Price formation of tourist hotels of the city of São Luís/Maranhão

Formação de Preço dos Hotéis Turísticos da Cidade de São Luís/Maranhão

La formación de precios de hoteles turísticos de la Ciudad del São Luís / Maranhão

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Abstract: A hotel is a business establishment that provides accommodation and food services, and for that, it has physical structures that meet the specific and basic conditions to receive guests, in exchange for payment. Pricing in this sector may have a focus on cost, market competition, and the perception of value. The formation of price takes into account demand, segmentation, weather, competition behavior and characteristics of the property, among others. The aim of this paper is to analyze the pricing strategies in the lodging facilities in São Luís, Maranhão, Brazil. The study is justified by the importance of pricing for hotel management, from the reality of the hotel industry in São Luís. We adopted descriptive research procedures, predominantly quantitative in a sample of 31 hotel companies of São Luís, with managers from these establishments. Data were analyzed with support software R version 3.2.1. The research shows that the hotel chain in São Luis do Maranhão uses tools and price management strategies recommended by the legislation and other support for price management. It is concluded that there is an effort of the management of hotels to professionalize the calculation of daily rate, using techniques that give them more security in the decision and pricing, abandoning the informal or empirical methods, without abandoning the market research.

Keywords: Tourism. Hospitality. Pricing.

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Resumo: O hotel é um estabelecimento comercial com o objetivo de prestação de serviços de hospedagem e alimentação, e para isso, possuem estruturas físicas que satisfaçam as condições específicas e básicas para receber hóspedes, em troca de pagamento. A precificação nesses empreendimentos pode ter enfoque nos custos, mercado, concorrência e na percepção de de valor. Alguns fatores podem ser considerados na formação de preços, tais como, demanda, segmentação, meteorologia, comportamento da concorrência e característica do estabelecimento entre outros. O objetivo deste artigo é analisar as estratégias de formação de preços nos meios de hospedagem em São Luís/Maranhão/Brasil. O estudo justifica-se pela relevância da precificação para a gestão hoteleira, a partir da realidade do setor hoteleiro em São Luís do Maranhão. Foi adotado procedimentos de pesquisa descritiva, predominantemente quantitativa, em uma amostragem de 31 empresas hoteleiras de São Luís, sendo os responsáveis os gestores desses estabelecimentos. Os dados foram analisados com apoio software R versão 3.2.1. A pesquisa aponta que a rede hoteleira em São Luís do Maranhão utiliza as ferramentas e estratégias de gestão de preços recomendados pela legislação e outras de apoio para gestão dos preços. Conclui-se que há um esforço da gestão dos hotéis para profissionalizar os métodos de cálculo da diária, utilizando técnicas que lhes deem maior segurança na decisão e formação de preços, abandonando os métodos informais ou empíricos, sem abandonar a pesquisa de mercado.


Resumen: El hotel es un establecimiento comercial con el fin de proporcionar servicios de alojamiento y comida, y para eso, tienen estructuras físicas que cumplan las condiciones específicas y básicas para recibir a los invitados, a cambio del pago. El precio de estas empresas puede tener un enfoque en los costos, la competencia del mercado y la percepción de valor. Algunos factores que pueden considerarse en la formación de precios, tales como la demanda, la segmentación, el clima, el comportamiento de la competencia y las características de la propiedad, entre otros. El propósito de este artículo es analizar las estrategias de precios en hoteles turísticos de la Ciudad de São Luís do Maranhão/Brasil. El estudio se justifica por la importancia de la fijación de precios para la dirección del hotel, de la realidad de la industria hoteleira en São Luís. Fue adoptado procedimientos descriptivos, predominantemente cuantitativos en una muestra de 31 empresas hoteleeras de São Luís, y los encuestados gerentes de estos establecimientos. Los datos se analizaron con el apoyo Del software R versión 3.2.1. La investigación muestra que la cadena de hoteles en São Luís do Maranhão utiliza las herramientas y estrategias de gestión de precios recomendados por la legislação y otras formas de apoyo para la gestión de precios. Se concluye que hay un esfuerzo de la gestión de hoteles para profesionalizar a los métodos de cálculo tasa diaria, utilizando técnicas que les dan más seguridad en la decisión y la fijación de precios, el abandono de los métodos empíricos o informales, sin abandonar la investigación de mercado.

Palabras clave: Turismo. Hospitalidad. La formación de precios.

1 INTRODUCTION

Tourism is an important world economic activity, driving GDP growth in many countries. According to the World Travel and Tourism Council – WTTC the total contribution of Tourism & Travel to global GDP in 2013 was US$ 6.9 billion, equivalent to 9.5 percent of global GDP and, in 2014, it rose 5.7 percent, which corresponds to a contribution of US$ 7.3 billion. This phenomenon occurs, motivated by the economic activities carried out by the trade, including the hotel industry, travel agencies, airlines, transportation services, restaurant and entertainment among others offered to tourists (WTTC, 2014).

In Brazil this activity attracts foreign currency and generates jobs, especially for a city like São Luís, MA, which stands out as one of the main tourism destinations of the country. With regard to travel expenses, approximately 33 percent come from the hotel sector (MTur, 2015; Meira, 2012). This means that the hotel activity is responsible for about one-third of the contribution from the tourist segment.
The hospitality industry in Brazil can be divided into three groups: the first are the independent hotels – which are mostly small businesses and represent almost 70 percent of the establishments in the country. The second group consists of the national hotel chains; and, the third comprises the major international chains that have settled in the country in recent years (Meira, 2012; Mendes, 2016).

The growth of the hotel industry has been keeping up the pace with the changes and demands in tourism. The hotel sector should be prepared to meet the new demands that arise from technological tools and the emergence of new generations (Castillo & Quintero, 2013) and demand in major events such as those which took place recently in Brazil (Rio+20 in 2012, World Cup in 2014, Olympic and Paralympic Games in 2016).

In this way, managers need to adjust management systems to act in this competitive environment. Among other activities, they should adopt procedures that allow determining and assigning costs, the pricing formation of products, calculation of contribution margin and break-even point (Vieira & Souza, 2005). Also including market and competition variables (Cogan, 2013; Porto, 2014), such as the number of beds spaces in the region, the demand, the management of the hotel, independent or chain – national or international, and the hotel classification.

The guiding research problem of this study is to know how managers work the process of formation of daily rates in lodging in São Luís, MA.

Within the hotel sector, many variables influence the decision-making of daily rates, such as market, cultural, natural, and social variables. The pricing in these establishments can be made from the perspective of costs, market, competition, or value. Some factors should be considered in the policy of price formation, such as demand, events, market segmentation, internal promotions, weather, behavior of the competition, and characteristics of the establishment (Planagumà & Julve, 2012; Castillo & Quintero, 2013).

Pricing is a complex subject studied in several areas of the human knowledge and applied social sciences relating to management and finance, economics, accounting and marketing (Porto, 2014). Regardless of the approach, its importance is evident, given that it is through the results obtained by the sales and materialized in the prices of products that the accommodation establishments ensure their survival over time (Heo & Lee, 2011).

Several papers have been published with the focus on the study of price management in hosting, such as: Becerra, Santaló & Silva (2013); Pinto and Santos (2012), Heo and Lee (2011), among others. Thus, demonstrating the interest in the subject, mainly by the influence that the sector suffers from environmental factors such as competition, the internet, new ways of management, client behavior and economy.

This article presents first the theoretical framework of the hotel industry and price formation, then a description of the procedures used for field research and the results,
discussing the pricing techniques used by hotel companies in São Luís.

2 HOTEL INDUSTRY

The hotel industry is a key activity for tourism because of the revenues from tourists and jobs created (MTUR, 2015). The industry is linked to the tourism demand and is composed of hotels, guesthouses and hostels, which offer a service, particularly to tourists (Mello & Goldenstein, 2016).

The hotel sector is an industry of service and products, featuring specific characteristics of an organization whose core objectives are the offer of lodging, food, entertainment, security, and well-being services (Maurício & Ramos, 2011; Ferrando, Prusaczyk, & Tejera, 2012).

According to Duduche, Costa, Silva, Igarashi and Góis (2011, p. 106), the hotel companies are “service suppliers which have as main activity accommodation, differentiating from other economic activities, and depending on clients for its functioning”.

Depending on its constitution, hotel companies can be organized in chains (networks) or they can be independent units (Pinto & Santos, 2012). The separation between the ownership of the property and the management of the business is more common and evident in the segment of the high-end hotel brands, in which the larger operators or brand stand out, of international and domestic chains. There are various types of agreements between owners and operators, but generally, the strategic choice of the biggest players is providing hotel management services. In turn, the so-called independent hotels are managed by their owners or, in some special cases, by a third party. However, the large administrators, brand owners, make demands to manage the hotels that must be met still in the project phase of new construction (Mello & Goldenstein, 2016).

Regarding the size, the Resolution of CNTUR No. 1,023 describes the rules for the classification of a hotel company, according the annual revenue (Mauricio & Ramos, 2011), shown in Table 1:

Table 1 - Size of the hotel company by annual revenue

<table>
<thead>
<tr>
<th>Size</th>
<th>CNTUR Resolution 1,023 (Annual revenue)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Business</td>
<td>Less than R$ 100,000.00</td>
</tr>
<tr>
<td>Medium Business</td>
<td>Between R$ 100,000.00 and 250,000.00</td>
</tr>
<tr>
<td>Large Business</td>
<td>More than R$ 250,000.00</td>
</tr>
</tbody>
</table>

Source: Adapted from Mauricio and Ramos (2011)

On the other hand, the Supplementary Law No. 123/2006 classifies the Brazilian companies in micro and small enterprises. The gross revenue, each calendar year, of micro enterprises is equal to or less than R$ 360,000.00 (three hundred and sixty thousand Brazilian Reais) (Brasil, 2015). While small enterprises would be those with, in each calendar year, a gross revenue of more than R$ 360,000.00 (three hundred and sixty thousand Brazilian Reais) and equal to or less than R$ 3,600,000.00 (three million and six hundred thousand Brazilian Reais). Above this value, the business is considered a large company and cannot opt for the Simple National tax (Brasil, 2015). The most current classification regarding the business size in Brazil is LC 123/2006, which applies to all establishments, including the means of accom-
Another criterion used for the classification of enterprises is the number of employees (Ricci, 2011), as presented in Table 2 below:

Table 2 – Classification of enterprises according to the sector and number of employees

<table>
<thead>
<tr>
<th>Size</th>
<th>Commerce and Services</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro Business</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Small Business</td>
<td>10 to 49</td>
<td>20 to 99</td>
</tr>
<tr>
<td>Medium Business</td>
<td>50 to 99</td>
<td>100 to 499</td>
</tr>
</tbody>
</table>

Source: Sebrae (2008 as cited Ricci, 2011)

It turns out that the hotel companies can take on various shapes and sizes, from micro, small and large enterprises, or from independent hotels to national and international hotel chains; however, all of them have to consider the management system.

Hotel accommodations, according to Anjos and Grigolo (2013) require an organization composed of human, material, technological, financial, and information resources, regulated by the market laws whose main goal is to satisfy the customers who, supposedly, have different travel motivations.

In this context the type of tourism accommodation stands out, responds to a number of factors, including the purpose of creating a service accommodation typically for tourism, to meet the specific needs of the tourist, because of the tourism flow and growth of the commercial activity and exchanges (Castillo & Quintero, 2013).

It is observed that in the context of the hotel company the accommodation service is considered to be its core activity, from which the concept of tourism accommodation originates (TA) and the attributes that differentiates it from other establishments, presented in Table 3 – Attributes of tourism accommodation (Planagumà & Julve, 2012; Mauricio & Ramos, 2011):

Table 3 - Attributes of tourism accommodation (TA)

<table>
<thead>
<tr>
<th>Operation:</th>
<th>Only hotel companies that adopt procedures regarding the guests based on the industry legislation should manage or operate TA.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification:</td>
<td>TA meets the classification standards laid down in legislation or industry regulations and maintain such standards over time.</td>
</tr>
<tr>
<td>Licensing:</td>
<td>The competent authorities must license TA to provide accommodation services.</td>
</tr>
<tr>
<td>Specification of HU:</td>
<td>The TA offers accommodation for temporary use of the guest in a Housing Unit (HU) room specific for this purpose.</td>
</tr>
<tr>
<td>Minimum structure:</td>
<td>The TA has minimum required services, which are reception/concierge, luggage and personal objects storage, maintenance and cleaning of spaces.</td>
</tr>
</tbody>
</table>

Source: Adapted from Planagumà and Julve (2012) and Maricio and Ramos (2011)

In this sense, the hotel is an establishment where the tourist will find lodging and meals in exchange for payment for these services. The lodging service includes the reception, concierge, telephony, housekeeping, and the area of direct contact with the client. Food and beverage services (F&B) are also available in TA (Oliveira & Spena, 2012).

The housing unit (HU) is the space that the customer uses for lodging, hygiene and rest, and classified as standard room or suite. The former is the bedroom for exclusi-
ve use of one or more guests (double or triple), appropriate location for storing clothes and personal objects; the suite consists of a bedroom with living room (Ye, Law, & Zhang, 2011).

Therefore, the management aims to organize, plan, coordinate and control the activities and services offered by the business be it a hotel, guesthouse, resort, flats or other type. The manager must be prepared to take care of all the departments, from the accommodation of the guests, food, finance, marketing activities, among other (Tomazzoni & Bittencourt, 2013).

The services of personnel management, finance, accounting, purchasing and controls such as assets and inventory, the verification and cost controls are the responsibility of the administrative sector (Duduche et al, 2011), as well as the formation of prices.

**Classification of tourism accommodation**

The goal of the hotel classification is to offer the guest a reference of accommodation that faithfully reflects the levels of comfort, services and rates expected according to their different motivations and goals, enabling the comparison between the various lodging facilities available in a region (Bertoli Neto, 2013).

According to the Brazilian Association of the Hotel Industry – ABIH, the classification is an dissemination instrument of clear and objective information about lodging services, being an important mechanism of communication with the market, enabling fair competition and helping tourists, Brazilians and foreigners, in their choices (ABIH, 2015).

**Pricing in accommodation establishments**

For tourism, the price is part of the three elements of the activity. Besides price, the freedom to come and go, and the diversity of goods and services offered are key elements for the tourism dynamics with economic consequences at destination and on the issuing region (Planagumà & Julve, 2012).

Price corresponds to the amount paid to someone with the intent to purchase a product that comes with added benefits, i.e., value, usually symbolized by money earned through work (Toni & Mazzon, 2011). According to Aziz, Saleh, Rasmy, and Elshishinyl (2011), the price is important not only from a
financial point of view, but also from the operational perspective, because it helps regulate the stocks and production pressures.

We highlight that accommodation rates are influenced by supply and demand, i.e., the revenue is subject to the amount and sale price of the products and services offered; also, sales are dependent on the consumers’ purchases (Parolin, 2014).

The price and quality, allied to the physical and operational aspects of the hotel enterprise, guide the society and enable it to compare means of accommodation. This perspective underlies the development of hotel classification (Roim & Pereira, 2012), which is in the case of Brazil the SBClass and the star categories.

Within the hotel industry, Parolin (2014) notes that maximization of revenues encourages efficient management of demand and billing. Especially, because it involves the selection and the use of marketing tools key to market and competition analysis, and to develop pricing strategies for each segment.

In this regard, Fernando et al. (2012) pinpoint that accommodation establishments draw on three pricing strategies: cost-based pricing, market-based pricing and a combination of cost and market strategies. Nevertheless, Porto (2014) indicates three strategies to form the prices in the hotel industry: cost strategies, client-based strategies, and pricing through the study of competition.

According to Schütze (2008) the hotel companies must focus on the pricing model and choose between three approaches: (a) dynamic pricing, in which the remaining capacity is fixed in price dynamically, widely used by hotels with focus on competition; (b) pre-fixed constant pricing, based on a categorization of the different types of customers and focuses on capacity fixing between these classes with the strategic use of service levels or packages; and, (c) pre-fixed mixed pricing, which consists in the combination of different strategies, i.e. constant and decreasing prices for expected or uncertain low-demand days with last-minute bonus for the remaining capacity.

Lunkes (2009) refers four strategies to set the price of products: costs, competitors, market, and a mixed strategy of these. Despite some disagreement, all authors suggest an inner vision, on offer – products and costs – and an external perspective, on demand – customers and market, and some add a mixed approach.

On his part, Cardoso (2011) classifies pricing strategies into two methods: the informal or empirical, and formal or scientific. The informal or empirical method, based (a) on Intuition or on the owner or manager’s empirical knowledge; (b) on Competitors, focusing on prices charged by these, after a survey of prices; and (c) Trial and Error, in which the price is set and the behavior of sales monitored.

The formal or scientific method includes three techniques, the 3Cs, the Texas Restaurant Association (TRA) markup method, and the gross margin method. In the 3Cs (Consumers, Costs and Competitors) strategy, consumers determine the ceiling price they are willing to pay; the costs indicate the minimum (floor) price that can be charged for a product; and competitors are part of the market analysis and prices of other accommodation establishments. With
regard to TRA, it is a financial model of costs, considering the cost of goods sold (COGS), payroll and operating expenses. Finally, the gross margin method is based on costs, from which the average gross profit is calculated – difference between revenue and COGS divided by the number of customers (Cardoso, 2011). Adding to this discussion, Ferrando et al. (2012) argue that price setting must resort to strategies based on costs, competition, and/or demand.

Kotler and Keller (2012), and Cogan (2013) describe eleven strategies for pricing in the lodging industry; the methods converge to pricing based on value, based on market, and strategies based on costs. Moreover, at the time of setting the price that will be on the "price list" or negotiated with the tourists, markup calculation, break-even average occupancy by housing unit calculation, the price of the competition, or the Yield Management or Revenue Management are also used.

Following, we describe three of these pricing strategies that accommodation establishments managers use to set prices of services: value, cost, and daily rates

**Value-based pricing**

Value-related aspects are guided by the perception of the benefits of the product which is a complex of tangible (facilities, technology, bed-making and cleaning of rooms) and intangible (brand reputation, added value of services, attentive staff) attributes that must be offered to a market for evaluation and acquisition, use or consumption (Costa, 1987).

The knowledge of the hospitality products is key to defining pricing strategies, thus future results depended on its current performance, broadening the demand for the product through the loyalty of consumers, the word-of-mouth and other post-purchase behaviors (Santos, Vassallo, & Rabahy, 2009).

The perceived value is part of the hotel product, because in this sector a considerable attention has been devoted to the analysis of the managerial processes based on reviews, quality perception and attitudes of tourists. Therefore, the concept of perceived value has been widely used to assess the performance of the product by the guests (Santos et al., 2009). Knowledge of expectation and perception of quality of services provided allows the managers to have a detailed parameter of each sector, making possible the implementation of changes and improvements in quality to get the loyalty of actual and potential customers (Souza, Meira & Maske, 2012).

Pricing strategies based on perceived value focus on setting the prices based on the perception of quality and especially in the corporation brand and image.

**Cost-based pricing**

Regardless of type, size, or the classification of the accommodation establishment, the cost factor is always present in the service, and identifying and determining it is a difficult task for the hotel manager. Therefore, cost management is essential to the good management of the company; this information is useful in various ways, according to the services offered to different users (Lunkes, 2009). One of the purposes of cost
accounting is to keep the administration well informed about the situation of the company, aiding the decision-making, ranging from setting the price of services, purchase of equipment, avoiding waste and losses (Batista, Silva, Silva, & Almeida, 2016).

In this sense, the design of the cost system should meet all these demands. Some requirements at the time of creation of the cost system include the study of the administrative structure, the context, the competences and the responsibilities of each person in each sector, and create a chart of accounts where such information is coded and ready to generate reports (Carvalho, Pedrosa, Yoshitke & Paulo, 2004).

**Calculation of daily rate**

The calculations that use cost information are financial approaches, according to which prices are determined to get a fair profit above all costs associated with the production (Collins & Parsa, 2006). The determination of the daily rate, which will be negotiated, is a decision that entails aspects related to individual price offers per booking, define it for a category of products that implicates price over time, as well as discounts (Aziz et al., 2011).

It is worth noting, therefore, that the calculations or methods for determining daily rates of housing units are characterized by the markup calculation, average price calculation that uses the break-even point and the contribution margin, the revenue management (RM), and empirical or informal methods of calculation (Cross, 1998; Petrocchi, 2007; Cardoso, 2011). Although the empirical methods are recommended only to assist science, many accommodations establishments still determine their prices based on these methods, intuition, trial and error or they establish the rates lower, equal to or greater than those of the competitors (Machado, Machado & Iolanda, 2006).

However, Boaria and Anjos (2014) verified, in the study of the use of revenue management in hotels in Foz do Iguaçu, that the use of scientific methods can assist the management. It allows the hotel manager to anticipate and predict sales prices, trying to obtain greater profitability through the creation of a rate plan, taking into account the history of previous years, events and special occasions, anticipating the occupation and creating a consistent rate plan.

**3 METHODOLOGY**

To know the variables that contribute to the pricing in the hotel sector in São Luís (MA) we used descriptive research design, a quantitative approach and survey procedures. The survey consists of collecting data on a population from a selected sample (Dencker, 1998), providing knowledge about the lodging industry of São Luís and the identification of management strategies and the methods for the calculation of daily rates.

Regarding the object of research, the city of São Luís has large national and international hotel chains as well as independent managed hotels. According to the Brazilian Association of the Hotel Industry – ABIH-MA (2015) there are 35 tourism accommodation establishments in the city. Using the criterion of non-random sample, the establishments were invited to participate in the survey; 31 of those have agreed to answer the survey.
For improved data reliability, the respondents should be involved directly with the management of the hotel and knowledgeable on pricing practices, and one representative per establishment, which may be the owner, or managing director, or general manager, or administrative manager, and or commercial/ marketing manager.

The questionnaire uses the state-of-the-art of lodging pricing (Becerra & Silva, 2013; Pinto & Santos, 2012; Ferrando, Prusaczyk, & Tejera, 2012; Martinéz & Guillen, 2011; Ye, Law, & Zhang, 2011; Lu & Shiu, 2011; Han & Kim 2010; Hung, Shang, & Wang, 2010; Schwartz, 2008; Zong, Tang, & Huang, 2008). The objective is to identify the strategies and methods used for the formation of daily rates. For this purpose, we used close-ended questions and a quantitative 5-point Likert scale, with options to select the answers that best describe the reality of the accommodation establishment. To know the level of use of a pricing strategy, also to detect the method that the manager uses to set the negotiated daily rate, the questionnaire uses a scale of 1 to 5, where 1 is "never uses" and 5 "uses very frequently".

Data analysis was carried out with R software version 3.2.1 and Microsoft Excel. The description of categorical variables was performed, using absolute and relative frequencies, while for the quantitative variables we used means, standard deviations, and confidence intervals. The Likert scale (1 to 5) was transformed into a scale of 0 to 100, and the closer to 100 (one hundred), the greater was the frequency of use of strategies to form the daily rate and the methods to set the daily rate.

4 ANALYSIS AND RESULTS of the methods for price formation

In this section we present the results of research, starting with the profile of the respondents and of the establishments investigated, then we describe the methods used for the formation of prices.

Profile of the respondents: 31 lodging companies participated in this research; respondents were people who occupied the positions of general manager (39 percent), sales manager (23 percent), manager (13 percent), administrative manager (10 percent) and other operational functions (16 percent). No owners responded to the survey. Of these managers, most have higher education in the areas of administration and tourism. They are working in the area of tourism and hospitality for over 5 years, thus assigning greater reliability of the survey responses.

Profile of Hotels: The understanding of the profile of hotel companies is critical to the analysis of the price formation process, since variables such as type, size, product offered, type of management, among other variables, will influence the setting of daily rates (Santos et al, 2009; Souza et al, 2012). Companies of various typologies, degrees of comfort, with heterogeneous products and differentiated market segments compose the hotel industry of São Luís, as well as independent lodging establishments, national and international hotel chains. The characteristics of hotel companies of São Luís, their typology and category are depicted in Table 4:
Table 4 – Tipology of the tourism accommodation establishments (TAE)

<table>
<thead>
<tr>
<th>Variables (n=31)</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
<td>22</td>
<td>71.0%</td>
</tr>
<tr>
<td>Guesthouse</td>
<td>6</td>
<td>19.4%</td>
</tr>
<tr>
<td>Flat/Apart-Hotel</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Historic Hotel</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Resort</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Simple *</td>
<td>6</td>
<td>19.4%</td>
</tr>
<tr>
<td>Economic **</td>
<td>5</td>
<td>16.1%</td>
</tr>
<tr>
<td>Tourism ***</td>
<td>12</td>
<td>38.7%</td>
</tr>
<tr>
<td>Superior ****</td>
<td>6</td>
<td>19.4%</td>
</tr>
<tr>
<td>Luxury *****</td>
<td>2</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

Source: Data research

The Table shows that most hotel companies of São Luís was classified on typology Hotel (71 percent), followed by Hostels (19.4 percent), and others, Flat/Apart-Hotel, Historic Hotel, Resort, have little representation with one (3.2 percent) establishment of each category.

The SBClass classification (ABIH, 2015) organizes hotel companies by categories according to the degree of comfort: Simple (* a star), Economic (** two stars), Tourist (*** three stars), Superior (**** four stars) and Luxury (***** five stars). From the set of hotels studied, 38.7 percent are classified as to the degree of comfort in the tourism category (***), 19.4 percent belong to the category Simple (*), 19.4 percent are Superior (****), 16.1 percent are Economic (**) and only 6.4 percent are classified in category Luxury (*****).

According to the respondents, in general, these hotels offer HUs with double, single, suite, and other typologies of rooms, for example, triple room and other options to include extra beds.

In addition to accommodation, hotels also offer other services in order to add more value and to differentiate in the market (Espinet, Saez, Coenders, & Fluvià, 2003). Respondents indicated that hotels offer other products and services besides the bed, such as internet, minibar, laundry services, meeting rooms for events, services of tour guides, souvenir shop, spa, garage and saunas, among others.

This study verifies that 65 percent of the hotels considered are independent companies. In these establishments, there may be a price management customization, using empirical methods based on intuition, competition or trial and error (Cardoso, 2011). The other establishments, 25 percent are part of national chains and 10 percent of international chains, in these cases the scientific methods of formation of prices are more prevalent.

On the topic of the management of prices, according to the respondents, the task of planning and implementing pricing policy is the responsibility of general manager (32 percent), sales and market relations manager (29 percent), manager (19 percent) and administrative manager (19 percent). Only one (3 percent) establishment has a revenue management (RM) responsible for price management.

Lodging is an industry of goods and services, and the daily rate includes the room (rental of the housing unit) its use and related services, in the period of 24 hours, in accordance with check-in and check-out time (Maurício & Ramos, 2011; Petrocchi, 2007).

The study of cost variables take into account that these should be considered as the minimum value to be charged at the time of forming price. Following, we present the
costing methods used and the main expenses that make up the final price of the daily rate in the hotel companies in São Luís.

### 5.1 Costing methods used

The costing methods aim to support the relationship between price, cost, sales volume (occupation) and profit (Lunkes, 2009). Table 5 classifies the costing methods used for pricing in São Luís’ accommodation establishments, reported by respondents of survey:

<table>
<thead>
<tr>
<th>Costing methods</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable or direct</td>
<td>16</td>
<td>51.6</td>
</tr>
<tr>
<td>Absorption</td>
<td>11</td>
<td>35.5</td>
</tr>
<tr>
<td>Activity based (ABC)</td>
<td>10</td>
<td>32.3</td>
</tr>
<tr>
<td>Others</td>
<td>02</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**Source:** Data research

Table 5 shows that the most commonly used costing method is the Variable or Direct costing (51.6 percent), followed by Absorption costing (35.5 percent) and Activity-Based Costing - ABC (32.3 percent). It should be highlighted that the Absorption method is an accounting procedure accepted by the tax legislation of Brazil (Cardoso, 2011), in which all the expenses related to the effort of service provision will be distributed individually for all services rendered (Lunkes, 2009; Cogan, 2013). Managers prefer the variable or direct costing method, because it allows the distribution of costs, facilitating the management of the accounts. The answers show that hotel companies make use of two or more methods, absorption costing recommended by tax legislation (Bruni, 2008) and another to complement their management needs (Bruni, 2008), which may be variable or the activity-based – ABC, highlighting that the methods are not exclusive (Nakagawa, 2012). The hotel company can use a method complementary to each other.

In order to know which expenses most influence the composition of the daily rates, as Leitão and Silva (2006) and Bernardi (1996) refer, the respondents classified the spending items, as shown in Table 6.

<table>
<thead>
<tr>
<th>Components of costs in price formation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax and social security</td>
<td>57.26</td>
</tr>
<tr>
<td>Water and energy</td>
<td>54.84</td>
</tr>
<tr>
<td>Salaries of employees</td>
<td>50.81</td>
</tr>
<tr>
<td>Outsourcing</td>
<td>37.90</td>
</tr>
<tr>
<td>Depreciation</td>
<td>33.07</td>
</tr>
<tr>
<td>Telephony</td>
<td>31.45</td>
</tr>
<tr>
<td>Fees of the bord and commission</td>
<td>23.39</td>
</tr>
<tr>
<td>Supplies</td>
<td>21.77</td>
</tr>
</tbody>
</table>

**Source:** Data Research

Table 6 shows the costs that most influence the daily rates: tax and social security (57.26 percent), water and energy (54.84 percent), salaries (50.81 percent), outsourcing (37.90%), depreciation (33.07%), telephony (31.45 percent), commission and board fees (23.39%) and supplies and consumables (21.77 percent).

These results agree with Mendes (2016), Vice President of Research and Trends of FOHB. He has stated, "The costs of energy, supplies, and the evident tax increases, as the charges in payroll, push the companies’ costs up about 40 percent above the index of inflation forecast for 2015, which is more than 9 percent a year". In addition, the author recommends that hotel managers must "promote adjustments in rates to cope with the current situation, with the goal of keeping a healthy market, generating jobs, distribute income and promote the best ex-
perience for guests”.

The water and energy represent a high cost due to laundry and restaurant services, and the use of air conditioning, especially in this region of high temperatures throughout the year.

Given that it is a service, the supplies and consumables have low impact on prices, while the revenue or board fees account for the expenses, not being suitable to the costs of the services (Vieira & Souza, 2005; Bruni, 2008; Silva & Lins, 2013).

It is important to point out that the system of calculation and allocation of costs is essential to the formation of prices, calculation of the contribution margin and breakeven point, as well as to the profits of the hotel company (Vieira & Souza, 2005).

The best price can decide the success or failure of the tourism establishment, because it will attract and retain customers, and it is through the price that the establishment knows if the operation is profitable or not (Leitão & Silva, 2006).

5.2 Strategies for pricing

The hotel company that has the more information the more prepared it will be to face the challenges, and to react faster to competitors and to the pricing decision-making process (Steed & Gu, 2004; Cross, 1998).

Pricing strategies entail competition, market and costs policies because in an highly competitive and innovative environment, in which the customer is increasingly more demanding, the pricing is more related to the implications of the market than to the costs. However, from the cost analysis it is possible to set the prices and subsequently submit them to the market (Collins & Parsa, 2006).

Table 7 shows the pricing strategies used by accommodation establishments, as indicated by the managers:

<table>
<thead>
<tr>
<th>Pricing strategies</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price by activity-based costs</td>
<td>38.71</td>
</tr>
<tr>
<td>Price by ideal value</td>
<td>36.29</td>
</tr>
<tr>
<td>Price by perceived value</td>
<td>34.68</td>
</tr>
<tr>
<td>Marginal price</td>
<td>31.45</td>
</tr>
<tr>
<td>Price by return on invested capital</td>
<td>28.23</td>
</tr>
<tr>
<td>Distinct price</td>
<td>27.42</td>
</tr>
<tr>
<td>Price by full costs or total</td>
<td>25.81</td>
</tr>
<tr>
<td>Competitive price</td>
<td>21.77</td>
</tr>
<tr>
<td>Price by production line</td>
<td>21.77</td>
</tr>
<tr>
<td>Price by image or psychological</td>
<td>19.36</td>
</tr>
<tr>
<td>Price by auction</td>
<td>7.26</td>
</tr>
</tbody>
</table>

Source: Data Research

It can be seen in the table that the most common strategies for setting the daily rate is the "price by Activity-based Costs" (38.71 percent). The methodology Activity Based Costing (ABC) allows a better perception of costs through analysis of the activities performed by the company and their respective relations with the product, minimizing distortions caused by "arbitrary indirect costs" apportionment used by traditional methods (Cardoso, 2011). The ABC also contributes to decisions related to the improvement of processes, services, products, customers and investments in new capacity, enabling the establishment to fulfill its goals with greater efficiency, efficacy and effectiveness (Nakagawa, 2012), aiming at the maximum profitability of all sectors and of all its employees (Carvalho et al., 2004)

“Price by ideal value” and “Price by perceived value” appear next. Thus demon-
strating that the hotel companies in São Luís are in line with the studies of Lu and Shiu (2011) and Santos et al. (2009), in so far as they seek to explain the satisfaction of guests in hotel products consumption from the evaluation of structural and human components. In addition, many consider that pricing is the most important decision that the hotel companies need to make, since this task comprises various formulas or methods of calculation to get to the daily rate. The establishments must evaluate the best way to reach to this “number” and should adopt a strategy related to the price policy and a method of calculation, which is the practice, i.e., the activity held to establish the price to be negotiated (Martínez & Guillén, 2011; Lere, 1979).

Table 8 identifies the level of use of calculation methods to get to the daily rate.

<table>
<thead>
<tr>
<th>Daily rate calculation (n=31)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition-based pricing</td>
<td>53.23</td>
</tr>
<tr>
<td>Revenue management</td>
<td>44.36</td>
</tr>
<tr>
<td>Intuition of the manager</td>
<td>42.74</td>
</tr>
<tr>
<td>Break-even point</td>
<td>32.26</td>
</tr>
<tr>
<td>Markup</td>
<td>25.00</td>
</tr>
<tr>
<td>Trial and error</td>
<td>20.97</td>
</tr>
</tbody>
</table>

Source: Data research

Table 8 above shows, according to the respondents, that most used method to set the daily rate is the "the price is fixed according to the price of competitors" (53.23 percent). Following appear the Revenue Management (RM), Intuition of the Manager, Price Calculation considering the Break-even Point, Calculation of Markup. The less used is the price set by means of Trial and Error.

Strategies based on competitors’ price are an empirical method (Cardoso, 2011) built upon the prices of rivals. These should be used with great caution and care. If on one hand they allow a company to get a desired portion of the market and to increase the volume of sales in the short term, on the other hand, it can lead to inadequate prices and the gains achieved could be compensated quickly by competitors (Collins & Parsa, 2006). This method of pricing entails aspects related to the analysis of the prices of the accommodation establishments, copying their prices, aggressive pricing and offer of promotional prices (Kotler & Keller, 2012).

The RM method, or Yield Management, stands out as a method of administration characterized by maximizing revenue through the effective and efficient management of demand and supply (Heo & Lee, 2011).

According to Aziz et al. (2011), in the hotel industry, the revenue management is committed to assist the tourism accommodation establishment in determining the daily rate, maximizing the yield.

The methods based on the intuition of the Manager, also considered an empirical method (Cardoso, 2011), are characterized by the fact that the pricing comes from the business manager or the owner’s knowledge. In this research, the method has some prominence given the fact that the sample has 65 percent of independent hotels, and this is a common practice in this type of management.

The calculation of the break-even point is useful in decision-making about the housing units, change in daily rates, among others (Lunkes, 2009). The break-even point indicates the number of rooms occupied so that the hotel reaches its financial balance, i.e. without profit or loss, as well as indicate...
the occupancy rate necessary to produce particular profit or daily rate that should be practiced (Vieira & Souza, 2005). This level of occupation is called break-even point; at this level of activity, the hotel will have no profit or loss (Lunkes, 2009).

The Markup is an index calculated on the total cost of a product or service for the formation of price, based on the idea of cost plus pricing or price margin, which is adding to the unit cost of the product, or service to a profit margin to get the sale price (Cogan, 2013). The determination of price markup on costs will have results only if the price markup really generate the expected level of sales (Kotler & Keller, 2012).

It is noted that increasingly hotel chains (national or international) are using formal or scientific methods and abandoning the informal or empirical ones (Cardoso, 2011). In addition, it is common practice cost-based pricing (calculation of Markup or Break-even Point), however it stands out that the rate is determined by market and competition analysis (Cogan, 2013; Pinto & Santos, 2012; Zong et al., 2008). It turns out that there is a rise of RM method. However, in the independent hotels, the use of informal methods still dominates, such as competition-based pricing, the intuition of the manager and, less use of trial and error to set the price, as shown in Table 9 – Pricing per type of hotel management.

Table 9 – Pricing per type of hotel management

<table>
<thead>
<tr>
<th>Method used</th>
<th>Type of management</th>
<th>Independent</th>
<th>Internacional Chain</th>
<th>National Chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markup</td>
<td></td>
<td>23.75</td>
<td>16.67</td>
<td>31.25</td>
</tr>
<tr>
<td>Break-even point</td>
<td></td>
<td>32.50</td>
<td>41.67</td>
<td>28.13</td>
</tr>
<tr>
<td>Revenue Management</td>
<td></td>
<td>27.50</td>
<td>75.00</td>
<td>75.00</td>
</tr>
<tr>
<td>Intuition of the manager</td>
<td></td>
<td>56.25</td>
<td>16.67</td>
<td>18.75</td>
</tr>
<tr>
<td>Competition-based pricing</td>
<td></td>
<td>63.75</td>
<td>25.00</td>
<td>37.50</td>
</tr>
<tr>
<td>Trial and error</td>
<td></td>
<td>26.25</td>
<td>0.00</td>
<td>15.63</td>
</tr>
</tbody>
</table>

Source: Data Research

Based on the table above the National and International chains use more the RM to set the daily rate compared to Independent accommodation establishments. With a good use of the RM, the hotelier anticipates the sales prices in order to enhance profitability through a rate plan, taking into account the history of previous years, events and special occasions, anticipating the occupation and coming up with a coherent rate plan. This system gives greater confidence to hoteliers and proves that the revenue management is a viable alternative for corporations that wish to remain and stand out in the national and international market (Boaria & Anjos, 2014).

Conversely, the independent accommodation establishments use, predominantly, Competitor-based pricing to set the daily rate. Technique also identified in the national establishments. The lodging industry commonly adopts this technique, classified as empirical, through market research, and most of the time the daily rates considered are those of the hotel that has the biggest market share (Lunkes, 2009; Zanella, 2001).
5 FINAL CONSIDERATIONS

Price is an element of the marketing mix that generates revenue and therefore should be planned to minimize the effects of the business environment, increasingly dynamic and threatening to companies. The features of the hotel enterprises are the provision of bed and food, but many offer also other aggregated services that will influence the daily rate.

Hotel companies can use a variety of techniques and tools, from the manager’s knowledge, to the costs of the services and the prices of the competition.

In this study, we verified a balance between micro, small and large-sized companies in the lodging industry in São Luís, as well as regarding the type of management, independent units, national and international chains.

As for cost strategies, the most used is the variable or direct method, as the national legislation recommends, though the majority also uses a second method of support, with emphasis to the absorption method and the ABC, to the formation of prices.

The study identified that the main costs influencing the daily rates are the accounts of Tax and Social Security, Water and Energy spending, Salaries (50.81 percent), Outsourcing (37.90 percent) and Depreciation (33.07 percent).

The main strategies to price formation, the study verified, are the activity-based price (ABC), the price for ideal value, and the price for perceived value, while the most referred strategy for the calculation of daily rate was the based on competitors, followed by Revenue Management.

In conclusion, it appears that there is an effort of the management of the hotels in San Luís to make the calculation of daily rate more professional, using techniques more reliable for making decision about prices, abandoning the informal or empirical methods.

As limitation of research, we pinpoint that the definition of the prices in a competitive environment undergoes more pressure of the external environment and thus we suggest further research focusing on customers.

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Price Formation of Tourist Hotels of the City of São Luís/Maranhão


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