera & Clemenza (2012) in the same way confirms the positive relationship between both variables and emphasizes that although the operators do not have clearly defined activities that increase their absorption capacity, they have a sufficient level that allows them to obtain a sustained competitive advantage over time.

In an investigation carried out in SMEs Costa Rica, whose objective was to obtain the absorption index of this type of companies, concluded that they are under the levels of absorption capacity that the companies present and that there are sectors with greater lag, as it is the one of agriculture and fishing, and the main cause is the low presence of mechanisms of social integration. He also stressed the importance of extracting available knowledge from the environment and emphasized the importance of quantifying the absorption capacity of companies, as well as public policies that favor the process (Mongue, Rogriguez & Leiva, 2015).

Finally, in another study carried out in Mexico in the aquaculture sector, García, León & Preciado (2015) show that in addition to having a positive correlation between absorption capacity and innovation, it performs an evaluation of the correlation between the different phases of process, finally showing that the assimilation phase is the most representative in relation to innovation.

II. METHOD AND PROCEDURE

This research was based on a quantitative, descriptive, exploratory and methodology, it also considers causal correlation, since it seeks to establish the relationship between variables.

The subject of study are the executives of the hotel sector of San Miguel de Allende, Guanajuato, Mexico.

According to the Ministry of Tourism of Guanajuato in 2015 registered an inventory of 134 hotels, however the National Institute of Statistics and Geography (INEGI) through the National Statistical Directory of Economic Units (DENUE), a population of 120 companies which met the requirements stipulated to consider the object of study. To calculate the sample for a finite universe with a 95% confidence level; and a margin of error of 5% the following statistical equation was used. (1)

$$n = \frac{N * Z_{\alpha}^{2} * p * q}{d^{2} * (N-1) + Z_{\alpha}^{2} * p * q}$$

After calculating the sample using equation (1) the sample size of 80 units was obtained. Once the

instrument was applied, two surveys had to be eliminated, since the answers were incomplete.

The instrument has three parts. In the first one, general business questions are asked, such as the age, number of employees, room number, etc., and identify the services they offer to their clients. In the second part the instrument has the questions with which the elements of absorption capacity are identified. Acquisition: where the type of permanent or temporary links that companies have with institutions, organizations or events was questioned. Assimilation: through activities established on a daily or occasional basis that are carried out within the company to analyze the environment, interpretation and understanding of the market and share knowledge. Transformation: regarding the use of knowledge translated into innovation, improvements within the activities or business processes. Through closed answers to dichotomous questions that identified the elements of the acquisition capacity, a Likert scale (measured using a Likert-type 5-point scale) was used to evaluate the assimilation of knowledge and an incremental scale of 1 to 10 to identify the use and transformation of knowledge, improvements and innovations of the business. The Cronbach's alpha obtained in the instrument was 0.810 which guarantees the reliability of the results. The third part of the instrument evaluates the degree of innovation that the company made during the last two years, as well as the use of technology. For the analysis of the data, the statistical program SPSS was used to obtain the information presented in the results. It is important to mention that in Mexico one of the classifications of the hotels is handled with stars from 1 to 5, where the greater star, the better the quality of the service.

★	One star: only offers the very basic.
★★	Two stars: basic services and infrastructure.
★★★	Three stars: proper infrastructure, complete and standard service, without big luxuries.
★★★★	Four stars: Luxurious infrastructure and superior service.
★★★★★	Five stars: Exceptional services and infrastructure.

This research has as main objective to identify the absorption capacity of the hotel companies in San Miguel de Allende, as well as to recognize and evaluate the absorption capacity that this type of company presents, as well as to recognize how solidified companies have the processes that implies absorption capacity, capacity of acquisition, assimilation and exploitation.

The research recognizes the model it proposed (Cohen & Levinthal, 1990) because it has a simpler structure that is coupled with those of SMEs.

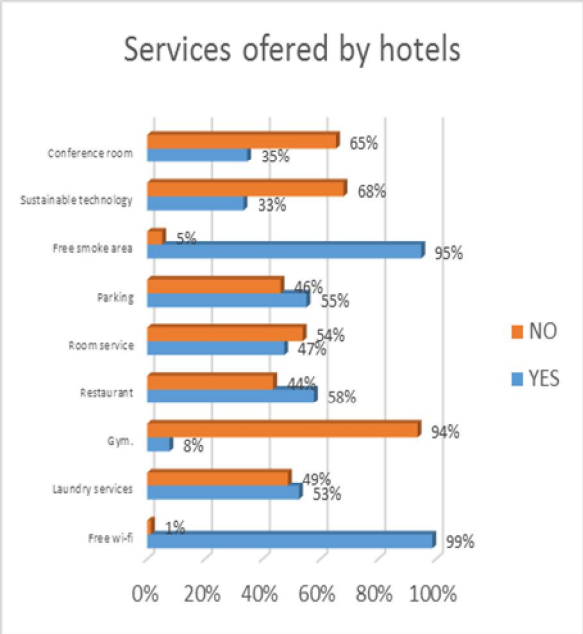
III. RESULTS

First of all, it should be noted that of the 78 companies that
were surveyed, the average number of years in business were 11.6 years, the average number of rooms was 16.11, where the lowest number of rooms were 3 and the highest was 76 rooms in the hotel. The average number of employees was 9.33 people, it is important to remember that the object of study of the research were SMEs.

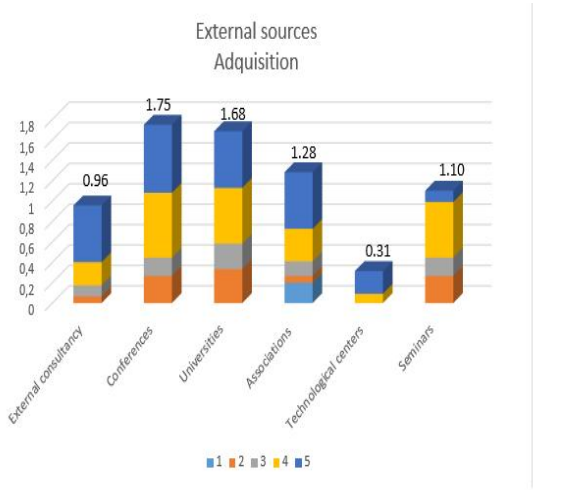
Regarding the category of stars the following frequencies
were obtained, hotels with a star rating 6.3%, two stars 19%, three stars 35.4%, four stars 27.8% and five stars 11.4%.

The following figure shows the types of services offered
in the SMEs hotels in San Miguel de Allende. It is clear that offering customers free internet service is an indispensable service that virtually 100% of hotels have identified. Another consolidated service as part of its service is smoke-free rooms. One of the services that the majority of hotels do not offer is the gym area, which only 8% of hotels have that option for their clients. As can be seen in the figure, the other services are in intermediate positions between the hotels of the place, showing percentages very divided in the ranges of 40 and 60 percent.

Type of services offered:



The following figure shows the links made by companies with external organizations or institutions from which they can extract knowledge, the graph is divided by classification of hotels and it is observed low or zero participation of companies with a star, even in hotels with two star linking is low. It is observed that attendance at conferences, the relationship with universities and belonging to associations are the most worked links in SMEs in the hotel sector.

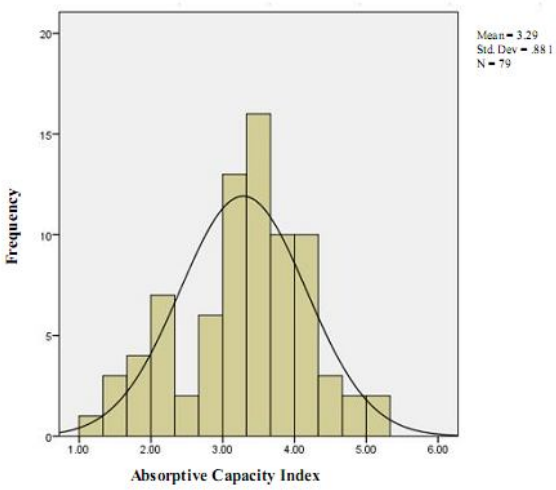


In the following figure we can observe the evaluation of the factor of analysis of the three stages of the absorption capacity, according to Cohen & Levithanl (1990). Stratification was performed by the number of stars with which the hotels are identified. It is observed that the capacities that the companies present make the difference in the capacity of acquisition, where the greater number of stars, the greater the acquisition index.

It is observed that the hotels of 2 and 3 stars have similar indexes, and that those of 4 and 5 have closer indices. Regarding the assimilation capacity, a more heterogeneous index is evidenced in the five groups, although a positive relationship between the number of stars and the obtained index is observed. Finally the capacity of transformation maintains a positive relationship, which increases with respect to the number of stars of the hotels.

STARS	YEARS	EMPLOYEES	ADQUISITION CAPABILITY	ASSIMILATION CAPABILITY	TRANSFORMATION CAPABILITY
1	6.2	4	0.034	3.292	4.400
2	6.1	7.5	0.167	3.523	4.533
3	12.6	8.1	0.143	3.663	5.930
4	17.5	11.4	0.393	3.832	6.697
5	6.2	14.1	0.444	3.863	7.258

Finally, the absorption capacity index of companies in the hotel sector of San Miguel de Allende, Guanajuato from which an average of 3.29 was obtained, which on a scale of 1 to 5, it is observed that it is placed a little more above the middle, which is not considered a high index, nor an index that is homogeneous in the units of study, that is to say there are differences between the groups of hotels that were observed.



CONCLUSION

The results of the present research show important findings regarding the behavior of SMEs.

First of all, the hotels in San Miguel Allende have a great variety of accommodation with different characteristics which allows to cover different tastes, needs and economic budgets. However its low occupancy rate despite being recognized as the place most visited in Mexico gives indications of a serious problem for hoteliers, since it can be reflected that the visits to the place are very short and do not incite long stays that would generate a greater spill in the place.

On the other hand, regarding the low levels of participation and interaction with the outside, it is transcendental to understand that they are the companies without a good structure like the micro companies, those that require more connection with external sources. That leads to acquisition of new knowledge, tendencies and relationships. The

phenomenon is observed mainly in the hotels with the classification of 1 star, who offer only what is indispensable to tourists, do not have a connection with the outside, consequently the possibilities of growth, improvement and permanence in the market are practically null.

With regard to the acquisition, assimilation and transformation indices, it is evident that they are not related to each other, so that changes in the organization are observed despite having no links with external sources. But there is a relation as to the number of employees, the more employees a company in the hotel sector has, the higher the capacity index, and this is due to the fact that there is more human resources, there must be a bigger structure and formalization of links and formal activities within the company to assimilate and transform knowledge. For companies with few workers, belonging to a hotel association may be enough to learn about the trends of the sector, changes in the demands of tourists and problems that affect their business, in such a way that they make changes that allow them to remain active.
It is necessary to create formal structured mechanisms that allow the approach of universities, technology centers, and consultancies of the tourism secretariat to the most vulnerable and least-growth companies, since these are the ones that are kept further from knowledge. University-business linkage has been shown in several investigations to be a winning combination for both parties, however concepts of the triple helix increases the benefits to the company. The government and the Ministry of Tourism lack effective programs aimed at hotel companies with low market share, which could support in various areas such as training, training in the use of technology, certification advice, quality of service, among others to increase their profitability and competitiveness.

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