



Factors influencing the loyalty of news website readers

Factores que influyen en la lealtad de los lectores de sitios web de noticias

Horacio Dávila Garza*, Gustavo Juan Alarcón Martínez,
Jesús Fabián López Pérez

Universidad Autónoma de Nuevo León, México

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Abstract

Technological advancements have pressured traditional news media to transform into a digital environment, changing the way they deliver content to their readers. This has made it so news media outlets consider gaining their readers loyalty towards their website an important component for business. With this premise, a multiple linear regression analysis was carried out on a sample of 486 adults who reside in Mexico City, Monterrey, and Guadalajara. The results show that factors such as familiarity, satisfaction and reputation are positively related with how loyal a user is to a news website. In addition, it shows that the importance of said factors differs when the analysis is carried out stratifying by residence, gender, or educational level. This allows us to conclude that the news media can focus their efforts to gain their readers' loyalty depending on their audience's profile.

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Keywords: loyalty; news websites; online news readers

* Corresponding author.

E-mail address: hdavilahdavila@gmail.com (H. Dávila Garza).

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Resumen

Los medios tradicionales de información se han visto en la necesidad de evolucionar a un ambiente digital con motivo del avance tecnológico, cambiando la manera en que hacen llegar la información a los usuarios de noticias. Esto ha provocado que los medios consideren relevante generar lealtad de los lectores hacia sus sitios web informativos. En este sentido, se realizó un análisis de regresión lineal múltiple a una muestra de 486 adultos residentes de las ciudades de México, Monterrey y Guadalajara, donde los resultados muestran que factores como familiaridad, satisfacción y reputación se relacionan de manera positiva con la lealtad de los lectores de los sitios web de noticias. Además, muestran que la importancia de dichos factores es distinta cuando el análisis se realiza estratificándolo por residencia, género o escolaridad, lo que permite concluir que los medios informativos pueden dirigir sus esfuerzos de lealtad dependiendo de las características de sus lectores.

Código JEL: M10, M20, M31

Palabras clave: lealtad; sitios webs de noticias; usuarios de noticias en línea

Introduction

Problem statement

The first digital newspapers appeared worldwide during the 1990s due to the explosive growth of the Internet. According to Salaverría (2019), between 1995 and 1996, the first outlines of news websites were glimpsed in Mexico, so technological advances forced the media to rethink their business model substantially (Ramos, 2015). Nonetheless, the strongest impact on traditional print media due to technological advances began in 2008, when newspaper sales decreased significantly. Years later, during 2011 and 2012, advertising investment also significantly decreased as the number of print newspaper readers fell (Segura-Anaya, Marta-Lazo, Martínez, 2014).

Dekavalla (2019) and Nelson (2019)—cited by Nelson and Kim (2020)—point out that, faced with the above problems, media professionals and people interested in journalism around the world have invested millions of dollars “to make news more attractive and transparent in the hope that doing so will generate more public trust and, consequently, more audience loyalty” (p.2). Other authors, such as Hacek (2017), believe that news media have had to focus on creating strategies to increase their readership while at the same time incentivizing their loyalty.

Through its national survey on the availability and use of information technologies in households (2019), the National Institute of Statistics and Geography (INEGI; Spanish: Instituto Nacional de Estadística y Geografía) reports that in Mexico the number of Internet users amounts to 80.6 million people. 90.7% of them require it to obtain general information, and specifically, 47.3% require it to read

newspapers, books, and magazines. This information leads to the conclusion that the near future of the media will invariably unfold in a digital environment.

General research hypothesis

The reputation of the news medium, the website's ease of use, reader satisfaction, and user familiarity positively influence reader loyalty to news websites in Mexico.

Rationale

The problems the media faces worldwide are a current issue that has been little studied in Mexico. Therefore, this study aims to be useful for the country's journalism industry, providing knowledge from its own perspective and adding to the efforts to help the media overcome its business crisis. In addition, this research proposes to elaborate a series of statistical analyses based on stratified groups to determine the differences in the variables resulting from each group and their impact factors.

Delimitations of the study

The study considered news users of legal age inhabitants of three of the country's largest cities (Mexico City, Monterrey, and Guadalajara), regardless of gender or educational background. These cities correspond to the metropolitan areas with the highest population and economic importance in Mexico with popular news media platforms. Field tests were conducted between December 2020 and March 2021.

Theoretical framework

Dependent variable; loyalty (of news website readers)

Readers' loyalty to news websites is closely related to the theory of uses and gratifications developed by the communication theorists Blumler and Katz, which dates back to the mid-twentieth century. This theory establishes that the media satisfies the audience's needs related to social interaction (Martínez, 2010). Dunne, Lawlor, and Rowley (2010) cite O'Donohoe (1994) and Cantril (1942) and point out that the theory of uses and gratifications has been applied at different times to a variety of mass media that at the time were dominant or emerging, such as radio, television, magazines, and newspapers. Therefore,

researchers have recently considered it appropriate to apply this theory to the new media that emerged due to the Internet.

The theory of uses and gratifications represents a precedent of the importance for the media of having the permanent preference of news readers in today's digital environment. This permanent preference obtained through the reader's use of news information platforms provides them with the gratification they expect from their reading. Based on this context, this research focuses on the analysis of the loyalty of users of news websites regarding factors that may impact it to a greater or lesser extent.

Studies addressing news reading in digital media present diverse definitions of loyalty. Flavián, Guinalíu, and Gurrea (2006), citing Jones and Sasser (1995), point out on the one hand that "consumer loyalty is the feeling of attachment or bonding with the people, products, or services of a company" (p.364), and on the other hand that "these feelings are positively reflected in the behavior of consumers toward an organization" (p.364). Similarly, Hacek (2017) cites Srinivasant et al. (2002) and Toufaily (2013) and defines loyalty as "the likelihood that the same user will revisit a given website" (p.58).

More recent authors, such as Vargas, De Esteban, and Moura (2020), consider that loyalty "is assumed as an effort of the company to maintain the connection with the customer, so its creation and daily maintenance is of vital importance due to the strong competition of the current context" (p.136). For Martínez-González and Álvarez-Albelo (2021), online loyalty "refers to the intention of consumers to repeat the online purchase of the same product, service, or brand, or to recommend it through the web, mobile, or social networks" (p.2). These authors establish their definitions of loyalty in the understanding that a commercial exchange or purchase exists between the consumer and the service provider. In the case of the present study, loyalty is analyzed from the perspective of the user's free access to news website information, and the definition made by Hacek (2017) will be used, although specifying that it is applicable to news websites.

Empirical studies found in the literature review determine direct and positive relations between loyalty and familiarity, satisfaction, reputation, and ease of use. Examples of the above are Antepará-Basurto, Braganza, and López (2019), Hacek (2017), Casaló, Flavián, and Guinalíu (2008), Flavián and Gurrea (2007) and Flavián et al. (2006). Similarly, studies such as the one conducted by Martínez-González and Álvarez-Albelo (2021) focus their research on tourism websites. Although they do not correspond to news websites, they involve variables such as site personalization and first impression for consumer loyalty, which shows that loyalty itself is a topic that has been studied recently from the perspective of different commerce websites.

Independent variable; reputation (of the news media)

The value of the organizations' products with a recognized brand is above their utilitarian value, as companies with a reputable and prestigious image can better differentiate themselves from their competitors (Jere & Borain, 2018). Goyanes and Vara-Miguel (2017) point out that a peculiarity of the profile of news customers through websites is that they "perceive a media system independent of political and economic influences" (p.489). Hacek (2017) states that reputation "promotes the good name of the given news website" (p.59). Lai, Griffin, and Babin (2009), cited by Jere and Borain (2018), specify that "corporate or brand image is an important factor in the overall judgment of a service provider, reflecting the reputation and prestige of a company or brand" (p.99).

Also, Goyanes, Artero, and Zapata (2018), citing Pennycook and Rand (2018), approach the concept of media brand and associate it with identity, pointing out that "media brands are strongly linked to professional journalistic values" and add that "brand value in journalism is related to factors such as uniqueness, relevance, and reader preference" (p.5).

For Perona-Páez and Hernández-Ruiz (2020), "corporate reputation is determined by the status of an organization, the experience of and relations with it, what is expected in the future from that organization, and perceptions about the general attractiveness of the same organization" (p. 3). In another perspective, Caviggioli, Lamberti, Landoni, and Meola (2020) state that "essentially, corporate reputation can be defined as the admiration and respect that a person feels for an organization at a given time" (p.878).

In the case of the present study, it is important to relate the idea of media independence to the previous definitions, considering that this element is of utmost importance in the positioning of the brand and reputation of a media outlet. Therefore, an integral definition is proposed for the definition of media reputation. Media reputation is identified as the corporate image that reflects the general prestige of a journalistic company, including the perception of independence that readers have of it and the professional journalistic values with which they identify themselves.

Regarding empirical studies that demonstrate a positive relation between the reputation variable and the loyalty of users of news websites, Antepara-Basurto et al. (2019) used satisfaction as a mediating variable that ends up having a positive relation with the intention to revisit and the intention to recommend, both elements clearly associated with loyalty. Other examples of authors whose studies showed a direct relation between loyalty and reputation are Hacek (2017) and Casaló et al. (2008).

Other studies address the topic of reputation from different perspectives that demonstrate the importance of this variable, such as that of Barbeito-Veloso, Perona-Páez, Rodríguez-Prieto, and Hernández-Ruiz (2020), who conducted a case study analyzing the treatment of journalistic content and its influence on the reputation of the Spanish press.

Independent variable; ease of use (of the website)

According to Flavián and Gurrea (2007), research has focused on virtual organizations and how consumers perceive them. Consequently, paying attention to the website design and ease of use becomes important, as this has a major impact on the marketing strategy. In new digital marketplaces, including news websites, ease of use is an element that can motivate users in their choice of which site to access. Hacek (2017) notes that “the concept of ease of use refers to the benefits consumers experience when it is easy to navigate a website’s content” (p.58). Hacek himself, citing Horvath (2016), defines the ease of use of a website as “a quality attribute in terms of the ease with which users can access the standard features of the website” (p.58).

According to Flavián et al. (2006), the elements that should be considered to understand the concept of ease of use of a website are a) Ease of understanding the structure, functions, interface, and contents; b) Simplicity of use from the first time; c) Speed in finding what you are looking for; d) Ease of navigation and e) Ability to control what you are doing at all times. Flavián et al. (2006), citing Davis (1989), define ease of use as “the degree of effort that, according to the user, is required by the system used” (p.365). Flavián et al. also cite Nielsen (1994) and indicate that ease of use “refers to how easy it is to learn to use the system, the effectiveness of the website design, the ease of remembering how to use it, the reduction of errors, and the overall satisfaction with it” (p.365).

Other authors, such as Medina-Quintero, Ábrego-Almazán, and Echeverría-Ríos (2020), define ease of use as “the degree to which using an innovation is effortless” (p.27). Likewise, Kous, Pusnik, Hericko, and Polancic (2020) cite Roy, Pattnaik, and Mall (2014) and state that “in general, the usability of a website can be defined as a quality characteristic that describes the ease with which a user can navigate a website” (p.76).

For this research, Ease of use is defined comprehensively. Thus, it refers to the benefits users experience when it is easy to navigate the content of a news website. It is the quality attribute in terms of the ease with which users can access the standard features of the site. This includes the question of how easy it is to understand the structure of the system, its functions, the interface, and the content available to users.

Antepara-Basurto et al. (2019), Hacek (2017), Flavián and Gurrea (2007), and Flavián et al. (2006) report the direct and positive relations of this variable with loyalty in their studies. Likewise, there are several types of research other than the topic of news websites that consider ease of use as an important variable, such as the one conducted by Medina-Quintero et al. (2020), who studied this variable in relation to citizen trust in e-government.

Independent variable; (reader) satisfaction

For Hacek (2017), who cites Casaló et al. (2007) and Toufaily et al. (2013), the concept of satisfaction “includes psychological factors such as the fulfillment of mutual promises or the smooth functioning of relevant relations” (p.59). He defines news website reader satisfaction noting that it corresponds to the “emotional state that results from an overall evaluation of all important factors that contribute to the consumer’s relation with the site.” In the same way, the author also adds that “satisfaction can be linked to the subjective attitude of a consumer or user toward a news website,” concluding with the idea that “it is a permanent emotional predisposition based on the benefits obtained” (p.59).

According to Yuda-Bakti, Rakhmawati, Sumaedi, Widiarti, Yarmen, and Astrini (2020), many authors have used the perceived quality-satisfaction-loyalty structure of service theory. For these authors, perceived service quality and satisfaction are two widely discussed constructs in the service and marketing literature. In the case of this research, the variable of study and interest corresponds to reader satisfaction, which could well apply to definitions of customer or user satisfaction. Other definitions of satisfaction can be found in studies such as Islam, Islam, Pitafi, Xiaobei, Rehmani, Irfan, and Mubarak (2020), who state that “customer satisfaction is an assessment based on the comparison between real and perceived experiences” (p.125). They also cite Herrmann, Monroe, and Huber (2007) and complement the definition by stating that “customer satisfaction is a reflection of positive feelings” (p.125).

Likewise, according to Choi and Lee (2020), “satisfaction is subjective because each person perceives it differently to the extent that the individual feels useful” (p.28). They add that “satisfaction is determined by the results of subjective judgments about expectations and previous experiences, which can be evaluated from judgments through personal feelings that psychological factors can determine” (p.28).

For the present study, reader satisfaction is defined based on the ideas established by Hacek (2017), referring to it as the permanent emotional state based on the benefits obtained and resulting from an overall assessment of all the important factors that contribute to the user’s or reader’s relation with the news website.

Antepara-Basurto et al. (2019), Hacek (2017), and Casaló et al. (2007) show positive relations between satisfaction and loyalty in their research. Also, authors such as Mahdani, Syahputra, Adam, and Ikramuddin (2020) study customer satisfaction and loyalty in small and medium-sized companies from the point of view of digital marketing platforms, which indicates the relevance of the study of the satisfaction variable when addressed from different approaches.

Independent variable; familiarity (reader's familiarity with the website)

Flavián et al. (2006) and Flavián and Gurrea (2006), cited by Hacek (2017), indicate that for Internet users, familiarity is a key factor that allows them to decide whether or not to access a website. The more familiarity readers perceive with their news websites, the easier they can decide which digital portals to visit. On the other hand, Flavián and Gurrea (2007) point out that there is a certain logic in thinking that users who feel familiar with a news site will be more predisposed to read it. Hacek (2017), citing Flavián et al. (2006), defines familiarity as “the impression people have of a certain product or service based on their previous contact with it” (p.58). Hacek (2017), citing Casaló et al. (2008), identifies familiarity “as the means by which a user’s initial uncertainty about a news website is overcome” (p.58).

In another paper, Gunness and Oppewal (2020), citing Gafen (2000), define familiarity with a website as “knowledge based on specific activities and previous experiences or learning about how to use a particular interface” (p.331). These authors cite Kim, Ferrin, and Rao (2008), stating that familiarity “can refer to knowledge of the vendor, understanding of the website’s content, and procedures for searching and ordering and its relevant technologies” (p.331).

In the present study, Website Familiarity is defined using and complementing Hacek’s (2017) description as follows: familiarity refers to the impression people have of a given news website based on their previous contact with it and their reading and visiting habits. The elements of habit and custom are considered necessary to the definition in order to emphasize the background of the user’s familiarity with digital news portals.

This variable also presents direct and positive relations with Website Loyalty, as evidenced by Flavián and Gurrea (2007), Hacek (2017), and Antepara-Basurto et al. (2019).

Among those investigations addressing the familiarity variable from a different approach to loyalty toward news websites is the one conducted by Chun, Lee, and Park (2020), who, among other variables, studied brand familiarity and purchase intention in franchise companies.

Hypotheses

Based on the literature presented in this study, the following hypotheses are presented, which propose four causal factors of loyalty:

H1: News media reputation is positively related to the loyalty level of readers of news websites.

H2: Website ease of use is positively related to the loyalty level of readers of news websites.

H3: Reader satisfaction is positively related to the loyalty level of readers of news websites.

H4: Reader familiarity with the website is positively related to the loyalty level of readers of news websites.

Methodology

Construction of the measuring instrument

Based on the questionnaires proposed in the empirical studies mentioned in the theoretical framework section and items developed by the authors of this research, a measurement instrument was constructed and tested for content validity. Seven experts participated in this test: two academics and five persons directly related to journalistic work. The instrument consisted of a first section where detailed information on the different variables was collected, with between 4 and 6 questions for each, with 7 points on the Likert scale as answer options. The second section consisted of obtaining information on the participant's profile, such as gender, age, schooling, and place of residence.

The questionnaire was developed using the Google Forms tool and distributed through the Internet on social networks, requesting users to share it with more users to create a snowball effect. The participation criteria focused on being readers of news websites, of legal age, and residents of the cities considered in the study.

Population and sample

In the National Survey on Availability and Use of Information Technologies in Households (2019), INEGI reported 80.6 million Internet users in Mexico, of which 38.1 million use the Internet to read newspapers, magazines, or books. The latter users represent the study subjects of the present research since Internet use is a condition for reading news websites. In terms of population, this study focused on users in Mexico City, Monterrey, and Guadalajara, obtaining a total of 486 responses.

Descriptive statistics

The profile of the participants considering the 486 sample surveys was as follows: in terms of gender, 53% of the people were women, and 47% were men. The dominant age ranges were 40 to 49 years old, with 30% participation; 18 to 29 years old, with 24%; and 30 to 39 years old, also with 24%. The

predominant level of education was a bachelor's degree, with 55%. Finally, the breakdown by place of residence was 44% Mexico City, 30% Monterrey, and 26% Guadalajara.

Reliability analysis

An analysis of the internal consistency of the measurement instrument was carried out using Cronbach's alpha test for each variable. Table 1 shows the results of this analysis.

Table 1
Cronbach's alphas for each construct

Variable	Name	Items (*)	Alpha
Y	Loyalty (of news website readers)	6	0.822
X1	Reputation (of the news media)	5	0.752
X2	Ease of use (of the website)	4	0.868
X3	(Reader) Satisfaction	4	0.852
X4	Familiarity (reader's familiarity with the website)	4	0.835

(*) There was no variation between the number of incoming and outgoing items.

Source: created by the authors based on IBM SPSS results.

According to Hair, Risher, Sarstedt, and Ringle (2019), in an internal consistency test, the recommended values for Cronbach's Alphas are between 0.700 and 0.900, so the indicators shown in Table 1 meet this parameter.

Analysis of results

Statistical analysis; multiple linear regression

A multiple linear regression analysis in its version of successive steps was carried out with the support of the IBM SPSS program to establish how well the proposed model of the present study fits the reality of the data obtained. This statistical method is "an explanatory model in which a dependent variable is studied as a function of a series of explanatory or independent variables" (Treviño, 2014, p.297). Table 2 presents a summary of the results.

Table 2
 Summary of models resulting from multiple linear regression analysis (successive steps)

Mod.	R2	DW	F	CI	Familiarity		Reputation		Satisfaction		Ease of use	
					Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
1	.431	1.647	368.1	8.3	.657	.000	--	--	--	--	--	--
2	.474		219.5	12.8	.478	.000	.276	.000	--	--	--	--
3	.491		156.6	17.7	.389	.000	.193	.000	.205	.000	--	--
4	.495		119.7	20.7	.400	.000	.206	.000	.245	.000	-.093	.027

Abbreviations:

R2: Coefficient of determination, DW: Durbin Watson, F: F-statistic, CI: Condition Index

Source: created by the authors based on IBM SPSS results.

The analysis resulted in a summary with four models, where the R-squared obtained values ranging from 0.431 to 0.495. The Durbin-Watson indicator was 1.6, within the acceptable range of 1.5 to 2.5. Regarding the analysis of variance, the F-statistic value was higher than 3.45 in all the models, so there is an adequate dispersion of the data for the mean value. In the case of the analysis of Beta-type coefficients, the p-values were less than 0.05 for all variables, thus complying with the significance criterion. Nonetheless, in model 4, the variable “ease of use” stands out, with a negative coefficient. It is important to consider that the impact of this coefficient is imperceptible as it does not reach the value of ± 0.100 (Rositas, 2005).

The collinearity diagnosis yielded condition indices above the threshold of 15 from the third model onwards. As can be seen, each model, by adding an explanatory variable, impacts the multicollinearity index. Nevertheless, these changes in the index only cause marginal changes in the Beta coefficients of the first three models. Regarding the theoretical part of the recommended threshold for condition indices, Bresley (1991) points out that condition indices between 20 and 30 suggest serious multicollinearity problems, while for models with indicators above 30, the problem is understood as manifestly serious.

Alternative intro models

It was decided to perform an alternative analysis using different combinations of variables through the intro option to compare the models resulting from the successive steps option. The summary of the analysis can be seen in Table 3.

Table 3

Summary of models resulting from multiple linear regression analysis (intro)

Mod. (*)	R2	DW	F	CI	Familiarity		Reputation		Satisfaction		Ease of use	
					Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
A1	.473	1.596	146.3	14.7	.486	.000	.285	.000	--	--	--	--
A2	.423	1.689	119.4	15.2	--	--	.329	.000	.418	.000	--	--
A3	.476	1.657	147.8	15.2	.464	.000	--	--	.328	.000	--	--

(*) The letter A (alternative) is prefixed to differentiate it from the models in successive steps.

Abbreviations:

Mod: Model, R2: Coefficient of determination, DW: Durbin Watson, F: F-statistic, CI: Condition Index

Source: created by the authors based on IBM SPSS results.

Of the possible combinations of variables using the intro option, only three models were significant. The contribution of this exercise is that it proposes two scenarios where the selected variables are different from those of the stepwise model, reflecting a lower condition index. Nonetheless, unlike the successive step models, these models present an absent variable as they propose only two explanatory variables.

Therefore, based on the results from the analysis of variance, the Beta-type coefficients, and the diagnosis of collinearity, it was decided to choose model 3 of the successive steps version as the result of the present research proposal, which supports hypotheses H1 (Reputation), H3 (Satisfaction), and H4 (Familiarity), with their respective impact factors. Although this model slightly increases the suspicion of multicollinearity by increasing the condition index, it also increases the variance explained and recovers an additional predictor variable that the other models do not have.

Model 4 was rejected because the explanatory variable “ease of use,” although imperceptible, had a negative impact coefficient, multicollinearity increased, and the value of the other impact coefficients became volatile, i.e., they increased instead of decreasing.

Therefore, it can be concluded that the variables “Familiarity” of the reader with the website, “Reputation” of the news media, and “Satisfaction” of the reader are directly and positively related in this order with the “Loyalty” of the readers of news websites. These variables account for 49.1% of the variance explained. These results coincide in a general way with research such as Antepara-Basurto et al. (2019), Casaló et al. (2007), and Flavián and Gurrea (2007), who considered these variables.

Comparative results of linear regression by stratification

Taking as a reference the sample used to determine the results of the linear regression of the models described in the previous section, a stratified regression analysis was performed with the following results (see Table 4):

Table 4
Proposed global model vs. stratifications (residence, gender, and schooling)

Group	Obs.	R2	F	CI	Familiarity			Reputation			Satisfaction		
					Beta	Err.	Sig.	Beta	Err.	Sig.	Beta	Err.	Sig.
Global model	486	.491	156.6	17.7	.389	.046	.000	.193	.064	.000	.205	.052	.000
Mexico City	216	.496	106.6	15.8	.393	.074	.000	--	--	--	.372	.085	.000
Monterrey	142	.548	86.4	13.6	.295	.060	.000	.511	.089	.000	--	--	--
Guadalajara	128	.472	57.7	13.1	.447	.091	.000	.302	.090	.001	--	--	--
Men	226	.477	103.5	12.3	.513	.062	.000	.247	.090	.000	--	--	--
Women	260	.505	89.2	18.0	.317	.062	.000	.184	.083	.005	.297	.070	.000
High school or less	141	.526	78.5	13.6	.423	.068	.000	--	--	--	.383	.078	.000
Bachelor's Degree	265	.459	75.6	18.6	.401	.070	.000	.186	.092	.006	.162	.076	.029
Postgraduate	80	.528	45.2	14.3	.440	.135	.000	.378	.153	.000	--	--	--

Abbreviations:

Obs: Number of observations (sample), R2: Coefficient of determination, DW: Durbin Watson, F: F-statistic, CI: Condition index, Err: Standard error.

Source: created by the authors based on IBM SPSS results.

Of the 8 analysis groups, in two of them (Women and Bachelor's Degree), the significant variables were the same as in the proposed global model: "Familiarity," "Reputation," and "Satisfaction." Nevertheless, the remaining 6 models did not coincide in the number of variables, so it can be concluded that the analysis by stratification provides additional and relevant information. Thus, newspaper companies can use this information depending on the type of readers that make up the majority of their market or, as the case may be, the type of readers they intend to target.

In the case of stratification by geographic area, it can be seen that in the case of users in Mexico City, the impact factors presented balanced values in the variables "Familiarity" and "Satisfaction," while in Monterrey, the resulting variables were "Familiarity" and "Reputation," with greater emphasis on the latter variable. In Guadalajara, the significant variables were the same as in Monterrey; nonetheless, the highest impact factor corresponded to "Familiarity."

These results may be due to each group's different expectations of the news source. Thus, for example, while readers of news websites in Mexico City attach importance to the habit they have of being informed on the same website and that at the same time it provides them with a state of greater well-being by knowing they are informed, in Monterrey they are inclined to identify themselves with media they consider to be critical, truthful, and independent.

On the other hand, in the stratification by gender, in the group of men, the result with the greatest impact was the variable "Familiarity," which shows that they attach greater importance to the habit and custom they have of obtaining information on the same portal. In contrast, the impact factors were distributed among the three significant variables in the group of women, as in the global model.

Differences in the significant variables and their level of impact as described above were also observed in the results of stratification by schooling, indicating that some groups are more willing to feel identified with the media to which they have access, others with immediate well-being, and still others to perceive themselves as truthfully and independently informed.

It should be noted that of the three factors that were found to have a direct, positive, and significant relationship with Loyalty, the "Reputation" factor is the most difficult to build for a journalistic media since it requires years of constant effort accompanied by quality in the final product. One way to underpin this effort is to enlist collaborators with a previously earned reputation to send readers a message of the importance of this element for the news media. In contrast, a possible disadvantage of building a reputation is that it requires keeping a distance from political and economic interests, which often restricts possible advertising contracts that would help the media themselves to finance their projects and the cost of news production.

Additionally, it may be noted that it could be less complex to implement the "Familiarity" and "Satisfaction" variables. In the case of "Familiarity," the media would have to concentrate on making their product a news portal that is in frequent contact with users so that their reading is part of their daily routine. This can be achieved through advertising, market penetration campaigns, or special promotions for readers. Regarding the "Satisfaction" factor, the readers should be understood globally, especially considering the type of information they seek and what they like.

Comparison of linear regression results by similarity

Euclidean distance was calculated to find similarities between the global model and the already presented stratified models. This calculation made it possible to determine a similarity index between each model, where the lower the index, the greater the similarity. The result is presented in Table 5.

Table 5
Proposed global model vs. stratifications (residence, gender, and schooling)
Order based on similarity of results

Group	Obs.	R2	F	CI	Familiarity			Reputation			Satisfaction			Similarity
					Beta	Err.	Sig.	Beta	Err.	Sig.	Beta	Err.	Sig.	
Global model	486	.491	156.6	17.7	.389	.046	.000	.193	.064	.000	.205	.052	.000	--
Bachelor's Degree	265	.459	75.6	18.6	.401	.070	.000	.186	.092	.006	.162	.076	.029	.045
Women	260	.505	89.2	18.0	.317	.062	.000	.184	.083	.005	.297	.070	.000	.117
Guadalajara	128	.472	57.7	13.1	.447	.091	.000	.302	.090	.001	--	--	--	.239
Men	226	.477	103.5	12.3	.513	.062	.000	.247	.090	.000	--	--	--	.246
Mexico City	216	.496	106.6	15.8	.393	.074	.000	--	--	--	.372	.085	.000	.255
High school or less	141	.526	78.5	13.6	.423	.068	.000	--	--	--	.383	.078	.000	.265
Postgraduate	80	.528	45.2	14.3	.440	.135	.000	.378	.153	.000	--	--	--	.281
Monterrey	142	.548	86.4	13.6	.295	.060	.000	.511	.089	.000	--	--	--	.390

Abbreviations:

Obs: Number of observations (sample), R2: Coefficient of determination, DW: Durbin Watson, F: F-statistic, CI: Condition index, Err: Standard error.

Similarity: index of similarity to the global model based on Euclidean distance.

Source: created by the authors based on IBM SPSS results.

The last column of Table 5 shows that the models of the “Bachelor’s Degree” and “Women” groups present greater similarity with the proposed global model, obtaining indices below 0.2. On the contrary, the least similar group corresponds to “Monterrey,” with an indicator close to 0.4. Such results could be related to the number of elements in the sample of each group since more similar groups have a larger sample and vice versa. Nevertheless, there is also the possibility that the order of the similarities presented in these groups is related to the importance that each of them assigned to the study variables.

A three-dimensional graph was created to complement the above information by considering the impact coefficients of the three variables that were significant in each group. This locates each group with respect to the global model and the rest of the groups, as shown in Figure 1.

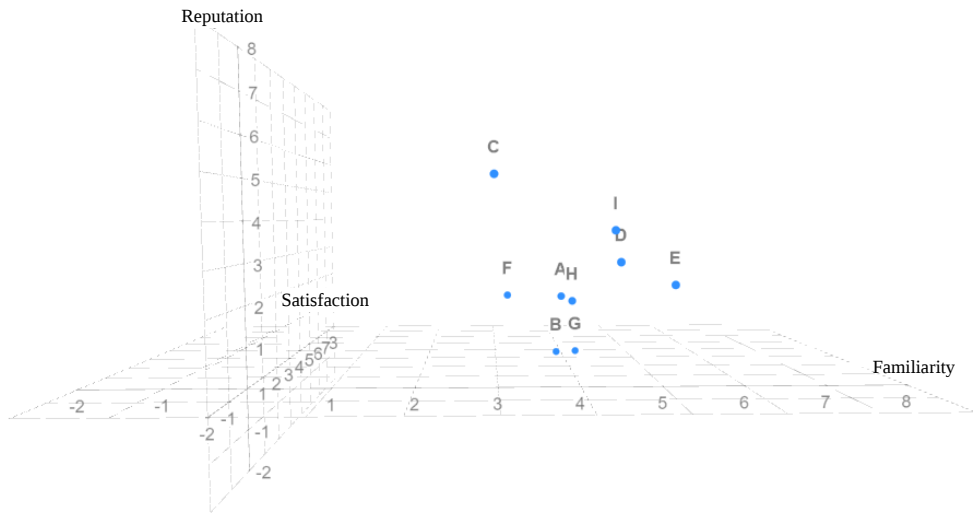


Figure 1. Three-dimensional image based on the impact coefficients of the different groups analyzed

Nomenclature of groups in the three-dimensional image:

A. Global model	B. Mexico City	C. Monterrey
D. Guadalajara	E. Men	F. Women
G. High school or less	H. Bachelor's Degree	I. Postgraduate

Source: Exercise conducted at <https://www.Math3d.org>

Conclusions

This study aimed to determine the factors that influence readers' loyalty to news websites. These factors were taken from empirical studies of the existing literature. Since the study was conducted using a quantitative approach, a measurement instrument was developed that fulfilled the expert validation process and the internal consistency test by calculating Cronbach's Alphas. The instrument was applied to users in Mexico City and the metropolitan areas of Monterrey and Guadalajara, as these are three of the most representative cities in Mexico.

The results of the multiple regression analysis show that the variables "Familiarity" of the reader with the website, "Reputation" of the news media, and "Satisfaction" of the reader present a direct, positive, and significant relation with the "Loyalty" of the readers of news websites. The variable "Ease of use" was not considered because its possible inclusion implied an unsatisfactory level of multicollinearity. The set of variables included accounted for nearly half of the total variance, which

indicates that other factors have an effect on “Loyalty.” Consequently, exploring new variables not yet recognized in the literature becomes relevant. The results obtained in this study coincide with those reported by research documented in the theoretical framework, such as Antepara-Basurto et al. (2019), Hacek (2017), Casaló et al. (2008), and Flavián and Gurrea (2007).

Furthermore, a regression analysis was performed with the stratification criteria of city of residence, gender, and schooling, with specific results for each case, which provide information for newspaper companies to focus their efforts on the variables according to the profile of the readers that make up their market. As an example, the analyses by residence show that in Mexico City, the impact factors were balanced for “Familiarity” and “Satisfaction,” while, in contrast, “Reputation” had a greater impact in Monterrey and “Familiarity” in Guadalajara. This shows that the difference between these three groups implies, on the one hand, the importance of certain readers’ habit of getting information from the same website (Familiarity) and, on the other hand, the need to identify with a prestigious media outlet (Reputation).

Strategies can be implemented to promote each of the three explanatory variables that resulted in the different groups. In the case of “Reputation,” a strategy could consist of recruiting a group of collaborators and renowned journalists who give the news media a certain prestige. Similarly, advertising campaigns and special promotions could contribute to promoting the “Familiarity” variable since the key to this factor is the continuous presence of the website among news users. Finally, the “Satisfaction” factor can be addressed by identifying and publishing the type of information that interests readers.

As a recommendation for future studies on this topic, since this research focused on users in Mexico City, Monterrey, and Guadalajara, it would be advisable to include cities in other states besides those already considered. This would help to know the effects of the different factors on loyalty in different geographic areas and contrast them with those already obtained. Finally, it is also critical for future studies to follow up on the newspaper industry’s strategy to offer information to the public, either by maintaining free access to news content or by charging for information, since loyalty factors could be different depending on the market strategy.

References

- Antepara-Basurto, J., Braganza, L. & López, W. (2019). Factores que construyen la lealtad a sitios web de prensa digital en el Ecuador. *Ecos de la Academia*, 10 (5), 39-52. Disponible en: <http://revistasojos.utn.edu.ec/index.php/ecosacademia/article/view/496/375>. Consultado: 22/02/2022
- Barbeito-Veloso, M. L., Perona-Páez, J. J., Rodríguez-Prieto, V. & Hernández-Ruiz, A. (2020). El tratamiento de los contenidos periodísticos y su influencia en la reputación de la prensa española: la campaña electoral de noviembre de 2019 como estudio de caso. *Estudios sobre el Mensaje Periodístico*, 26 (4), 1305-1324. <http://dx.doi.org/10.5209/esmp.69925>
- Belsley, D.A. (1991). A guide to using the collinearity diagnostics. *Computer Science in Economics and Management*, (4), 33–50. Disponible en: <http://fmwww.bc.edu/EC-P/wp190.pdf>. Consultado: 14/12/2021
- Casaló, L., Flavián, C. & Guinalíu, M. (2008). The role of perceived usability, reputation, satisfaction and consumer familiarity on the website loyalty formation process. *Computers in Human Behavior*, 24 (2), 325-345. <https://doi.org/10.1016/j.chb.2007.01.017>
- Caviggioli, F., Lamberti, L., Landoni, P. & Meola, P. (2020). Technology adoption news and corporate reputation: sentiment analysis about the introduction of Bitcoin. *Journal of Product & Brand Management*, 29 (7), 877-897. <https://doi.org/10.1108/JPBM-03-2018-1774>
- Choi, H.Y. & Lee, Y. K. (2020). The Effect of Travel Blog Quality on User Satisfaction and Intention to Revisit. *International Journal of IT-based Business Strategy Management*, 6 (1), 25-32 <http://dx.doi.org/10.21742/ijibsm.2020.6.1.04>
- Chun, T. Y., Lee, D. K., Park, N. H. (2020). The effect of marketing activities on the brand recognition, brand familiarity and purchase intention on SNS of franchise companies. *Journal of Asian Finance, Economics and Business*, 7 (11), 955-966. <https://doi.org/10.13106/jafeb.2020.vol7.no11.955>
- Dunne, Á., Lawlor, M. & Rowley, J. (2010) Young people's use of online social networking sites: a uses and gratifications perspective. *Journal of Research in Interactive Marketing*, 4 (1), 46-58. <https://doi.org/10.1108/17505931011033551>
- Flavián, C., Guinalíu, M. & Guerra, R. (2006). The influence of familiarity and usability on loyalty to online journalistic services: The role of user experience. *Journal of Retailing and Consumer Services*, 13 (5), 363-375. <https://doi.org/10.1016/j.jretconser.2005.11.003>
- Flavián, C. & Gurrea, R. (2006). The choice of digital newspapers: influence of reader goals and user experience. *Internet Research*, 16 (3), 231-247. <https://doi.org/10.1108/10662240610673673>

- Flavián, C. & Gurrea, R. (September 3-7, 2007). Analyzing the influence of websites attributes on the choice of newspapers on the internet. (E-Commerce and Web Technologies). 8 th International Conference, EC-Web 2007, Regensburg, Germany, 179-190. https://doi.org/10.1007/978-3-540-74563-1_18
- Goyanes, M. & Vara-Miguel, A. (2017). Probabilidad de pagar por noticias digitales en España. *El profesional de la información*, 26 (3), 488-496. <https://doi.org/10.3145/epi.2017.may15>
- Goyanes, M., Artero, J.P. & Zapata, L. (2018). The effects of news authorship, exclusiveness and media type in readers' paying intent for online news: An experimental study. *Journalism*, 22 (7), 1-19. <https://doi.org/10.1177/1464884918820741>
- Gunness, A. & Oppewal, H. (2020). How mindset and store familiarity impact online stockout responses. *International Journal of Retail & Distribution Management*, 48 (4), 326-347. <https://doi.org/10.1108/IJRDM-02-2018-0034>
- Hacek. (2017). The correlation of usability, familiarity, satisfaction and reputation with the loyalty of student users of news websites. *Media Studies*, 8 (15), 56-71. <https://doi.org/10.20901/ms.8.15.5/Primljeno:06.09.2016>
- Hair, J. F., Risher, J. J., Sarstedt, M., Ringle, C. M. (2019) When to use and how to report the results of PLM-SEM. *European Business Review*, 31 (1), 2-24. <https://doi.org/10.1108/EBR-112018-0203>
- Islam, T., Islam, R., Pitafi, A. H., Xiaobei, L., Rehmani, M. & Irfan, M., Mubarak, M. S. (2020) The impact of corporate social responsibility on customer loyalty: The mediating role of corporate reputation, customer satisfaction and trust. *Sustainable Production and Consumption*, 25, 123-135. <https://doi.org/10.1016/j.spc.2020.07.019>
- Jere, M. & Borain R. (April, 4-7, 2018). Willing seller, unwilling buyer: Factors influencing intention to pay for online news in South Africa. 2018 Annual Conference of the Emerging Markets Conference Board, Johannesburg, South Africa. University of the Witwatersrand, Wits Business School. Johannesburg, South Africa. Disponible en: https://www.researchgate.net/profile/SemonaPillay/publication/328216450_Pillay_S_2018_The_influence_of_vlogging_communities_on_brand_loyalty_Johannesburg_Emerging_Markets_Conference_Board_pp_127-139/links/5bbf338a299bf10101792e9a/Pillay-S-2018-The-influence-of-vloggingcommunities-on-brand-loyalty-Johannesburg-Emerging-Markets-Conference-Board-pp-127-139.pdf#page=109. Consultado: 17/01/2022

- Kous, K.; Pusnik, M.; Hericko, M.; Polancic, G. (2020). Usability evaluation of a library website with different end user groups. *Journal of Librarianship and Information Science*, 52 (1), 75-90.
<https://doi.org/10.1177/0961000618773133>
- Mahdani, M., Syahputra, H., Adam, M., Ikramuddin, I. (2020). The role of digital marketing platforms on supply chain management for customer satisfaction and loyalty in small and medium enterprises (SMEs) at Indonesia. *International Journal of Supply Chain Management*, 9 (3), 1210-1220.
Disponible en: <https://www.researchgate.net/publication/349367487>. Consultado: 04/05/2023
- Martínez, F. (October 4-5, 2010). La teoría de los usos y gratificaciones aplicada a las redes sociales. (Nuevos medios nueva comunicación). II Congreso Internacional 3.0, Salamanca, 461-474.
Disponibile en: <https://www.studocu.com/es/document/universidad-europea-delatlantico/teoria-de-la-comunicacion/teoria-de-usos-y-gratificaciones-aplicada-a-las-redessociales/8664379>.
Consultado: 17/01/2022
- Martínez-González, J. A., Álvarez-Albelo, C. D. (2021). Influence of site personalization and first impression on young consumers' loyalty to tourism websites. *Sustantibility*. 13 (3), 1-17.
<https://doi.org/10.3390/su13031425>
- Medina-Quintero, J. M., Ábrego-Almazán, D., Echeverría-Ríos, O. (2020). Satisfacción, facilidad de uso y confianza del ciudadano en el gobierno electrónico. *Investigación Administrativa* 50 (127), 23-41. Disponible en: <http://www.redalyc.org/articulo.oa?id=456065109004>. Consultado: 04/05/2023
- Nelson, J.L. & Kim, S.J. (2020). Improve Trust, Increase Loyalty? Analyzing the Relationship Between News Credibility and Consumption. *Journalism Practice*, 15 (3) 1-18.
<https://doi.org/10.1080/17512786.2020.1719874>
- Perona-Páez, J.J & Hernández-Ruiz, A. (2020). El tratamiento de los contenidos periodísticos y su influencia en la reputación de la prensa española: la campaña electoral de noviembre de 2019 como estudio de caso. *Estudios sobre el Mensaje Periodístico*, 26 (4) 1305-1324.
<https://doi.org/10.5209/esmp.69925>
- Ramos, R. (2015). A Critical View on the Relationship between Internet and the Disappearance of Paper Press: Threats and Opportunities of new Technologies for the Media. *International Technology, Science and Society Review*, 4 (2), 181-191. <https://doi.org/10.37467/gka-revtechno.v4.886>
- Rositas, J. (2005). Factores críticos de éxito en la gestión de calidad y su grado de presencia e impacto en la industria manufacturera mexicana. Tesis doctoral no publicada, Universidad Autónoma de Nuevo León, Monterrey, México. Disponible en: <https://cd.dgb.uanl.mx/bitstream/handle/201504211/16200/19827.pdf?sequence=1&isAllowed=y>. Consultado: 06/05/2023

- Salaverría, R. (2019). Digital Journalism: 25 years of research. Review article. *El profesional de la información*, 28 (1), 1-27. <https://doi.org/10.3145/epi.2019.ene.01>
- Segura-Anaya, A., Marta-Lazo, C. & Martínez (2014). Percepción de los jóvenes universitarios sobre el pago por contenidos informativos en Internet. *Periodística [Societat Catalana de Comunicació]*, 17, 47-64. <https://doi.org/10.2436/20.3008.02.42>
- Treviño, E. J. (2014). Regresión múltiple. En K. Sáenz & G. Tamez (Eds.), *Métodos y técnicas cualitativas y cuantitativas aplicables a la investigación en ciencias sociales*, (297-313). México, D. F.: Tirant Humanidades
- Vargas, F. R., De Esteban, J. & Moura, L. R. (2020) La relación entre la confianza y el compromiso y sus efectos en la lealtad de marca. *Revista de Métodos Cuantitativos para la Economía y la Empresa*. Universidad de Pablo de Olavide Sevilla. 131-151. Disponible en: <https://www.upo.es/revistas/index.php/RevMetCuant/article/view/3839>. Consultado: 04/05/2023
- Yuda-Bakti, I. G. M., Rakhmawati, T., Sumaedi, S., Widiyanti, T., Yarmen, M. & Astrini, N. J. (2020). Public transport users' WOM: an integration model of the theory of planned behavior, customer satisfaction theory, and personal norm theory. *Transportation Research Procedia*, 48, 3365-3379. <https://doi.org/10.1016/j.trpro.2020.08.117>