ABSTRACT: The purpose of this paper is to evaluate the influence of strategic resources of hotel firms on their performance, from the consumers’ perspective. Firms are heterogeneous sets of resources, which enables different strategies in the search for competitive advantage. This study uses secondary data on hotel firms in the city of Brasilia in the Distrito Federal (Federal District), taken from the website www.booking.com.br. The data were submitted to simple and multiple regressions analyses. The simple regression analysis indicated a significant influence of Location, Cleanliness, Employees, Comfort, Amenities, and Cost-Benefit on the firms’ performance. These results corroborate the view that these resources are valuable to the firms analyzed. In contrast, the multiple regression analysis indicated that only Location had a significant influence on firms’ performance. This output suggests that Location is a strategic resource perceived by consumers and capable of generating a sustainable competitive advantage. The prevalence of location puts in perspective the role of quality of services for the competitiveness of hotel establishments in the context analyzed.
KEY WORDS: Strategy; Resources; Hotels; Competitiveness; Performance

RESUMO: O presente trabalho tem por objetivo avaliar a influência dos recursos estratégicos das empresas hoteleiras sobre seu desempenho a partir da percepção dos consumidores. As empresas são heterogêneas enquanto conjuntos de recursos disponíveis, o que abre a possibilidade da busca pela vantagem competitiva de maneiras distintas. Esta pesquisa envolve dados secundários de estabelecimentos hoteleiros do Distrito Federal disponíveis no sítio www.booking.com.br. Os dados foram analisados a partir de regressões simples e múltiplas. Os resultados das análises de regressão simples indicaram a influência significativa dos recursos Localização, Limpeza, Funcionários, Conforto, Comodidades e Custo-Benefício sobre o desempenho das empresas. Esses resultados corroboraram a perspectiva de que esses recursos são valiosos para as empresas analisadas. Ao analisar os dados de forma conjunta, a partir da regressão múltipla, pode-se observar que somente o recurso Localização manteve a influência significativa sobre o desempenho. Esse resultado permite argumentar que a Localização é um recurso estratégico percebido pelos consumidores e capaz de gerar uma vantagem competitiva sustentável. A prevalência da Localização coloca em perspectiva o papel da qualidade dos serviços para a competitividade dos hotéis no contexto analisado.

PALAVRAS-CHAVE: Estratégia; Recursos; Meios de Hospedagem, Competitividade; Desempenho.

INTRODUCTION

The tourism industry is a very complex industry, in terms of the elements that comprise it and the different economic sectors involved in its development (World Tourism Organization [WTO], 1998). Unlike in other economic activities, consumers of tourism travel to a certain destination to enjoy the attractions, products and services offered (Cunha & Cunha, 2005; Ferreira, Meireles, Macedo, Barone, Santana & Zotes, 2011). From an economic perspective, therefore, tourism is defined by its demand, i.e., it is an activity that consists of consumption by visitors or non-residents (Instituto Brasileiro de Geografia e Estatística [IBGE], 2012). The touristic product is the result of the combination of attractions (natural or cultural), tourist equipment, services and support infrastructure offered (Pavlovich, 2003; Ferreira et al., 2011), all these elements being...
located within a specific geographic area (Costa & Albuquerque, 2013; Hoffmann & Campos, 2013). Among the various economic sectors directly or indirectly involved in tourism, the hotel industry is an economic activity whose performance is more directly related to the tourism economy (IBGE, 2012). The hotel sector is a vital component in the tourism production chain (Scott, Cooper & Baggio, 2008). As with other clustered economic activities, the territorial concentration of hotels stimulates competition and influences companies’ performance, (Pan, 2005; Lado-Sestayo, Otero-González & Vivel-Búa, 2014). Due to these structural characteristics, hotel services must constantly seek to be competitive.

As argued by Coyne (1986) and Hoffman (2000), competitive advantage stems from inequalities between competitors, as perceived by the market. In other words, these inequalities must be reflected in some key criteria that influence the consumer’s decision. Thus, the competitive advantage of firms in the hotel sector is generated by the heterogeneity of the firms’ resources (Barney, 1991). However, it is only materialized in the customer’s perception (Coyne, 1986).

Based on these arguments, the paper analyzes the relationship between competitive resources and performance of hotel firms in Brasília, in the Brazilian Distrito Federal (DF) [Federal District], from the consumers’ perspective. According to the Pesquisa de Serviços de Hospedagem [Hotel Services Survey] (IBGE, 2017), Brasília has 279 hotels. Unlike other Brazilian states, where there is a greater prevalence of smaller establishments, the Distrito Federal has a higher recurrence of hotels (65.2%), with a higher number of rooms (50.6% of establishments have more than 30 rooms). According to the IBGE (2017), between 2011 and 2016, the DF showed a 25.7% increase in accommodation establishments, with an increase of over 50% in the offer of rooms.

Besides the introduction, this paper has five sections. The second section presents the theoretical framework that guides the analyses. The third section presents the research method, including the data collected, data analysis. The fourth presents the results, and the fifth and final section brings the conclusions.

THEORETICAL BACKGROUND

The analyses for this research are supported by the business strategy framework. According to Rumelt, Schendel and Teece (1994), the study of strategy relates to understanding how firms’ choices and decision-making processes enable then to achieve better performance. Therefore, strategy is closely linked to practice. The practice of strategy therefore preceded the creation of the field of study (Rumelt et al. 1994).

Strategy has been studied since the 1960s (Rumelt et al., 1994) but was focused only on large companies (Idenburg, 1993). It was Mintzberg (1973) who first described the process of elaborating strategy in small firms, demonstrating the differences compared to what happens in large firms. In Brazil, in 2015, companies with nine employees or less represented 87% of businesses and employed about 27% of the national workforce (Table 1). Even allowing for a certain decrease in this percentage between 2013 and 2015, we can see the Brazilian economy is largely comprised of small businesses.
Table 1: Number of small businesses, personnel employed, and emphasis on the accommodation and food sectors

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of firms with up to 9 employees</th>
<th>% of total firms</th>
<th>Employees</th>
<th>% total</th>
<th>Accommodation/Restaurant Sectors</th>
<th>Employees</th>
<th>Average Employees/Firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3,960,854</td>
<td>87.01</td>
<td>10,805,296</td>
<td>26.87</td>
<td>316,999</td>
<td>2,324,429</td>
<td>7.33</td>
</tr>
<tr>
<td>2013</td>
<td>4,181,130</td>
<td>87.56</td>
<td>10,850,587</td>
<td>25.89</td>
<td>326,637</td>
<td>2,266,156</td>
<td>6.94</td>
</tr>
</tbody>
</table>

Source: elaboration by the author, based on IBGE (2020) data.

Sinclair and Stabler (2009) characterize the hotel segment as fragmented, composed of many small and medium-sized companies (as shown in Table 1), and with a vast difference in the quality of services provided. As a result, the market structure can be characterized in different ways, according to the location and spatial distribution of firms, ranging from locations with perfect competition, to highly concentrated markets, including oligopolies or even monopolies, in destinations where there is just one huge resort, for example (Sinclair & Stabler, 2009). Hotel enterprises have unique features: a static product (the services are offered in a specific location, which cannot be altered to meet variations in demand); the offer of tangible and intangible aspects simultaneously; fluctuations in demand; high fixed operating costs; the impossibility of stock formation; simultaneous production, distribution and consumption with the mandatory presence of the consumer; and seasonality (Gohr & Santos, 2010).

Hotel firms are also characterized as capital intensive, with little flexibility, due to the difficulties of promoting substantial changes in the projects implemented and in their location (Gorini & Mendes, 2005). Proserpio (2007) argues that the considerable real estate investments needed to build accommodation facilities is a traditional barrier for the sector, both for entry to and exit from the sector. These barriers, according to the propositions of Porter (1986), amplify the internal competition within the industry. Apart from the high costs of installations, hotels need to invest regularly on maintaining and modernizing their facilities, as outdated or aging hotels can generate competitive disadvantages and negatively influence performance (Gohr & Santos, 2010; Gorini & Mendes, 2005).

Given that hotels provide labor-intensive and uninterrupted service, there is a need for a greater number of employees, with qualification being a fundamental aspect for the quality of services (Gohr & Santos, 2010; Gorini & Mendes, 2005; Proserpio, 2007). The quality of the services offered is directly linked to consumer satisfaction, and it is a critical aspect for hotel companies’ performance (Gohr, Moretto Neto & Santana, 2002; Tsai, Song & Wong, 2009).

Proserpio (2007) points out that, considering the impossibility of stock and supply adjustment, hotels operate with considerable idle capacity, which translates into irrecoverable revenue losses. Therefore, hotels must constantly seek to achieve the highest possible occupancy rate. The external environment of hotel firms is marked by high competition between companies, all striving for competitiveness and better performance (Tsai, Song & Wong, 2009). In view of complexity of the competitive
environment in which hotel firms operate, several potential strategies can be used to improve performance (Hoffmann, Vieira, Reyes Jr. & Melo, 2015; Silva, Andrade, Casales-Garcia, & Leitão, 2018).

From an external perspective, the Structure- Conduct- Performance paradigm dictates that a firm’s performance is the result of the competitive market structure in which it is inserted (Vasconcelos & Cyrino, 2000). Thus, the primary analysis focus is on the firm’s environment (Furrer, Thomas, & Goussevkaia, 2008). Porter (1986) makes a contribution to the field by providing a model for analyzing a company’s competitiveness based on the structure of the industry. The author identifies three generic strategies that a firm could adopt to achieve competitive advantage: (i) cost leadership; (ii) product differentiation; and (iii) focus on a specific market segment. All of Porter’s (1986) competitive strategies converge, in different ways, towards the central objective of ensuring that the company’s financial returns are higher than those of its competitors. One of the main criticisms of this model is the assumption that companies in the same industry are homogeneous in terms of their characteristics and available resources (Barney, 1991).

Gohr and Santos (2010) analyze the strategies used by hotel firms on the coast of the state of Santa Catarina, in the south of Brazil. They identify the use of cost leadership and product differentiation strategies, two of the strategies previously described by Porter (1986). Similarly, da Silva et al. (2018) identify the use of cost reduction strategies in hotel firms as a coping strategy in times of crisis.

In terms of exogenous factors, an analysis of the relationships established by the hotel firms is emphasized, whether through networks or through the formation of clusters. The tourism production chain focuses on coordination, cooperation, and integration of complex and heterogeneous activities in a dynamic environment. Thus, a firm’s results reflect not only its individual efforts, but also the interaction established with other organizations, both public and private. The tourism product is developed through a network of interdependent and integrated agents (Zemla, 2014; Zee & Vanneste, 2015; Czernek & Czaron, 2016). Several studies have focused on the influence of inter-organizational relationships on firms’ performance, e.g., Hocayen-da-Silva and Teixeira (2009), Costa and Albuquerque (2013) and Vieira, Hoffmann and Reyes Júnior (2018).

Taking an endogenous approach to competition, the Resource-Based View (RBV) is considered one of the most widely accepted and widespread theoretical frameworks in the area of strategy studies (Priem & Butler, 2001; Hoopes, Madsen & Walker, 2003; Newbert, 2007; Popadiuk, Rivera & Bataglia, 2014). Resources are tangible and intangible assets associated semi-permanently with the firm (Wernerfelt, 1984); they include capabilities, organizational processes, attributes, information, and knowledge that firms mobilize and use to implement their strategies (Barney, 1991).

RBV analyses the association between the firm’s characteristics (its resources) and its performance (Dierickx & Cool, 1989; Barney, 1991; Grant, 1991; Furrer, Thomas & Goussevkaia, 2008). RBV is based on two assumptions. The first, advocated by Penrose (1959), assumes that firms are heterogeneous in terms of their available resources and capacities. The second argues that a firm’s resources have limited mobility (Barney, 1991; 2001; Priem & Butler, 2001; Newbert, 2007; Barney & Hesterly,
2011), i.e., that the resources cannot be freely transacted or exchanged between firms (Barney, 1991; Peteraf, 1993).

This imperfect mobility and the heterogeneity of resources are related to the possibility of obtaining and maintaining Ricardian rents (Grant, 1991; Peteraf 1993). If the resources were evenly distributed, perfectly mobile, or easily traded on the market, it would be impossible for firms to maintain competitive advantage or superior performance (Barney 1991; Grant, 1991; Peteraf, 1993). In these situations, the competitive differential provided by the superior resources would be replicated by competitors, leading to a situation of competitive parity and, effectively, making all the companies’ performances equal (Peteraf, 1993; Barney, 2001; Barney & Arikan, 2001). The use of strategic resources enables firms to implement a unique strategy in order to obtain competitive advantage (Barney, 1991).

Not all firms have resources capable of providing better performance, just as not all the resources of a firm are strategically relevant (Barney, 1991). Strategic resources that would enable firms to achieve better performance (Barney, 1991), are naturally scarce (Peteraf, 1993), since in order to sustain better performance, and therefore be considered strategic, the resources must have some specific characteristics (Barney, 1991). Having rare and valuable resources would give the firm to obtain a competitive advantage (Barney, 1991) that would provide economic returns above those of its competitors, even if only temporarily (Barney & Arikan, 2001). If these resources are also difficult for the competitors to imitate, they can provide a sustainable competitive advantage for the firm, due to their uniqueness (Dierickx & Cool, 1989; Barney, 1991; Grant, 1991; Hoffman 2000).

This combination of characteristics – rarity, high value, and difficulty of imitating – has the potential to generate lasting economic returns for the company (Barney & Arikan, 2001). Barney and Hesterly (2011) add to this perspective, arguing that in addition to these three characteristics, the resources must be properly exploited. Resources can only become source of competitive advantage if they are properly exploited by the organization (Ray, Barney & Muhanna, 2004; Newbert, 2007).

Despite being one of the central paradigms in the area of strategy (Priem & Butler, 2001; Hoopes, Madsen & Walker, 2003; Newbert, 2007; Popadiuk, Rivera & Bataglia, 2014), some aspects of RBV make it difficult to apply in practice. Ray, Barney and Muhanna (2004) point out that analyzing the relationship between a firm’s resources and its overall performance can lead to erroneous conclusions; a firm may have competitive resources in some activities and less competitive ones in others. Thus, the better performance provided by a strategic resource could be overshadowed by the poorer the performance another, less advantageous resource. Barney and Arikan (2001) argue that the extent to which an organization’s resources can be used to create a single strategy cannot be assessed independently from the overall market context. Although the value of the resource can be measured from an internal perspective, its rarity, and possibility of it being imitated or replaced, can only be evaluated and understood in comparison with the resources of its competitors.
Alternatively, resources can be analyzed from the consumer’s perspective. Coyne (1986) highlights the role of demand, establishing that sustainable competitive advantage is obtained when three conditions are achieved: (i) the consumers perceive a consistent difference between a company’s products, compared to those of its competitors; (ii) this difference results from a gap between the company’s resources and capabilities and those of its competitors; and (iii) this difference is lasting. Competitive advantage is, therefore, the result of inequalities between competitors, and these must materialize in order to be perceived by the market, that is, they must reflect on some key criterion that influences the consumer’s decision (Coyne, 1986; Hoffman, 2000). The analysis of competitive resources from the consumers’ perspective is particularly appropriate for accommodation because, despite recent technological advances, the hotel sector is a labor-intensive economic activity characterized by close interaction between supplier and customer during the production process.

Several studies have highlighted customers satisfaction as a key-factor for hotel performance. Tsai, Wong e Song (2009) associate customer satisfaction with a firm’s performance, arguing that satisfaction leads customers to return, and to give the establishment positive reviews. Analyzing budget hotels in particular, João, Merlo and Morgado (2010) identified the importance of aspects such as cleanliness, employee professionalism and friendliness, quietness of the rooms, and the reliability of the services, as determining attributes for customers. Lima-Filho, Marchiotti and Silva (2012) show that the relevant criteria for customer satisfaction vary, according to which category the establishment is in.

Stefanini, Yamashita and Sousa (2012) analyze the factors that influence the perceived value of hotel services among business travelers. Similar to the results of João, Merlo and Morgado (2010), aspects related to employees were indicated as important for these customers. Structural aspects of the establishment, such as cleanliness, and quietness of the rooms, were also emphasized, as were Internet quality and hotel location (Stefanini, Yamashita & Sousa, 2012). Limberger, Meira, Añaña and Sohn (2016) indicate that most studies on service evaluation in hotels associate tourist satisfaction with the following criteria: room, services (staff), comfort, cleanliness, cost-benefit, location, and amenities.

METHOD

This paper presents an exploratory and descriptive research, with the application of quantitative analysis techniques. The study focuses on hotels in the Distrito Federal as units of analysis. The universe is comprised of hotels located in DF for which information is available on the website www.booking.com.br. This website was chosen due to the information it provides on consumers’ evaluation of the hotel resources and services, from a longitudinal perspective, which allows a common time frame to be established for the analyses.

Information from user-generated content tools, or information from websites that evaluate the accommodation, has previously been used in research in the tourism and hotel sectors. Limberger, Boaria and dos Anjos (2014) present a review of international
articles that use information from social media to assess hotel guest satisfaction, and Borges, Pereira, Matos and Borchardt (2015) and Limberger et al. (2016) use information available on the website www.booking.com.br.

Some studies point out that hotel evaluation websites sometimes contain false analyses (Ayeh, Au, & Law, 2013; Filieri, Alguezaui, & Mcleay, 2015). It is not possible, a priori, to differentiate real users from fake ones. We understand, however, that the use of quantitative information in an aggregated way can mitigate the effects of false analyses, as it considers all the analyses in a given period. Molinillo et al. (2016) highlight that the higher the number of evaluations, the greater their credibility, since the high number minimizes the influence of possible false evaluations.

Based on consumer-generated information, the website www.booking.com.br provides evaluations on the following aspects: Location of the establishment; Cleanliness; Employees; Comfort; Amenities; Cost-benefit ratio; and Wi-Fi service. For the purposes of the present paper, these characteristics were viewed as competitive resources, as proposed by Barney (1991). Hence, these competitive resources are able to influence a hotel’s performance.

For the data collection, the web scraping technique was used, as in Oliveira and Porto (2016). This is a technique used to download, analyze, and organize data from the Web in an automated way, replacing repetitive, manual processes of information extraction with an automated solution (Broucke & Baesens, 2018). This technique allowed us to filter the evaluations posted during a specific period. However, it was not possible to gather non-textual evaluations, such as scores, as website does not make these available. Nor was it possible to collect information from evaluations in other languages than Portuguese, due to the impossibility of removing the language filters using the technique.

Considering the need to establish a common comparative basis for evaluating hotels, we collected information from all the evaluations posted between January 2017 and December 2018, of firms classified on the website as “hotels” and located in the Distrito Federal. The data were collected during January 2019. Afterwards, we checked the hotels, to remove from the analysis any that did not fit the intended category and those had passed through the filter (e.g. hostels, motels, apartments for rent).

After eliminating establishments not characterized as hotels, the final sample analyzed was 96 hotels. By way of comparison, according to the IBGE Accommodation Services Survey (2017), the Distrito Federal has 182 hotels, so our sample represents 52.74% of the establishments identified by the IBGE. According to the standards proposed by Hair Jr., Black, Babin and Anderson (2009), this proportion is adequate for the intended analysis techniques.

The 96 hotels analyzed had received a total of 43,845 evaluations in the period considered. As highlighted previously, for the purposes of this study, the values of the aspects analyzed by consumers (Location; Cleanliness; Staff; Comfort; Amenities; Cost-benefit ratio; and Wi-Fi service) were considered competitive resources of the hotels. We calculated an average score for each guest review, in relation to the aspects analyzed, to obtain a single resource score for each hotel.
Due to difficulty of accessing information on companies’ accounting or financial performance, the total number of evaluations received by the establishments in the same period, on the www.booking.com.br website, was used to assess hotel performance. The greater the number of reviews, the greater the number of guests an establishment received, so we took the number of reviews posted to be an indicator of the number of hotel guests. The proposed relationship has empirical support. Porto, Santos and Santana (2017) found evidence of an association between the number of comments on online pages and sales performance in retail companies. Specifically in the tourism sector, Tuominen (2011), in an exploratory study of hotels in six different European cities, identified the presence of a significant positive correlation between the number of online evaluations and traditional performance indicators of hotel firms, such as revenue per available room (RevPAR) and occupancy rate. Vieira, Hoffmann and Reyes Jr. (2018), using confirmatory factor analysis, identified a positive and significant correlation between performance as perceived by hotel entrepreneurs and a latent performance variable created using indicators from the website Trip Advisor. The number of evaluations in a given period was one of the observable variables used by the authors. The data were initially analyzed using descriptive statistics and correlation analysis to verify the premises for the subsequent analyses. Afterward, the data were submitted to simple and multiple regression analyses, assuming the averages of the aspects evaluated by the guests as independent variables and the total number of evaluations as a dependent variable. All the regression analyses were performed using the forced entry method, assuming a p-value of 0.05 as a criterion for statistical significance. Statistical analyses were performed using the software SPSS. The following section presents the analyses performed, and the results.

RESULTS

The initial statistical analyses indicated severe deviation in the values for asymmetry and kurtosis in the variable Total Quantity of Assessments, indicating a deviation from the norm. Following Hair Jr. et al.‘s (2009) guidelines, the variable was transformed by the square root. To check for the presence of multicollinearity between independent variables, we used a preliminary diagnosis based on correlation analysis. The results of Pearson’s correlation are shown in Table 2.

Table 2: Pearson’s Correlation

<table>
<thead>
<tr>
<th>Variables</th>
<th>Location</th>
<th>Cleanliness</th>
<th>Employees</th>
<th>Comfort</th>
<th>Amenities</th>
<th>Cost-Benefit</th>
<th>Wi-Fi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleanliness</td>
<td>.706*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>.719*</td>
<td>.871*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfort</td>
<td>.665*</td>
<td>.929*</td>
<td>.864*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amenities</td>
<td>.688*</td>
<td>.859*</td>
<td>.850*</td>
<td>.882*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost-Benefit</td>
<td>.595*</td>
<td>.725*</td>
<td>.769*</td>
<td>.788*</td>
<td>.904*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wi-Fi</td>
<td>.403*</td>
<td>.650*</td>
<td>.636*</td>
<td>.673*</td>
<td>.706*</td>
<td>.729*</td>
<td>1</td>
</tr>
<tr>
<td>Evaluations</td>
<td>.575*</td>
<td>.429*</td>
<td>.425*</td>
<td>.385*</td>
<td>.417*</td>
<td>.345*</td>
<td>.184</td>
</tr>
</tbody>
</table>

* Correlation is significative at a 0.01 level.
According to Field (2005), correlation values close to 0.9 indicate the occurrence of collinearity. As shown in Table 2, more than a few variables have correlation values close to the proposed threshold, indicating the occurrence of multicollinearity between variables. According to Hair Jr. et al. (2009), if these variables are inserted in the same multiple regression model, there is the possibility of Type II error and beta coefficients becoming unreliable, making it impossible to assess the individual contribution of each independent variable to explain the dependent variable.

Similar results were found by Borges et al. (2015) and Limberger et al. (2016), analyzing data from the same website in previous studies. As highlighted by Borges et al. (2015), if the consumer had a positive experience at the hotel, he or she tends to evaluate the different attributes positively. The same occurs with a negative experience, leading to negative evaluations in all variables. This behavior explains the occurrence of multicollinearity between the variables studied, even when dealing with different aspects of the experience provided.

To avoid the effects of multicollinearity, we analyzed the data with simple regression with the insertion of the variables individually. Thus, a regression analysis was performed for each independent variable. The results are shown in Table 3.

**Table 3: Simple Regression Analysis – Dependent Variable Number of Evaluations**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Constant</th>
<th>Beta</th>
<th>Standard Beta</th>
<th>ANOVA Sig.</th>
<th>R²</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>-56.77**</td>
<td>9.00**</td>
<td>1.323**</td>
<td>.000</td>
<td>.330</td>
<td>1.91</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>-21.42*</td>
<td>4.99**</td>
<td>1.085**</td>
<td>.000</td>
<td>.184</td>
<td>1.70</td>
</tr>
<tr>
<td>Employees</td>
<td>-25.88*</td>
<td>5.59**</td>
<td>.425**</td>
<td>.000</td>
<td>.181</td>
<td>1.62</td>
</tr>
<tr>
<td>Comfort</td>
<td>-16.71</td>
<td>4.50**</td>
<td>.385**</td>
<td>.000</td>
<td>.139</td>
<td>1.58</td>
</tr>
<tr>
<td>Amenities</td>
<td>-14.03</td>
<td>4.32**</td>
<td>.417**</td>
<td>.000</td>
<td>.174</td>
<td>1.62</td>
</tr>
<tr>
<td>Cost-Benefit</td>
<td>-11.96</td>
<td>4.10**</td>
<td>.345**</td>
<td>.001</td>
<td>.119</td>
<td>1.54</td>
</tr>
<tr>
<td>Wi-Fi</td>
<td>3.63</td>
<td>2.13</td>
<td>.184</td>
<td>.079</td>
<td>.034</td>
<td>1.36</td>
</tr>
</tbody>
</table>

* Statistical significance at the level of P<0.05.
** Statistical significance at the level of P<0.01.

As shown Table 3, all the independent variables are significantly and positively associated with the total number of evaluations. Our results differ from those presented by Borges et al. (2015) and are closer to those of Limberger et al. (2016), even though both surveys used different dependent variables from ours. **A priori**, the diversity of resources seems to corroborate the breadth of potential strategies to be used by hotel enterprises (Hoffmann et al., 2015; Silva et al., 2018).

Our results reiterate the relevance of the variables analyzed for hotel performance, as described in previous works (João, Merlo & Morgado, 2010; Lima-Filho, Marchiotti & Silva, 2012; Stefanini, Yamashita & Sousa, 2012). When comparing the explanatory capacity of each dimension individually (from the R² coefficient), we notice that Location has a greater influence on the dependent variable, followed by the variables Cleanliness, Employees, and Amenities. The variables Comfort and Cost-benefit variables, although positively influencing the performance, have a lower R² coefficient than the other variables analyzed. Considering the arguments proposed by the RBV, all these variables represent valuable resources from the consumer’s perspective.
One exception found was the variable Wi-Fi, which did not show significant results in performance. Limberger et al. (2016) found a similar result when analyzing the relationship between the resources of hotel establishments and the general satisfaction of their customers. For Limberger et al. (2016), the availability of Wi-Fi would no longer be considered a feature that provides competitive advantage or an increase in quality, but is expected as part of the standard service. This appears to be corroborated by our empirical evidence. Based on the result, we decided not to include the variable Wi-Fi in the subsequent multiple regression analyses.

We used the VIF indicator (Variance Inflation Factor) to control the effect of multicollinearity on the models. VIF values greater than 10 indicated unacceptable levels of multicollinearity (Field, 2005). In the event of values higher than the established parameter, it was decided to exclude the variable from the analyses. In view of the proposed criterion, two models were tested. In the first, the variable Amenities presented a VIF value that was above the threshold. Considering that the variables Amenities and Comfort are closely related and positively correlated, it was decided to remove the variable Amenities from the subsequent analysis. The results are shown in Table 4.

### Table 4: Multiple Regression Analysis – Dependent Variable Quantity of Evaluations

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Sig.</td>
<td>FIV</td>
<td>Beta</td>
<td>Sig.</td>
<td>FIV</td>
</tr>
<tr>
<td>Location</td>
<td>8.35</td>
<td>.000</td>
<td>2.24</td>
<td>8.48</td>
<td>.000</td>
<td>2.21</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>1.523</td>
<td>.628</td>
<td>9.67</td>
<td>1.94</td>
<td>.520</td>
<td>9.02</td>
</tr>
<tr>
<td>Employees</td>
<td>-0.28</td>
<td>.992</td>
<td>5.49</td>
<td>.092</td>
<td>.972</td>
<td>5.45</td>
</tr>
<tr>
<td>Comfort</td>
<td>-1.924</td>
<td>.540</td>
<td>9.57</td>
<td>-1.66</td>
<td>.589</td>
<td>9.33</td>
</tr>
<tr>
<td>Amenities</td>
<td>1.538</td>
<td>.607</td>
<td>11.04</td>
<td>(-)</td>
<td>(-)</td>
<td>(-)</td>
</tr>
<tr>
<td>Cost-Benefit</td>
<td>-0.830</td>
<td>.743</td>
<td>6.04</td>
<td>.103</td>
<td>.953</td>
<td>2.95</td>
</tr>
<tr>
<td>Constant</td>
<td>-53.60</td>
<td>.000</td>
<td>1.961</td>
<td>1.957</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td></td>
<td></td>
<td>1.961</td>
<td>1.957</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.336</td>
<td>.334</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANOVA Sig.</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

(-) Variable not inserted in the model.

Although when tested individually, the different variables showed significant results on the variable performance, when tested together in models 1 and 2 with multiple regression analysis, we observed that only Location has a significant influence on the dependent variable. All the explanatory capacity of the other variables in Model 2 was captured by the variable Location, so that these variables became non-significant. The model resulting from the analysis explains around 33% of the variance of the dependent variable.

Previous research has identified the relevance of the variables Cleaning, Employees, Comfort, Amenities, and Cost-Benefit, for customer satisfaction (João, Merlo & Morgado, 2010; Lima-Filho, Marchiotti & Silva, 2012; Stefanini, Yamashita & Sousa, 2012; Limberger et al., 2016) and consequently, for hotel performance. Our results, however, seem to relativize the influence of these variables on the performance of the analyzed hotels.
In light of our results, the arguments of Ray, Barney and Muhanna’s (2004) should first be highlighted. For Ray, Barney and Muhanna (2004), when analyzing the relationship between resources and company performance, any benefit derived from a resource that provides competitive advantage can be overshadowed or reduced by the presence of inferior resources, eliminating the competitive advantage. In this sense, the availability of these resources would not be a sufficient condition for providing competitive advantage.

From the perspective of RBV, it can be argued that these variables, although they are valuable resources, as initially shown in the simple regression analysis, are not rare or difficult to imitate. Thus, standards of cleanliness, comfort, or amenities offered to guests, or even forms of pricing are all aspects that could be easily replicated by competitors, therefore, they do not represent a distinctive competitive resource. Even though one may reason that the services provided by the hotels are socially complex, and the capacity to meet customers’ expectations are developed over time and, therefore, path-dependent - as described by Barney (1991) as characteristic of strategic resources - it should be noted that the hotels in Brasilia are clustered territorially. This clustering of hotel firms facilitates the flow and exchange of information and knowledge between companies, whether through direct contact between organizations, or through involuntary exchange of employees, or even through contact with support institutions (Hoffmann & Campos, 2013). Thus, even though these resources are valuable resources for consumers, the competitive advantage they provide can easily be replicated by the competitors, leading to a situation of competitive parity (Peteraf, 1993; Barney, 2001; Barney & Arikan, 2001).

On the other hand, our results show the importance of Location for the performance of the hotels analyzed. As mentioned by Limberger et al. (2016), location is an aspect that does not depend on the hotel management. Regarding the inflexibility of hotel establishments, Gorini and Mendes (2005) emphasize the high sunk costs of installing and running a hotel, as well as the impossibility of changing its location. Although it is not a manageable asset, the results indicate that for the establishments analyzed, location is a resource that provides competitive advantage, and can explain a hotel’s superior performance.

Considering that the central areas of Brasília, close to the main federal public agencies, are listed as Cultural Heritage of Humanity and, therefore, with restrictions for the construction of new real estate projects, the importance location for hotel performance can be explained by two competing viewpoints. Moving away from a Structure-Conduct-Performance perspective, the restriction on new entrants constitutes a barrier to entry that limits competition between hotel firms (Porter, 1986). A privileged location can also be interpreted as a factor of competitive advantage (Porter, 1986). In both cases, the best-located firms would be protected from competitive forces, which would ensure higher-than-average financial returns for the hotel (Porter, 1986). As pointed out by Lado-Sestayo, Otero-González and Vivel-Búa (2014), location is one of the determining aspects of the profitability of hotel firms.

Alternatively, a privileged location can be seen as a valuable resource because it constitutes one of the central elements when choosing a hotel choice: where to stay
(Borges et al., 2015; Limberger et al. 2014). Also, given the geographical limitations imposed by the listing building status of certain areas of the city, we can argue that location is a rare resource that is difficult to imitate or replace, and one to which few establishments have access. In this sense, the location meets Barney’s (1991) requirements for characterization as a strategic resource for the firms analyzed in this study.

CONCLUSIONS, LIMITS AND RECOMMENDATIONS

This work evaluates the influence of strategic resources of firms in the hotel sector on hotel performance, from the consumer’s perspective. To achieve this objective, information was collected from the website www.booking.com.br, on guest ratings for the variables Location, Cleanliness, Staff, Comfort, Amenities, Cost-benefit, and Wi-Fi, for a sample of hotels in the Distrito Federal.

The preliminary results indicated high correlation between the variables evaluated, indicating the convergence of these variables to a latent variable. Although the guest reviews address several characteristics of the hotels and services provided, these reviews refer to customer satisfaction with the contracted services. So, the variables would constitute indicators that reflect guest satisfaction (measured latent variable) with the services provided.

Although this partial result is unexpected, it represents a contribution of this research. Although different aspects of hotels are evaluated, the underlying dimension that guides the analysis is the guest’s satisfaction with the contracted service, measured in a multidimensional way. Therefore, considering the interest in the use of information from user-generated content tools, or information from sites that for evaluating hotels to monitor destination performance (as in a study by Oliveira and Porto (2016), using information from Trip Advisor), our results suggest that some caution is needed when using such information, considering the influence of customer satisfaction with the evaluation of the different observable variables.

Due to multicollinearity between the independent variables, we initially performed simple regressions to assess the relationship between hotel resources and performance. Our preliminary results indicate that with the exception of the variable Wi-Fi, all the other variables are significantly and positively associated with hotel performance. These results indicate that from the consumers’ perspective, these resources are important for hotels. This finding corroborates previous studies that identified the importance of the variables Location, Cleanliness, Staff, Comfort, Amenities, and Cost-Benefit for the guests’ satisfaction and, as a consequence, for hotel performance.

Analyzing the data as a whole, with multiple regression analysis, we observed that only the variable Location was significantly associated with the number of evaluations. Hotels can improve their services based on employee qualification, amenities and comfort offered; they can also adapt their pricing strategy. All of these strategies can, to some extent, be emulated by the competition, especially in the context of a territorial cluster. In such situations, the competitors seek to mimic each other, resulting in a situation of competitive parity, as described by Barney and Hesterly (2011).
The perspective of Location as a distinctive resource for hotel firms is reinforced in Brasília, due to the limitations on the implantation of new companies enforced by the listed building status of the central area, as an area of Cultural Heritage. Thus, establishments operating in privileged locations tend to obtain gains in performance derived from this scarce, valuable, imperfectly imitable, and non-substitutable resource. In this sense, in the context we analyzed, Location meets Barney’s (1991) requirements for classification as a strategic resource.

Our results lead us to conclude that for the firms analyzed, Location is a strategic resource that is duly perceived by consumers, and is capable of generating sustainable competitive advantage, meeting Coyne’s (1986) conditions. It is interesting to note that once a the hotel is established, its location cannot be changed, resulting in a barrier for the entry of competitors. But it is not a barrier to the exit of the firm, since as Porter (1986) describes, hotels can be sold, capitalizing on the location as a source of competitive advantage.

Although the result seems trivial in the case of tourism clusters, where firms in the same segment are in close proximity to each other, the prevalence of Location over the other variables, especially those associated with the characteristics of the services provided, puts in perspective the role of service quality as a strategy for companies in the hotel industry. The search for service quality as a way of meeting customer needs and generating sustainable competitive advantages has been described in numerous studies.

Our results, although reiterating the value of this strategy, indicate that the search for quality is used by hotels only as a source of competitive parity. This perspective changes the way we understand the role of quality of services provided to tourists. This is a practical contribution of the present work. From a teaching perspective, this work promotes understanding of how companies in the hotel sector can obtain competitive advantage, and what are its sources of competitive parity. This could topic of debate in a classroom setting.

Among the limitations of the present study, the main one is the fact that our findings cannot be generalized. Although we cover a considerable percentage of hotel firms in Distrito Federal, this research is exploratory, and the sample is small. Therefore, the results should be interpreted strictly in relation to the sample analyzed. Our results are also linked to the local reality. We therefore suggest replicating this research in other contexts, to see whether the relationship between variables is the same in different organizational contexts. Also, considering that performance is a multidimensional concept, we suggest the use of other variables for analyzing hotel performance.
REFERENCES


Author Contribution

Daniel Pires Vieira: conception or design of the work, data analysis and interpretation, drafting and critical revision of the article.

Valmir Emil Hoffmann: data interpretation, drafting and critical revision of the article.

Pedro Vicente da Silva Neto: data collection and data analysis.

Gabriel de Lacerda Rangel: data collection and data analysis.