

# Social networks and their influence on the decision of the tourist destination

## Redes sociales y la influencia en la decisión del destino turístico

### *As redes sociais e a influência nas decisões de destino turístico*

**Omar Millán Delgado**, Universidad de Investigación y Desarrollo UDI, Bucaramanga, Colombia ([omillan1@udi.edu.co](mailto:omillan1@udi.edu.co))

**ABSTRACT** | The business model of tourist sites has evolved, and information and communication technology tools have become a cornerstone of the current model, where companies and users or tourists converge. In this scenario, the web plays a crucial role. Through it, third-party observations and ratings become an element that generates a degree of influence that affects the decisions of users of tourist sites. This study aims to determine precisely the degree of impact of the independent variables –number of observations and ratings by third parties– on elements or dependent variables, such as attention to the site, information, and probability of booking, all mediated by the concept of susceptibility or impact of the perception of the influence of third parties. The methodological process implemented includes an initial exploratory sampling to determine and validate the levels of the independent variables and the design of the tourism offers, in addition to convenience sampling and the use of a factorial model of experiment design. It is concluded that the volume of observations issued by third parties, as well as the evaluations it reflects, constitutes a predominant factor when deciding on a tourist site and that the role of susceptibility directly affects the user's needs in terms of information requirements, attention, and influences the probability of booking the tourist site.

**KEYWORDS:** social impact; attention; ratings; observations; susceptibility; tourism.

#### HOW TO CITE

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**RESUMEN** | *El modelo de negocios de los sitios turísticos ha evolucionado y las herramientas de tecnologías de la información y de las comunicaciones se han convertido en piedra angular para el actual modelo, en donde convergen empresas y usuarios o turistas. En este escenario, la web juega un rol trascendente: a través de ella, observaciones y calificaciones que hagan terceros se convierten en un elemento que genera un grado de influencia tal que afecta la decisión de usuarios de los sitios turísticos. El propósito de este estudio es determinar precisamente el grado de impacto de las variables independientes –número de observaciones y calificaciones por terceros– sobre elementos o variables dependientes, como la atención que suscita el sitio, la información y la probabilidad de reserva, todo ello mediado por el concepto de susceptibilidad o afectación de la percepción sobre la influencia de terceros. El proceso metodológico implementado incluye un muestreo exploratorio inicial para determinar y validar los niveles de las variables independientes y el diseño de las ofertas turísticas, sumado a un muestreo por conveniencia y al uso de un modelo factorial de diseño de experimentos. Se concluye que el volumen de las observaciones emitidas por terceros, así como las calificaciones que el sitio refleje, constituye un factor preponderante al momento de optar por un sitio turístico, y que el rol de la susceptibilidad afecta directamente a las necesidades del usuario en cuanto a los requerimientos de información, la atención, e influye en la probabilidad de reserva del sitio turístico.*

**PALABRAS CLAVE:** *afectación social; atención; calificaciones; observaciones; susceptibilidad; turismo.*

**RESUMO** | *O modelo de negócios dos sites de turismo vem evoluindo e as ferramentas tecnológicas de informação e telecomunicações se tornaram a pedra angular do modelo atual, para o qual convergem tanto as empresas quanto os usuários ou turistas. Nesse cenário, a web desempenha um papel transcendental; assim, por meio dela, as observações e avaliações feitas por terceiros tornam-se elementos que geram um grau de influência que afeta a decisão dos usuários de sites turísticos. O objetivo deste estudo é determinar com precisão o grau de impacto das variáveis independentes - número de observações e avaliações de terceiros - sobre elementos ou variáveis dependentes, como atenção ao site, informações e probabilidade de reserva, mediados pelo conceito de suscetibilidade ou impacto da percepção da influência de terceiros. O processo metodológico implementado inclui uma amostragem exploratória inicial para determinar e validar os níveis das variáveis independentes e o design das ofertas turísticas, além de amostragem por conveniência, bem como o uso de um modelo de design fatorial de experimentos. Conclui-se que o volume de observações emitidas por terceiros constitui um fator preponderante na decisão sobre um local turístico, bem como as avaliações que ele reflete; o papel da suscetibilidade afeta diretamente as necessidades do usuário em termos de requisitos de informação, a atenção e influencia a probabilidade de reservar o local turístico.*

**PALAVRAS CHAVE:** *impacto social; atenção; avaliações; observações; suscetibilidade; turismo.*

## INTRODUCTION

The influence of networks and their content on tourism is of great importance and encompasses various perspectives. Cestino González and Pérez Tapia (2020) affirm that social networks and *electronic word-of-mouth* (eWOM), which is derived from WOM (Harrison Walker, 2001), have become a crucial element for destination communication; Xiang and Gretzel (2010) consider that WOM is one of the most sought-after sources of information for people interested in traveling. Yuan and colleagues (2022) show how social networks drive economic growth in the tourism industry.

The networks are open platforms that enable users to become media by allowing them to search, organize, share and contribute content together (Parra et al., 2011).

The increasing use of social media also has an impact on the tourism industry. Li and colleagues (2023) and Lee and colleagues (2011) found an interesting correlation between society and the need for required information.

The research findings of Willemsen and colleagues (2011) show that content characteristics are crucial for understanding the perceived usefulness of a website's observations. In the tourism environment, the reputation of social networks in the dissemination of travel information is the most important factor influencing tourists' willingness to use them (Zhang et al., 2023). Social networks help to build loyalty among users who identify with tourist destinations (Domínguez Vila & Araújo Vila, 2014).

The use of trial plans is widespread in different areas of the manufacturing industry, but has recently been extended to social scenarios such as tourism. Huertas García and Laguna García (2011) investigated the factors that influence the decision to choose a hotel offered on a tourist website or in a brochure. Similarly, Huertas García and Consolación Segura (2008) present the usefulness of factorial designs as a tool for sequential research in the development of a tourist route.

### Research objective

The aim is to determine the degree of influence of two independent variables – number of observations and ratings – on tourists' decision-making regarding accommodation. This influence is mediated by the personality trait of receptivity to third-party information.

#### *Specific*

- Identify the degree of impact of the independent variables on the attention that a tourist offer is able to attract, i.e., to know how an offer attracts more attention from a user when it has many, few or no observations, as well as the intensity of attention to high or low degrees.

- Determine the effect on the estimation of the information content of the independent variables, the number of observations and the ratings of the tourist sites.
- Measure the degree of impact of third-party observations and reviews and the social influence on the interest that a tourism offer or website can generate on the Internet.
- Determine the extent to which the influence of the independent variable, mediated by the susceptibility covariate, affects the probability that a tourist site will be reserved.

## **THEORETICAL AND CONTEXTUAL FRAMEWORK**

In the World Economic Forum's *Travel 5 Tourism Competitiveness Report* (2019), Colombia ranks 55th out of 140 economies included in this metric. For 2021, Colombia ranks 58th, below the global average, according to the *Travel 5 Tourism Development Index 2021 Rebuilding for a Sustainable and Resilient Future* report (World Economic Forum, 2022). However, it is worth noting that the territory stands out in the tourism sector for its safety and security, its competitive hotel prices (position 53) and its wealth of natural resources.

In 2022, tourism activity in Colombia in terms of accommodation and food services accounted for 5.1% of GDP and is the eighth largest economic sector in the country ((Ministerio de Comercio, Industria y Turismo, 2023). Between January and November 2022, the accommodation occupancy rate was 55.5%, an increase of 6.8 percentage points compared to 2019 ((Ministerio de Comercio, Industria y Turismo, 2022).

### **Relevance of the independent variables number of observations and ratings**

The degree of influence of third-party observations or comments and evaluations on purchasing decisions has already been investigated by authors such as Chevalier and Mayzlin (2006) and Schweidel and colleagues (2011). Their studies summarize that consumers' experiences are based on the observations that others make about a product or service. Sparks and Browning (2011) found that consumers seem to be more influenced by negative information, especially when the observations are negative. However, positively worded information and numerical ratings increase both consumer purchase intentions and trust. Zhu and Zhang (2010) point out that online observations have more influence on less popular video games. Mousavizadeh and colleagues (2022) found that detailed observations and extreme star ratings are more popular. Furthermore, the amount of hedonic

and utilitarian cues in a review and its sentiment significantly influence online consumers' perception of its usefulness.

Observations and ratings have transformed the online purchasing process when sharing buying experiences and reviews due to their ease of use and simplicity (Amblee and Bui, 2011).

Webcare is the practice of responding to observations over the Internet. The review developed by Lopes and colleagues (2023) suggests that companies need to respond to word of mouth online, especially when it is negative, in a personalized, detailed, timely, and empathetic manner (Kapeš et al., 2022).

In this sense, the manager's personalized response to incoherent negative observations has a significant impact on consumers' perception of the usefulness of the response (Jin et al., 2023).

User-generated online reviews have become essential for hotels to improve overall customer satisfaction (Singh et al., 2023). Customers can choose a hotel based on several factors, including quality ratings from previous guests (Rodríguez Cid et al., 2015).

Tuominen (2011) shows correlations between the financial performance of hotels and the number of observations and reviews received. Lo and Yao (2019), for their part, suggest that observations written by experts have greater credibility. Hotels should strive to create positive experiences for hotel guests that motivate experts to write positive reviews.

Racherla and colleagues (2013) point out that website reviews are heavily skewed towards positive ratings and that balanced and negative reviews are rare. Furthermore, the correlation between review observations and individual attribute ratings is very low, suggesting that overall numerical ratings may not be ideal indicators of customers' perceived service quality and satisfaction.

In contrast, more and more hotel booking platforms and review websites are using multidimensional rating systems to encourage users to provide additional ratings of a product/service in addition to the overall rating (Liu et al., 2023).

The phenomenon of social influence, which is understood as the ability of people to influence third parties, assumes that the information provided by third parties about a surrounding reality is accepted and credible. People rely on observations and evaluations of third parties because they are easy to analyze (M. K. O. Lee et al., 2011). Such a situation is comparable to the one that occurs during an online purchase. In this regard, observations and evaluations support the decision because it is information that is easy to understand and process.

## METHODOLOGICAL DESIGN OF THE RESEARCH

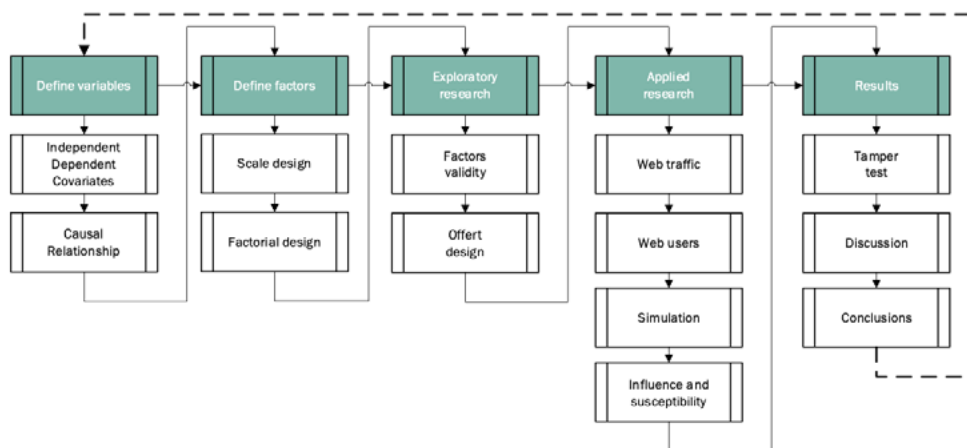
### Definition of variables and model

As this is a research study that aims to integrate the design of factorial experiments into the field of tourism, the variables that must be measurable and that justify the purpose of the research are first defined. Two independent variables are defined - the number of observations and the ratings - which affect the results of the dependent variables, defined as the attention aroused by the tourist, the interest, the degree of influence and the probability of booking. The model aims to determine the degree of influence or compensation between this group of variables. The factorial ordinal design was chosen due to its proven robustness in determining the relationships between the variables (Borrór et al., 2018; Montgomery, 2005). Figure 1 supports the methodological approach.

### Exploratory research

#### *Initial questionnaire design*

In order to define and validate the appropriate values for the analysis factors – number of observations and accommodation rating range– a form with a 5-Likert scale was designed using Google Forms, which included questions on familiarity with the accommodation, participation in previous ratings and observations.



**Figure 1. Methodological design of the research**

*Source: Own elaboration.*

### *Sampling in the exploratory phase*

The independent variables are the factors, which in turn have different levels. The validation and adjustment of the levels was consolidated by an initial exploratory study, which in practice served to specify what is meant by many or few observations of the tourist site and a high or low rating. Personal interviews with 51 tourists were also used to define the different designs of the accommodation offers, the basis for the design of the factors and their respective validated levels. The results of this phase can be summarized as follows:

A low evaluation score for a tourist site is seven or lower; a range of 7 to 9 is a medium score, and a high score is higher than this last score. A consensus was reached on the concept of few observations when scores are below 10, and when they are higher, they are categorized as many. On a 5-point Likert scale, a mean score of 4.0 with a deviation of 0.8 was obtained for the question on the similarity of the advertisement presented to other websites on the Internet. As far as the clarity of the information presented is concerned, a mean value of 3.9 out of 5 with a deviation of 1.2 was determined. 80% of respondents are of the opinion that the design of the offer is similar to that of a tourist offer.

### **Design of tourist offers**

In the experimental design model, the forms presented in person to tourists in the different municipalities of the Santander region had to be homogeneous, but at the same time different from any previously designed offer or treatment. The offers from the experimental design represent a combination of the evaluations with their respective levels –high and low– and the observations with their three different levels –many, few or none–, i.e., a factorial design (2X3). Table 1 shows the tourist offers.

<b>Offer</b>	<b>Numerical rating</b>	<b>Observations and opinions</b>
Offer 1	High	Many
Offer 2	High	Few
Offer 3	High	None
Offer 4	Low	Many
Offer 5	Low	Few
Offer 6	Low	None

**Table 1. Design of tourist offers for the experimental model**

*Source: Own elaboration.*



Some items that could provide additional information have been changed. They could lead to noise and bias in the decisions about the relevant factors when deciding on an accommodation location. The image of the hotel used in the offer was created using artificial intelligence tools with the Dream Studio application. Figure 2 shows an offer model that combines some observations and high scores.



**Figure 2. Tourist offer design model**

*Source: Own elaboration.*

### Convenience sampling

Two hundred and ten surveys were administered to tourists in person and in a non-probabilistic mode (Borrór et al., 2018). The selected respondent had to be a user of a web and hosting site. Otherwise, the measurement instrument was not applicable. The form contained the design of one of the offers of the different websites. Each respondent was randomly assigned to one of the six groups according to the specified offerings. There were 35 respondents for each tourism website offered.

The form first contained questions on the frequency and type of use of the website and then questions on the variables of interest in the study: Attention, information, interest and likelihood of booking the website. An introductory text indicated an imaginary trip with some details, such as duration and accompaniment. For accommodation, the respondent was asked to book it on the website and the design of the tourist offer was presented.

Finally, questions were asked about the respondent's level of receptivity to social influence scenarios. Receptivity was assumed to be a covariate in the factorial experimental design. Table 2 shows the scales used in the baseline questionnaire for the dependent variables and the covariate.



Question topic	Subtopic	Scale type	
Attention	Raise attention	Likert 5 From totally disagree to strongly agree	
	See more details		
	Fixation on punctuation		
	Fixation on comments		
Information	Usefulness to decide		
	Enough information		
	Organization		
	Reliability		
Intention	Interest in the offer		
	Viable alternative offer		
	Selection intent		
Probability	Hotel booking probability through websites		Numerical scale from 0 (lowly probable) to 10 (highly probable)
Susceptibility	Consult with others Reference on others		Likert 7 From totally disagree to strongly agree
	Reference on lack of knowledge		
	Support for the opinions of others		
	Impression to others		
	Buy products the same as others		
	Approval of others		
	Identification with others		
	Purchase on other people's tastes		
Sense of belonging			

**Table 2. Scales used in the questionnaire**

*Source: Own elaboration.*

For covariate susceptibility, the Bearden scale was used, a sensitivity analysis technique that measures the relative importance of attributes of a product or service in consumer decision making (Bearden et al., 1989). This scale uses the Likert 7 model from strongly disagree to strongly agree.

## RESULTS

The presentation of the results begins with a description of the web traffic of the tourism websites that are most relevant to the research topic. This is followed by a description of the characteristics of the users or tourists surveyed. In response to the stated objectives, the influences of the observations and the evaluations on the dependent variables are presented as results of the main effects and their interaction. Likewise, the results of the experimental design mediated by susceptibility are described and the manipulation test of the tourist offers is presented.

### Web traffic analysis

Once the leading accommodation websites in the region were identified thanks to the use of keywords in the search algorithms of the different extensions and SEO (Search Engine Optimization) results, the most relevant indexes or metrics were determined. The Similar Web and Semrush applications were used for this purpose. According to both, Booking.com is the most popular site. It is followed by TripAdvisor.com.co, Airbnb.com.co, Kayak.com.co and Trivago.com.co, in order, by a large margin.

According to Similar Web's findings, the five sites receive around 510 million visits per month worldwide, with just over 232 million unique visits and an average dwell time of three minutes per visit, with Airbnb.com.co having the longest dwell time. Together they average eight pages per visit. The bounce rate, or the percentage of visitors who leave the page or website before entering it, is better for Airbnb at 28.85% and unfavorable for Tripadvisor.com with a score of 58.9%. Table 3 shows the web traffic details of the representative websites.

In terms of managing the marketing channels through which the sites are accessed, as mentioned earlier, there are several options, including direct access, where Airbnb.com.co is more prominent<sup>1</sup>. Another way is organic search, which refers to search results that are not paid for by a search engine.

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1. Statistics of website marketing channels. Source: Own elaboration based on data from Similar Web.

	<b>Booking.com</b>	<b>Tripadvisor.com</b>	<b>Trivago.com</b>	<b>KAYAK</b>	<b>Airbnb.com</b>
Global ranking *	45/60	7048/159	64614/667	31114/295	13383/135
Total visits	1,503B	23,28M	1,509M	5,181M	5,702M
Monthly visits	501,9M	7,760 M	503.089	1,727M	1,900M
Monthly unique visitors	222,7M	5,559M	341,671	1,034M	735,798
Unique views by visitors	2,25	1,4	1,47	1,67	2,58
View duration	00:08:10	00:01:52	00:03:03	00:04:19	00:10:50
Average pages per visit	8.37	3.65	4.75	3.95	21.02
Bounce Rate	33.52%	58.9%	38.1%	37.92%	28.85%

\* The second value corresponds to the position of the website in Colombia.

**Table 3. Website traffic rates**

Source: Own elaboration based on data from Similar Web (<https://www.similarweb.com/>).

The market leader in this channel is Tripadvisor.com.co. In paid search, users prefer the Kayak.com.co website<sup>2</sup>.

On Airbnb.com.co, traffic is most often on computer devices. For the other sites, mobile or cell phones predominate for marketing channels such as referrals, social networks and direct marketing, to name a few. When it comes to mobile or cellular devices, email is not a marketing channel for these tourism websites.

In general, according to Bigné and colleagues (2008), Yuan et al. (2022), Mariani and colleagues (2023) and Liu et al. (2023), the cell phone and electronic connections have become a powerful tool when it comes to establishing relationships between people and as a mechanism for accessing, consulting, reviewing and making decisions on activities such as a reservation.

### **Description of the characteristics of users on the web**

Of those surveyed, 100% are frequent internet users and 93% use more than one social network, indicating a high level of online activity; 51% are men and 49% are women. When it comes to travel, social media users vary widely in terms of adoption, usage behavior and volume, level of trust and influence, and final

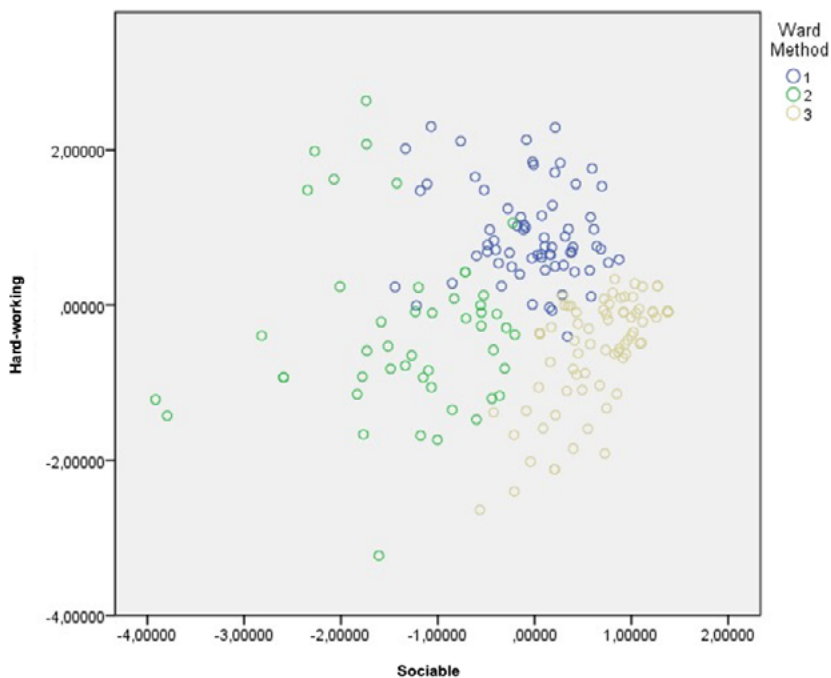
<sup>2</sup> Statistics of website marketing channels. Source: Own elaboration based on data from Similar Web.

decisions and actions (Khare et al., 2011). 83% of users are young, between 18 and 35 years old. 64% use the internet more than three hours per week and go online for an average of three hours per week. The probability of removing the offered page is on average 7 out of 10 and a deviation of 0.14.

In order to obtain a classification showing the behavior related to web usage, the multivariate method of hierarchical clusters with Ward linkage and quadratic Euclidean distance was used. Based on the dendrogram created, three clusters can be assumed a priori, which were validated using the K-means method, resulting in an ANOVA with a sig of 0.000.

In turn, a factor analysis of the main components was conducted, with a Kaiser-Meyer-Olkin measure of 0.81 and a total explained variance of 52% for the two components. The first group was labeled social users: People with a great tendency to use networks to strengthen their social relationships, but also for entertainment. The other group was labeled as busy: People who use the web to a great extent to complement their professional activities.

According to graph 1, cluster 1 contains users with strong social relationships and web use to support their work. Cluster 2 includes those who, on average, are neither sociable nor busy on the web. Cluster 3 contains users with a greater propensity for leisure activities and social relationships and less use of the Internet to support their work.



**Graph 1. Classification of users according to their web use**

*Source: Own elaboration.*

### Degree of impact on user observations and ratings

From the results obtained, it can be concluded that the observations that tourists make about an attraction or destination significantly influence the attention that the offer motivates, the information about the attraction, the interest and the likelihood of making a reservation. For all these dependent variables, the  $p$ -value was less than 0.05, as shown in table 4. On the other hand, there is no interaction between these two variables on the four dependent variables, as shown in figure 3.

The covariate susceptibility has a significant effect on the dependent variables, except for attention ( $p$  values greater than 0.05).

Variable	Attention	Information	Interest	Probability
Observations	F= 52.95	F= 57.68	F= 54.64	F= 40.94
	$p$ value < 0.001	$p$ value < 0.0001	$p$ value < 0.001	$p$ value < 0.001
Ratings	F=47.84	F=31.98	F=15.96	F=48.97
	$p$ value < 0.001	$p$ value < 0.001	$p$ value < 0.001	$p$ value < 0.001
Interaction Observations Ratings	F = 1.44	F=1.17	F=1.10	F=0.07
	$p$ value = 0.240	$p$ value = 0.312	$p$ value = 0.335	$p$ value = 0.935
Susceptibility covariate	F= 0.37	F= 25.57	F=19.40	F=7.21
	$p$ value = 0.543	$p$ value < 0.001	$p$ value < 0.001	$p$ value = 0.008

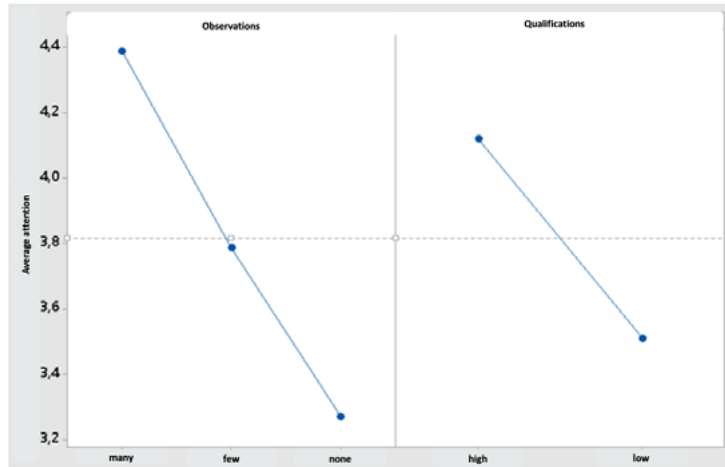
**Table 4. Results of the factorial design of the degree of influence of observations, ratings, interaction, and susceptibility on the dependent variables of the study**

*Source: Own elaboration.*

### Attention

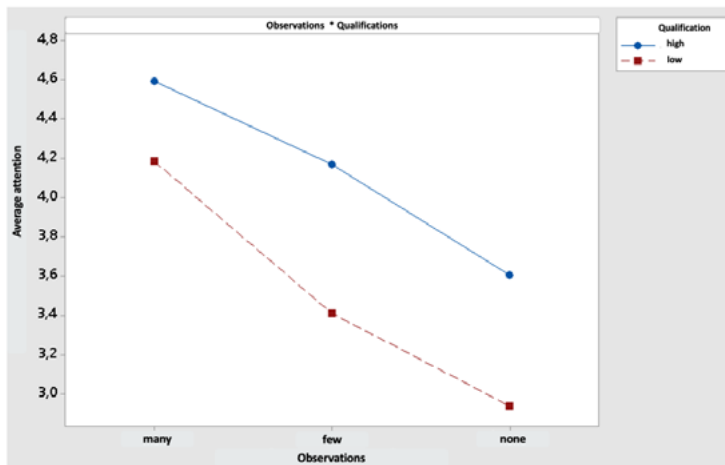
In graph 2 of the main effects, it can be seen that high observations achieve a higher average attention than low observations. Despite generating a higher average attention when they are high and a lower average when they are low, the ratings do not achieve results as high or as low as those of the observations.

Attention is also high when observations and ratings are high, but this is less if ratings are low. The behavior is maintained when there are few or no observations. As shown in graph 3, there is no interaction between these independent variables on website attention.



**Graph 2. Graph of the main effects –observations and ratings– on average attention**

*Source: Own elaboration.*



**Graph 3. Interaction graph of the observations and ratings on the means of attention**

*Source: Own elaboration.*

**Information**

The information variable shows the same behavior as the attention variable: observations and evaluations have a significant influence on the information generated by a tourist offer. However, the difference is more pronounced for observations than for ratings.

Many observations with high ratings show a better average of the information generated by the tourists. However, the gap becomes even greater if the tourist offer has no observations and has a high or low rating.

## Interest

If the site wants to arouse the tourist's interest, many comments on the website are recommended, but this decreases the fewer comments there are. Ratings also have an influence, but not with the same prominence. Many observations with high ratings are a very good scenario for the tourist website. Interest is decimated when the combination of low ratings and no observations occurs.

## Reservation probability

A large number of observations makes it more likely that the tourist will book the place, as does a high rating, although less likely; having no observations, combined with a low rating, has a stronger effect on the likelihood of not making a booking.

The probability variable shows no interaction between the independent variables. High ratings of the attraction in combination with many observations lead to a booking probability of more than 8 out of 10. Low ratings without observations of the location result in probabilities of slightly more than 4. The diagrams of the last three dependent variables show a similar behavior to that of the attention variable.

## Affected susceptibility

This scale of interpersonal influence – defined by the need to recognize one's own image in the opinion of peers through the purchase and use of products and brands and to learn about certain products through the experiences of others – has a significant impact on the information that users request from the tourist website, on the interest aroused by the tourist and on the likelihood of booking. However, it has no influence on the attention variable. This means that receptivity has no influence on how users pay attention to tourism offers. The scale used for this covariate is validated with a reliability level of 0.93 supported by Cronbach's alpha.

## Tamper test

The manipulations were tested using the Kruskal-Wallis test, as there were six different offers with a discrete variable. The observations were confirmed by the answers to the question: How would you rate the following statements regarding the ATTENTION aroused by the image you saw? "I noticed the rating of the hotel" with a value of  $p \leq 0.05 = 0.034$ , indicating that at least one of the median offers differed in each case.

## DISCUSSION

Research has shown that observations play a predominant role as a highly influential factor in the decisions of potential website users. Thus, the criterion of observations outweighs grades with a highly significant influence. Studies such as those by Vermeulen and Seegers (2009), Ullal and colleagues (2021),



Ventre and Kolbe (2020), Blal and Sturman (2014) and Schuckert and colleagues (2015) confirm this and conclude that the perceived usefulness of online observations influences trust and online purchase intention. Reviewers' experience shows that exposure to online reviews increases consumers' consideration to book the hotel and that hotel ratings and reviews published on travel websites increase hotel sales and revenue.

Camilleri and Filieri (2023) show that the usefulness of the information presented in hotel user observations is a significant predictor of satisfaction. Potential customers value quality feedback from consumers who have already experienced hotel services. For their part, Ye and colleagues (2009) concluded that there is a significant relationship between the observations made by online consumers and the business results of hotels.

According to Park and colleagues (2017), the usefulness of the information on tourist accommodation websites could be considered limited due to factors such as the possibility of manipulation of the data sets, the bias of the information – which represents a tourist preference and not a technical analysis of the rated event– and the presence of bias due to the lack of formation of a representative group of users giving their opinion.

Fake online observations and ratings in e-commerce have a significant impact on online consumers, retailers and consequently on market efficiency (Wu et al., 2020).

According to Montgomery (2005), an interaction exists when one of the factors does not have the same effect on the response when another factor is different. The absence of an interaction reflects the opposite. For example, the response in the mean of the attention variable is high for many observations, with a more significant result for high scores than for low scores. Similarly, the mean of this variable shows low results for each observation at the two levels of scores. This behavior is also maintained for the other three dependent variables. Thus, the respondents reflect a balance of results between the four dependent variables depending on the levels of the two factors or independent variables.

With the rapid growth of the Internet, the ability of users to publish content has created active electronic communities that provide a wealth of information about products (Fernandes et al., 2022). The large amount of observations often made for the same product makes it more difficult for individuals to find the best observations and understand the true underlying quality of a product based on the observations (Ghose & Ipeiritis, 2007).

Another relevant element of this study is the mediation of the receptivity covariate as a factor of user image identification in the peer group and the

influence of purchase decision based on others' experiences. Behavioral intention, measured as the intention to recommend and visit the destination, was translated by Alcántara-Pilar and del Barrio-García (2016) as independent of the tourist's social culture. Social influence is not only evident in the data, but also in the personality traits of the person viewing the data. As Rodríguez and García (2020) found, the use of social influence tools in networks also contributes to the visibility of organizations in the tourism sector.

Receptivity affects how the user is interested in the information of the offer, arouses interest in it and influences the likelihood of booking, but does not attract attention to the particular advertisement or offer. This differs from studies such as those by Litvin and colleagues (2008), Cialdini (2009), Diana-Jens and Rodríguez Ruibal (2015), which show that the personality trait mediates the effect of attention. Among the possible causes of this result is the inclusion of the ten subthemes of the covariate (table 2), which may have caused some noise or bias on the part of the respondents (Alcántara-Pilar & del Barrio-García, 2016), as they explained at the time the instrument was applied.

The previously developed studies, together with the results of this study, constitute an essential basis to determine how technological development tools for information and communication become business improvers that seek to capture markets eager to use web and Internet technologies as a means to support decision making. This study helps to establish the value of the criteria defined as independent variables in a growing sector such as tourism.

This tool can become a competitive advantage in the tourism industry. If observations and reviews are acted upon with vigor, it is very likely to translate into improved revenue (Anderson & Han, 2016). The information that other users provide with their observations and reviews exerts a social influence that is valid, useful and moving for accommodation users.

As a complementary element, tourism website operators are encouraged to encourage their users to write comments about their stay. Few comments, even with high ratings, are a risk scenario.

## **CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH**

The main conclusion of the article is that both the observations and the ratings given by third parties about a tourist place or destination influence the way a potential user perceives that place or destination and that they affect the attention that motivates the offer, the information that is presented, the interest that the place arouses and the likelihood of booking. When interacting with the

receptivity variable, it is found to have some influence on the previous dependent variables, with the exception of the attention that the site attracts. In addition, the number of observations exerts a greater influence on the independent variables described than the ratings.

Observations on the websites are a tool that builds trust and provides an informative context to the offers, especially when presented in large numbers. This information is supported by the susceptibility that occurs at the time of social influence by third parties. Similarly, it facilitates managerial decision making when used as a strategic tool to gather, use, interpret and manage information.

The study has three limitations: The first has to do with the methodology used to determine the ranges of measurement of the independent variables, i.e. high or low values and a large or small number of observations. Determining the ranges through surveys leaves open the possibility of including biases due to the effect of subjectivity. These limit the factorial design process. The second limitation concerns the results, which have internal validity without the statistical possibility of extrapolating them to a population. Third, the study is limited to independent variables such as the number of observations and site ratings, ignoring other relevant measurement variables.

For future research, it is suggested that complementary and comparative methods be included in the analysis to define and validate the ranges or scales of the independent variables and other measurement variables that may directly influence the perceptions of potential tourism users. Likewise, it is recommended to review the subthemes to be included in the covariates to integrate them into a few factors; otherwise, it may become trendy. Finally, it is recommended to develop probabilistic samples in other scenarios or regions in a way that ensures inference.

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## **SOBRE EL AUTOR**

**OMAR MILLÁN DELGADO**, industrial engineer, specialist in integrated management systems. He has a master's degree in Business Administration and a Ph.D. in Strategic Planning and Technology Management. He is a university professor with more than 20 years of experience in management and engineering disciplines. He has work experience in management systems and business consulting, and in coordination in accreditation processes of undergraduate and graduate programs. His research areas are data analytics and business innovation.

 <https://orcid.org/0009-0006-7424-2741>