

NGO websites in the context of engagement with their audiences: a tool for analyzing the quality of their web portals

Los sitios web de las ONG en el contexto del relacionamiento con sus públicos: herramienta de análisis de la calidad de sus portales web¹



Beatriz Eugenia Quiceno-Castañeda. Full-time professor in the Faculty of Communications at the University of Medellín. She is a PhD cum laude in communications from the University of Malaga, Spain. She received a master's degree in international humanitarian action from Royal University of Groningen-Netherlands, and she is a specialist in organizational communication as well as a social communications journalist from the Autonomous University of the West in Cali, Colombia. Beatriz is an expert in public relations and communication for social change. She has been a visiting professor at the University of San Martin de Porres in Lima, Peru, a scholarship winner of the Programme Alban to pursue high-level studies in the European Union, and a member of the board of directors of the Colombian Association of Communication Programs and Faculties (AFACOM). She is a member of the GRECO and E-Virtual research groups. Beatriz has more than twenty scientific contributions that range from articles in high-impact journals to the academic coordination of books, book chapters, and presentations at international events.

University of Medellín, Colombia bquiceno@udemedellin.edu.co 0000-0003-3086-0215



Ana Catalina Quirós-Ramírez. Full-time professor in the Faculty of Communications at the University of Medellín. She currently serves as the Director of the Graphic Advertising and Communications Program. She is a publicist and holds a master's in marketing management. Ana is a doctoral candidate in communications from the University of Malaga, Spain. She is an expert in branding and advertising. She is a researcher for the Holographic Group: Studies in Graphic Advertising Communication catalogued by the Ministry of Science, Technology, and Innovation (MinCiencias). Her areas of research revolve around topics such as the differential approach to gender, persuasive communication, public relations, streaming platforms, and social networks. Ana is a member of the Colombian Association of Faculties, Schools, and Advertising Programs (AFAP), and she has been a juror of the court for the master's degree in design management at the University of Palermo, Argentina, and a juror for the Effie Awards Colombia. She has more than twenty scientific contributions that range from the organization of international conferences to articles in high-impact journals, book chapters, and presentations at international events, among others.

University of Medellín, Colombia acquiros@udemedellin.edu.co 0000-0002-7417-8499

How to cite this article:

Quiceno-Castañeda, B. E. and Quirós-Ramírez, A. C. (2024). NGO websites in the context of engagement with their audiences: a tool for analyzing the quality of their web portals. *Doxa Comunicación*, 38, pp. 417-436.

https://doi.org/10.31921/doxacom.n38a2028



This content is published under Creative Commons Attribution Non-Commercial License. International License CC BY-NC 4.0

¹ This article is the result of research from the doctoral thesis Organizaciones no gubernamentales, relaciones públicas, recaudación de fondos y postconflicto en Medellín (2021) as part of the interuniversity doctoral program in communications from the University of Malaga, Spain.

Received: 29/06/2023 - Accepted: 31/10/2023 - Early access: 09/11/2023 - Published: 01/01/2024

Abstract:

Data management is not something new in the field of communication and public relations. This article analyzed seven websites from an equal number of Non-Governmental Organizations (NGOs) in Colombia, starting with the question: How can NGOs improve the management of their websites to positively impact their public engagement strategy? The overall objective analyzes the quality of NGO websites to establish the link between quality and engagement with specific audiences. The methodological design is qualitative and combines techniques such as literature review and content analysis through the design and implementation of a matrix that allowed the quality of these sites to be evaluated. While website quality can be analyzed from different perspectives, this study presents a design that allows for measurement from a strategic perspective, considering several studies published by experts in the field. The main conclusion of this study is that most of the analyzed websites received a regular rating, which negatively affects their relationship with their audiences. Ultimately, this study contributes to the strategic management of digital communication that NGOs must undertake.

Keywords:

NGO; big data; public relations; data management; website quality.

Recibido: 29/06/2023 - Aceptado: 31/10/2023 - En edición: 09/11/2023 - Publicado: 01/01/2024

Resumen:

El manejo de datos no es algo nuevo en el ámbito de la comunicación y las relaciones públicas. Este artículo analizó 7 sitios web de igual número de Organizaciones No Gubernamentales en Colombia, partiendo de la pregunta ¿de qué manera las ONG pueden mejorar la gestión de sus sitios web para impactar positivamente su estrategia de relacionamiento con sus públicos? El objetivo general analiza la calidad de los sitios web de las ONG para establecer el vínculo entre calidad y relaciones con públicos específicos. El diseño metodológico es cualitativo y combinó técnicas como la revisión bibliográfica y el análisis de contenido a través del diseño y aplicación de una matriz que permitió evaluar la calidad de estos sitios. Si bien su calidad se puede analizar desde diferentes miradas, este estudio presenta un diseño que permite medirla desde la perspectiva estratégica atendiendo varios estudios publicados por expertos en el tema. La principal conclusión de este estudio es que la mayoría de los sitios web analizados obtuvieron una calificación regular, lo que las ha llevado a afectar de forma negativa la relación con sus públicos. Finalmente, este estudio aporta a la gestión estratégica de la comunicación digital que deben hacer las ONG.

Palabras clave:

ONG; big data; relaciones públicas; gestión de datos; calidad sitios web.

1. Introduction

1.1. The era of Big Data in public relations

The current communication environment, where globalization and the constant increase of interactions in the "specialized" and so-called digital communication platforms, is generating changes in the way organizations relate to their audiences of interest and therefore, it has highlighted the need for new, up-to-date public relations practices that will lead these organizations to achieve more effective communication with their audiences (Castillo-Esparcia et al., 2019; Wichels, 2014). This phenomenon confronts them with a new context in the current exercise of public relations: The large amount of information, known as Big Data, that is generated constantly at a high speed and that requires real-time management (Flores Cabello, 2020).

Data management is not something new in the field of communication, much less in the field of public relations. In fact, information management has been fundamental in the field of corporate reputation, where it is observed that internal communication, media relations, crisis communication, issues management, publicity, and relationships with investors are some of the activities most related to the management of massive data (Pereira Villazón et al., 2019).

In this way, the collection, storage, and analysis of large volumes of data plays a fundamental role segmenting the stakeholders, analyzing the environment, evaluating the effectiveness of communication processes, and responding efficiently to the needs of

stakeholders within the strategic management of communication in entities (Moreno et al., 2019). In highly complex organizations with sensitive agendas, the use of Big Data tools and the implementation of issue management strategies also allow the incorporation of advanced processes of active listening and evaluation, political and strategic decision-making, as well as the ability to manage content, automate tasks, and map relationships efficiently (Castillo-Esparcia et al., 2019). However, data management is a field that still has limited use by teams of corporate communication and public relations professionals; as is the case, for example, in disciplines related to marketing or advertising (Bustamante Alonso & Guillén Alonso, 2017; Miquel Segarra & Aced Toledano, 2020).

When we talk about Big Data, in the technological context, we are referring to one of the tools with the greatest impact on the digital transformation of the world today (Flores Cabello, 2020). Traditionally, Big Data has been approached conceptually, in terms of volume, speed, and variety; however, these characteristics have been accompanied by two other, more recent approaches, which are veracity, related to the reliability of sources, and value, which implies that data must be meaningful to support organizations in decision-making (Pereira Villazón et al., 2019; Bustamante and Guillén, 2017). This has given rise to the concept of Social Big Data, which focuses on the content of the data that remains public on these platforms, allowing the details of online communication to be recorded and offering various opportunities to analyze the information stored on websites (Suárez-Álvarez & García-Jiménez, 2021).

In this context, the digital maturity of an organization's communication team is necessary (Cuenca-Fontbona et al., 2020), taking as a starting point that in web 2.0, the fundamental objective of public relations remains the same: the management and construction of trust (Cuenca-Fontbona et al., 2022). This attribute, together with credibility and reputation, are differentiating criteria that must be in the DNA of third sector organizations (Balas Lara, 2008; Ortiz Rodríguez, 2021).

1.2. Non-Governmental Organization (NGO) websites as digital platforms for interaction

Websites as spaces with textual and visual content and hosted on servers on the network with a unique domain to make it easier for Internet users to access it are considered by experts to be the first point to give visibility to brands in the digital world (Coppola, 2023). With the arrival of the World Wide Web, the number of websites in the world quickly increased from one in 1991 to 1.88 billion in 2021(Mena Roa, 2021). This figure demonstrates the importance digital communication has had in all spheres of society in recent years.

Thus, in the context of public relations 2.0, corporate websites are places of interaction and dialogic communication (Capriotti et al., 2019) that allow organizations to approach their most relevant audiences as an additional and alternative option to social networks (Quintana Pujalte & Castillo Esparcia, 2019). This, without neglecting that both web and social networks are the platforms that are most analyzed through data management today (Miquel Segarra & Aced Toledano, 2020).

Non-Governmental Organizations have not been oblivious to digital dynamics, and they have found in public relations 2.0 new ways to reach their stakeholders and establish relationships of trust and commitment with them through more effective and direct communication (Delgado Rocha et al., 2020). For this reason, taking advantage of the digital world through its digital platforms implies a good level of interactivity and a clear call to action for this type of organization. These two aspects are relevant to evaluate the relationships that NGOs foster with their audiences on their websites (Quintana Pujalte, 2021).

A web portal offers numerous advantages for these organizations compared to traditional media. These advantages include very low communication costs, an information platform without space or time restrictions, and the possibility of interacting with users, thus favoring interaction with collaborators, socialization of their actions, accountability, and online donation of funds (Alonso Colchón, 2020). The latter is the call to action with the most presence on the websites of NGOs worldwide followed by actions such as "become a member" and "become a volunteer", which generates tools and resources that allow them to have high levels of contact with their target audience. (Quintana Pujalte, 2021).

The above shows the importance that websites have today in encouraging citizen support for social causes. The global trend in terms of monetary donations to support the various causes of third sector organizations indicates that 56% of NGOs in Latin America accept donations online through their websites (Nonprofit Tech for Good, 2019). In this sense, having a website that has the right features becomes an advantage for NGOs, understanding that the value of managing the data of these sites and digital platforms lies in the ability to use them, once processed, to transform them into practical information for people and convert information into knowledge (Bustamante Alonso & Guillén Alonso, 2017). Therefore, the exchange of information and data has created a new and valuable market where technological progress is the foundation of a knowledge society (Sánchez-Holgado et al., 2021).

Even though implementing a digital transformation process has high costs (Cuenca-Fontbona et al., 2020), NGOs cannot be oblivious to this phenomenon and should work towards a mature level of innovation. Sooner or later, they should start implementing tools for social business intelligence or social BI, aimed at the strategic use of data to improve internal aspects of the business and strengthen their governance processes under quality and efficiency criteria (Bustamante Alonso & Guillén Alonso, 2017). Accordingly, within the world of Big Data, companies such as Google are an example of the evolution of data management by providing tools such as Google Analytics, MapReduce, BigQuery and Knowledge Graph (Bustamante Alonso & Guillén Alonso, 2017).

The relationship between NGOs and their public can be analyzed from several perspectives; one of the most important is the issue of fundraising given the economic dependence that this type of organization has in order to fulfill its mission. In the same sense, in addition to prioritizing the implementation of digital transformation and innovation strategies as key facilitators to explore new partnership opportunities with the private sector and ensure continuity in fundraising actions, it is necessary for NGOs to work on reducing dependence on foreign subsidies and focus on diversifying their fundraising channels, an aspect for which websites play a fundamental role (Valderrama Montoya Mario Andrés & Orjuela Valderrama, 2022).

1.3. Website quality: analysis from a strategic conception

As mentioned above, websites are multiplying day by day, which is why evaluating their quality is a fundamental task for organizations in any area of the economy if they want to establish a direct dialogue with their audiences through them. The term website quality will be addressed from what Morales-Vargas et al, (2020) have called "web excellence," which refers to a website's ability to meet the expectations of its users and owners based on a series of quantifiable features. In that regard different organizations and authors have developed a variety of instruments that make it possible to evaluate, both quantitatively and qualitatively, the quality of a website. Google has the *test my site* tool that allows you to evaluate aspects such as site speed on both mobile and desktop

computers, image quality and the degree of responsiveness, among other items (Clouding.io, 2016), on a scale of 0 to 100, rating the status of websites, in terms of "poor," "decent," or "good."

Notwithstanding, evaluating the quality of a website is still a concept under construction and there are multiple interpretations associated with this notion (González López et al., 2013) that can be given from strategic, technical, and content elements inherent to websites (Morales-Vargas et al., 2020). That of which can be evaluated from the perspective of both programmers and end users (Anusha, 2014) and through user studies, focused on user experience, and expert studies, designed and applied by information professionals (Codina & Pedraza-Jiménez, 2016).

Previous investigations such as those of Morales-Vargas et al, (2020) analyze the scientific production that collects key concepts around the measurable attributes that allow the evaluation of quality on websites. Other authors like Pereira Villazón et al. (2019) and Bustamante and Guillén (2017) do this in terms of the quality of information management. Table 1 summarizes the findings of these investigations below:

Table 1. Measurable attributes in the quality of a website

Dimensions	Author
Usability, efficiency, and credibility	Anusha, 2014
Content, service, and technique	Rocha (2012)
Content, design, organization, and ease of use	Hasan &Abuelrub (2011)
Accuracy, reliability, and validity	Buendía Castro & Urueña Gómez-Moreno, 2010
Accuracy, credibility, honesty, and trust	Cuenca-Fontbona et al., 2022
Veracity and value	Pereira Villazón et al., 2019; Bustamante and Guillén, 2017.

Source: own elaboration from Buendía Castro & Urueña Gómez-Moreno, 2010; Bustamante and Guillén, 2017; Cuenca-Fontbona et al., 2022; Morales-Vargas et al., 2020; Pereira Villazón et al., 2019

Looking at the dimensions of analysis presented in Table 1, the authors agree on measurement attributes such as content, accuracy, credibility (related to veracity and reliability) and design. In this line of argument, it is important to highlight that from the strategic conception it may be the case that the website is well developed according to technical or functional criteria and still does not fulfill the purpose for which it was created and, therefore, fails in its objective (Sanabre et al., 2018).

From the studies formulated and applied by communication professionals, this article contributes to the analysis of NGO websites from a strategic and content perspective; leaving aside technical and programming elements to the discussions opened by other authors regarding the quality of websites.

2. Methodology

2.1. Objectives

The objective is based on the research question: How can the NGOs analyzed improve the management of their websites to positively impact their relationship strategy with their audiences?

The general objective is to evaluate the quality of Non-Governmental Organization websites to establish the link between quality and engagement with specific audiences. In this regard, two specific objectives are proposed:

- SO1. Design a matrix that would allow the quality of websites to be evaluated in terms of accuracy, reliability, and validity.
- SO2. Apply the website quality analysis matrix to a group of Colombian NGOs.

2.2. Methodological design

The methodology developed to achieve the proposed objectives was qualitative in nature. Techniques such as literature review and content analysis were used to meet the proposed objectives.

The literature review was used to verify aspects related to the evaluation of the quality of the websites, which allowed the selection of the categories and indicators to be evaluated. With this input, we proceeded to build the matrix for the content analysis of the NGO websites.

Content analysis was chosen as the basis for data extraction, processing, and analysis, transcending from the strictly quantitative to the strategic (Arango-Lopera. et al., 2022), recognizing, in this way, the concrete expression of the phenomenon studied. Regarding the approach to the body of data, the qualitative approach was prioritized to make for a critical reading of the data in the context of the communication process of which they make part.

The time span of the research that gives rise to this article is framed within the years 2017 to 2020. Data was collected between the second half of 2019 and the first half of 2020. During this time, the entire communication strategy of the 7 selected NGOs was thoroughly analyzed. The data was collected through direct viewing of the NGO websites in the sample.

The criteria under which these organizations were selected were:

- They had direct contact with the beneficiaries to be able to analyze the communication they had with them.
- Their headquarters were in the city of Medellín, Colombia because this region brings together a significant percentage of NGOs at the national level.
- They were members of the Antioquia Federation of NGOs because it guarantees responsibility and signifies that they are permanently controlled (Author 1, 2021).

In this manner, the sample of NGOs is defined as:

Code **NGO Analyzed** NGO 1 Corporación Región NGO 2 Escuela Nacional Sindical NGO3 Fundación las Golondrinas NGO 4 Fundación Hogares Claret NGO 5 Instituto Popular de Capacitación NGO 6 Corporación Proyectarte NGO 7 Corporación Vamos Mujer

Table 2. Delimitation of the research sample

2.3. Materials and methods

2.3.1. Literature review

The Ebsco and Scopus databases were used for the literature review. In the first, 152 academic publications were found and in the second, 105 results of scientific publications were obtained. This allowed us to have sufficient theoretical knowledge linked to the central theme of this research. Table 3 presents the systematized review that was carried out using this research technique:

Table 3. Parameters configured in the literature review on website quality

Databases used	Ebsco y Scopus
Subject areas	Communication and social sciences
Search terms	*Website AND Quality* *Websites* *Website Evaluation* *Information Analysis* *Quality Evaluation* *Site Design* *User Experience* *Content Analysis* *Limited to Content Categories* *Design Quality* *Web Design* *World Wide Web* *Website Design*
Language	English Spanish

Document type	Article Conference paper Book chapter Review	
Date of publications	2018-2023	
Date of inquiry	Updated June 2023	
Total references	257	

2.3.2. Content analysis

Taking into account the information selected in the literature review, which was included in the theoretical framework of this text, the instrument for content analysis was constructed and applied to the 7 websites of the NGOs in the sample.

Taking as a starting point the attributes presented in Table 1, the following dimensions of analysis were defined for the matrix: content, accuracy, credibility, and design based on Buendía Castro & Urueña Gómez-Moreno, 2010; Bustamante and Guillén, 2017; Cuenca-Fontbona et al., 2022; Morales-Vargas et al., 2020; Pereira Villazón et al., 2019.

2.3.3. The matrix

The design of the matrix was carried out under objective, systematic, reliable, and verifiable parameters for the treatment of information in content analysis (Berelson, 1952; Krippendorff, 1990). This matrix evaluates websites from a strategic and content perspective and is the result of the literature review as mentioned above.

In its design, four categories of analysis were defined: authorship, content, design, and credibility. These categories, in turn, were operationalized in 14 indicators as shown in Table 4.

Table 4. NGO Website Quality Assessment Matrix

QUALITY ASSESSMENT MATRIX OF NGO WEBSITES		
Categories and Indicators Attributes analyzed		
AUTHORSHIP		
Author		
Reputation and experience		

Form of contact – email, address, telephone number – with the organization, company, or person responsible for the site	□Yes □ No
Feedback - suggestions, complaints, requests-for the author	□Yes □No
URL (Domains)	Personal ~, %, users, members, people, .name General: .com, .mil, .net, .edu, .gov, .org, int. Territorial or geographic domains: English-speaking countries Spanish-speaking countries French-speaking countries
Copyright	□Yes □No
CONTENT	
Grammatical accuracy	Free of grammatical, typographical, and spelling errors
Objectivity	It evidences the point of view of the author or organization responsible for the site. Advertisements: Advertiser's influence on the content of the information clearly cited. Corporate or non-profit sponsors clearly cited: Existence of links to the sites of corporate or non-profit sponsors in order to be able to learn from them.
Audience	Specialized communication Semi-specialized communication Communication disclosure
DESIGN	
Navigational aids	Site map or index on the homepage Hyperlinks: Link to homepage For hierarchically arranged sites, link to the page one level higher in the hierarchy Available shortcuts Internal search engine Help section Browser title Clearly indicates the source of the site from which it comes Clearly describe the contents of the page It's short and unique to the site

Accessibility	Ease of access In case additional software is needed, ease of access to download Links work well Access restrictions (registration, password, etc.) Cost of access Site stability If you change, automatic transfer to the new site is provided
Presentation and management of information	Existence of moving graphics and images that add value to the text Logical and clear presentation and layout Advertisements: Properly used Distract the user
CREDIBILITY	
Veracity	Considerable and valid information according to the subject matter
Accuracy	Reference to other reliable sources of information
Value	Information provides support for decision-making

Source: own elaboration from Buendía Castro & Urueña Gómez-Moreno, 2010; Bustamante and Guillén, 2017; Cuenca-Fontbona et al., 2022; Pereira Villazón et al., 2019

For the measurement of the categories, a maximum score of 5.0 was defined using the researchers' criteria. Through the definition of an ordinal scale of values, the information was classified into exclusive and hierarchical categories where the evaluation ranges obey the terms "greater than" or "less than" (López & Fachelli, 2015).

An insufficient result gets a score lower than 3.0; an acceptable result scores less than 4.0; a good result scores less than 4.5 and an excellent result gets a score higher than 4.4 as explained by the following value scale:

Table 5. Ordinal scale of values in the evaluation of websites

WEBSITE RATING SCALE				
Excellent	Good	Acceptable	Insufficient	
5.0 - 4.5	4.4 - 4.0	3.9 - 3.0	2.9 - 0.0	

Source: own elaboration

Each of the categories was assigned an absolute value of 1.25, the result of dividing the maximum evaluation of 5.0 by 4 categories that have the same weight within the final evaluation. Thus, the absolute value of each category is evaluated according to the number of indicators it contains as explained in Table 6.

Table 6. Absolute values per indicator

ABSOLUTE VALUES PER INDICATOR				
Category Number of indicators		Value of indicator		
Authorship	6	0.2083		
Content	3	0.416		
Design 2 0.62		0.625		
Credibility	3	0.416		

Once the quality assessment matrix was applied to the websites of the 7 NGOs, the information collected was systematized in Excel and processed through percentage and ordinal analysis.

3. Results

This section will show the results obtained from the application of the analysis matrix to the 7 NGOs analyzed. Table 7 and Figure 1 show the values obtained by each of them, based on the four categories established and explained in detail in the methodology section of this article.

Table 7. Results of the quality analysis of the selected websites

	RESULTS OF THE QUALITY ANALYSIS OF THE SELECTED WEBSITES							
CATEGORY	INDICATOR	NGO1	NGO2	NGO3	NGO4	NGO5	NGO6	NGO7
AUTHORSHIP	Author	0,2083	0,2083	0,2083	0,2083	0,2083	0,2083	0,2083
	Reputation and experience	0,2083	0,2083	0	0	0,2083	0,2083	0
	Form of contact	0,2083	0,2083	0,2083	0,2083	0,2083	0	0,2083
	Feedback-suggestions	0,2083	0,2083	0,2083	0	0,2083	0	0,2083
	URL	0,2083	0,2083	0	0	0,2083	0	0,2083
	Copyright	0	0	0	0,2083	0	0	0,2083

	Grammatical accuracy	0,416	0,416	0	0,416	0,416	0	0,416
CONTENT	Objectivity	0,416	0,416	0	0,416	0,416	0	0,416
	Audience	0,416	0,416	0	0,416	0,416	0,416	0,416
DESIGN	Navigational aids	0	0	0	0	0	0	0
DESIGN	Accessibility	0,625	0	0	0	0,625	0	0,625
	Veracity	0,416	0,416	0	0,416	0,416	0	0,416
CREDIBILITY	Accuracy	0,416	0,416	0	0,416	0	0	0
	Value	0,416	0,416	0,416	0	0,416	0	0,416
ABSOLUTE VALUE		4,2	3,5	1,0	2,7	3,7	0,8	3,7
PERCENTAGE VALUE		83%	71%	21%	54%	75%	17%	75%

The website for NGO 1 achieved a level of good with a score of 4.2. The websites for NGOs 2, 5, and 7 achieved a level of acceptable, with a rating of 3.5 and 3.7 respectively. At the level of insufficient are the websites for NGO 4 with 2.7, NGO 3 with 1.0, and NGO 6 with 0.8.

It is evidenced that NGO 1 obtains an absolute value of 4.2, which implies an 83% achievement rate in the categories analyzed. This means that this website ranks on the scale defined as good.

NGOs 2, 5 and 7 obtained scores between 3.5 and 3.7, which percentage wise indicates an achievement between 71% and 75% in the categories analyzed, placing them on the scale defined as acceptable.

NGO 4 scores 2.7, NGO 3 scores 1.0, and NGO 6 scores 0.8 with percentages ranging between 54% and 17%, which places them in the category defined as insufficient.

The data analyzed show that 86% of the websites of the NGOs analyzed reached a level of evaluation between acceptable and insufficient according to the proposed rating scale. Only 14%, which corresponds to one NGO, achieved a level of good and no NGO achieved the level of excellent.

Figure 1 outlines the absolute value and the percentage value within the evaluation of the quality of the websites of each of the NGOs studied.

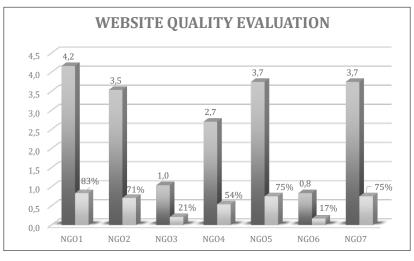


Figure 1. Results of the quality assessment of the selected websites

3.1. Results by category

In this section, the data will be analyzed according to the ordinal scale used to assess the quality of websites.

3.1.1. Authorship category

In the authorship category with 6 indicators, the results show that the only indicator met by the 7 NGO websites in the sample is that of author. This is followed by form of contact that 6 of the 7 websites meet; feedback and suggestions are met by 5 sites; while 4 comply with the URL indicator and only 2 out of 7 comply with the copyright indicator.

In this category, none of the websites analyzed achieve an absolute value of 1.25.

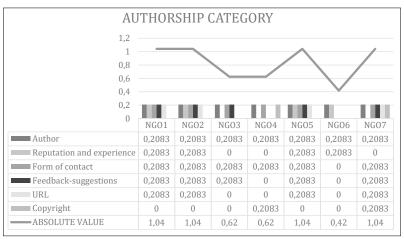


Figure 2. Website authorship category analysis

3.1.2. Content category

In the content category, composed of 3 indicators, the data shows that grammatical accuracy is met by 5 of the 7 NGOs analyzed; the objectivity indicator is also evident in 5 NGOs; finally, the audience indicator is met by 6 NGOs.

In this category, 5 of the observed websites reach an absolute value of 1.25 as shown in Figure 3.

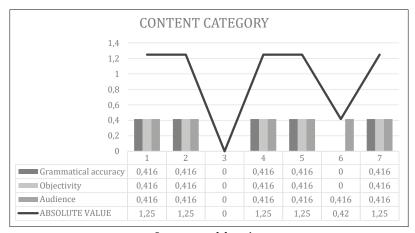


Figure 3. Website content category analysis

Source: own elaboration

3.1.3. Design category

In the design category, with 2 indicators, the data show that the navigation aids indicator is not met by any of the websites analyzed, while the accessibility indicator is met by only 3 of the 7 sites. In this category, none of the websites reaches an absolute value of 1.25 as expanded on in Figure 4.

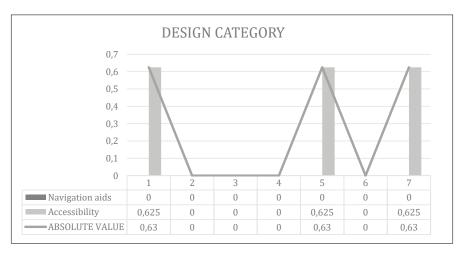


Figure 4. Website design category analysis

Source: own elaboration

3.1.4. Credibility category

This last category is made up of 3 indicators. The data obtained shows that 5 of the 7 websites in the sample comply with the indicators of veracity and value. While on the other hand, only 3 websites meet the accuracy indicator. In this category, only two of the websites analyzed reach an absolute value of 1.25 as shown in Figure 5.

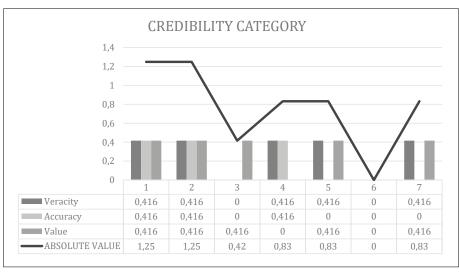


Figure 5. Website credibility category analysis

4. Discussion and conclusions

This article analyzed a total of 7 websites from the same number of NGOs in Colombia starting from the question: How can NGOs improve the management of their websites to positively impact their relationship strategy with their audiences? The general objective is to evaluate the quality of the websites of Non-Governmental Organizations to establish the link between quality and relations with specific audiences.

Although the quality of websites can be analyzed from different perspectives, both qualitative and quantitative, this article presented a design that allows it to be measured from a strategic point of view based on several studies published by experts in the field.

The quality of the websites analyzed is between fair and insufficient, significantly damaging the relationship between these entities and their audiences. If we take into consideration the definition of website quality proposed by Morales-Vargas et al (2020) who define it as the capacity of these spaces to meet the expectations of users and owners, it can be concluded that the websites analyzed lack the necessary quality to meet these expectations.

The first specific objective of this study was to design a matrix to assess the quality of websites in terms of accuracy, reliability, and validity. In this regard, it is concluded that, when applying the matrix, the category with the lowest score is design. Taking into account the proposal of Coppola (2023) regarding the definition of websites as spaces of textual and visual content that are increasingly entrenched as the first meeting point between brands and their audiences, not having a good design for the website prevents the response that is expected from the people who navigate these spaces; this is in close relation to the concept of user

experience proposed by Codina y Pedraza-Jiménez (2016). On the other hand, the best-rated category is that of content. This data allows us to conclude that the communicators of the NGOs of which the websites were analyzed have greater competencies to manage content, automate tasks, and manage relationships; this in accordance with Castillo-Esparcia *et al* (2019) when they refer to the implementation of issue management strategies of communication teams in highly complex organizations. On the other hand, communicators must improve in aspects related to data design and management as proposed by Bustamante-Alonso and Guillen-Alonso (2017) and Miquel-Segarra and Aced-Toledano (2020) referring to the reduced use of these aspects by communicators.

The second specific objective was to apply the website quality analysis matrix to a group of Colombian NGOs. In this regard, it is concluded that the quality of the websites of the NGOs analyzed is far from having the quality set by the categories and indicators proposed in the matrix that was designed and applied. In addition, given the extensive literature that is found in relation to the analysis of the quality of websites, strategic design contributes to the correct formulation of digital communication strategies for Non-Governmental Organizations.

Finally, it can be concluded that most of the NGOs analyzed obtained a rating between fair and insufficient for their websites. In this regard, the methodological commitment of this study with the design of the analysis matrix from a strategic point of view, can contribute to reversing this trend, contributing to the improvement of the management of their websites.

The limitation of this study is that it is focused on a group of NGOs in Colombia, but the researchers see potential for the matrix to be applied to other entities in other regions of the world. Future studies may be directed towards the proper planning of the digital communication of NGOs involving web and social networks.

5. Acknowledgments

This article has been translated into English by Bridget Marie Flynn, whom we thank for her work.

6. Specific contributions of each author

	First and Last Names
Conception and design	Beatriz Eugenia Quiceno-Castañeda
Methodology	Beatriz Eugenia Quiceno-Castañeda Ana Catalina Quirós-Ramírez
Data collection and analysis	Beatriz Eugenia Quiceno-Castañeda Ana Catalina Quirós-Ramírez
Discussion and conclusions	Beatriz Eugenia Quiceno-Castañeda Ana Catalina Quirós-Ramírez
Drafting, formatting, version review and approval	Beatriz Eugenia Quiceno-Castañeda Ana Catalina Quirós-Ramírez

7. Conflict of interests

The authors declare that there is no conflict of interest contained in this article.

8. Bibliographic references

Alonso Colchón, P. C. (2020). *La comunicación de las ONG españolas a través de su sitio web* [Tesis Doctoral, Universidad Complutense de Madrid]. https://bit.ly/3tTyT17

Anusha, R. (2014). A Study on Website Quality Models. *International Journal of Scientific and Research Publications*, 4(12). https://bit.ly/3QG7wk5

Arango-Lopera, C. A., Montoya-Zuluaga, A., y Aguilar-Rodríguez, D. (2022). Explorar lo sensible, mediar lo invisible. Estado de la cuestión de la investigación-creación en lo audiovisual. *Signo y Pensamiento, 41*. https://doi.org/10.11144/Javeriana.syp41.esmi

Balas Lara, M. (2008). El reto de la comunicación en el tercer sector no lucrativo. *Revista Española Del Tercer Sector*, 8, 17–37. https://bit.ly/3MsR58t

Berelson, Bernard. (1952). Content Analysis in Communication Research (III). Free Press, Glencoe.

Bustamante Alonso, N. B., & Guillén Alonso, S. T. (2017). Un acercamiento al Big Data y su utilización en comunicación. *Mediaciones Sociales*, *16*, 115–134. https://doi.org/10.5209/meso.58112

Capriotti, P., Zeler, I., & Oliveira, A. (2019). Comunicación dialógica 2.0 en Facebook. Análisis de la interacción en las organizaciones de América Latina. *Revista Latina de Comunicación Social*, 74, 1094–1113. https://doi.org/10.4185/RLCS-2019-1373

Castillo-Esparcia, A., Álvarez-Nobell, A., & Barroso, M. B. (2019). 'Issues' y 'big data' en la gestión de relaciones públicas. El caso de la implementación del nuevo sistema de tratamiento de residuos "Recuperando Valor" en Córdoba, Argentina. *Trípodos*, 45, 73–87. https://bit.ly/3MtcAFY

Clouding.io. (2016, July 13). Test my site: la herramienta de Google para testear tu website. https://bit.ly/3SuZpbH

Codina, L., & Pedraza-Jiménez, R. (2016). Características y componentes de un sistema de análisis de medios digitales: el SAAMD. En R. Pedraza-Jiménez, L. Codina, & J. Guallar. (Eds.), *Calidad en sitios web: Método de análisis general, e-commerce, imágenes, hemerotecas y turismo* (pp. 15–40). Editorial UOC.

Coppola, M. (2023). Qué es un sitio web, para qué sirve y cuáles son sus elementos. Hubspot. https://bit.ly/3FHL8R9

Cuenca-Fontbona, J., Compte-Pujol, M., & Zeler, I. (2022). The strategy applied to Public Relations in the digital environment: The Spanish case. *Revista Latina de Comunicacion Social*, 80, 162–182. https://doi.org/10.4185/RLCS-2022-1537

Cuenca-Fontbona, J., Matilla, K., & Compte-Pujol, M. (2020). Digital transformation of public relations and communication departments of a sample of Spanish companies. *Revista de Comunicacion*, *19*(1), 75–92. https://doi.org/10.26441/RC19.1-2020-A5 Delgado Rocha, J., Méndez, A. R., & Xavier Hidalgo, B. (2020). Encuentros y desencuentros entre las ONG y la juventud, en la web 2.0. *Razón y Palabra*, *24*(108), 345–378. https://doi.org/10.26807/rp.v24i108.1670

Flores Cabello, L. M. (2020). La era del big data en las relaciones públicas y su práctica profesional en Perú. *Anagramas Rumbos y Sentidos de La Comunicación*, 19(37), 147–165. https://doi.org/10.22395/angr.v19n37a8

González López, Ó. R., Bañegil Palacios, T. M., & Buenadicha Mateos, M. (2013). El índice cuantitativo de calidad web como instrumento objetivo de medición de la calidad de sitios web corporativos. *Investigaciones Europeas de Dirección y Economía de La Empresa*, 19(1), 16–30. https://doi.org/10.1016/j.iedee.2012.07.004

Hasan, L., & Abuelrub, E. (2011). Assessing the quality of web sites. *Applied Computing and Informatics*, 9(1), 11–29. https://doi.org/10.1016/j.aci.2009.03.001

Krippendorff, K. (1990). Metodología de análisis de contenido Teoría y práctica. Ediciones Paidós Ibérica, S.A.

López, P., & Fachelli, S. (2015). La medición de los fenómenos sociales. *Metodología De La Investigación Social Cuantitativa*, 35. https://doi.org/10.1017/CBO9781107415324.004

Miquel Segarra, S., & Aced Toledano, C. (2020). Big data: la revolución de los datos y su impacto en la comunicación corporativa. *Comunicación y Hombre, 16,* 115–132. https://bit.ly/3Mti3N3

Morales-Vargas, A., Pedraza-Jiménez, R., & Codina, L. (2020). Calidad en sitios web: análisis de la producción científica. *Profesional de La Informacion*, 29(5), 1–21. https://doi.org/10.3145/epi.2020.sep.08

Moreno, Á., Athaydes, A., & Navarro, C. (2019). Uso del big data y de la automatización entre los profesionales de las relaciones públicas en Brasil. *ComHumanitas: Revista Científica de Comunicación*, 9(2), 85–100. https://doi.org/10.31207/rch.v9i2.167

Nonprofit Tech for Good. (2019). Global NGO Technology Report 2019. Funraise, https://bit.ly/46YrFrA

Ortiz Rodríguez, H. (2021). Comunicación Integral y transparencia en las organizaciones del tercer sector Integral Communication and transparency of the third sector organizations. *Revista Internacional de Relaciones Públicas, 21*(21), 05–26. https://doi.org/10.5783/RIRP-21-2021-02-05-26

Pereira Villazón, T., Portilla Manjón, I., & Rodríguez Salcedo, N. (2019). Big data y Relaciones Públicas. Una revisión bibliográfica del estado de la cuestión. *Revista de Comunicación*, *18*(1), 151–165. https://doi.org/10.26441/RC18.1-2019-A8

Autora 1, 2021

Quintana Pujalte, L. (2021). Relaciones públicas y tecnología: la interactividad como punto de encuentro entre las ONG y sus públicos. *Revista Internacional de Relaciones Públicas*, 21(21), 49–68. https://doi.org/10.5783/RIRP-21-2021-04-49-68

Quintana Pujalte, L., & Castillo Esparcia, A. (2019). Relaciones públicas avanzadas: estudio del nivel de interactividad de los Think Tanks destacados en el uso de redes sociales. *International Journal of Latest Research in Humanities and Social Science*, 02(08), 44-54

Rocha, Á. (2012). Framework for a global quality evaluation of a website. *Online Information Review*, 36(3), 374–382. https://doi. org/10.1108/14684521211241404

Sanabre, C., Pedraza-Jiménez, R., & Codina, L. (2018). WebSite Canvas Model: A visual proposal for strategic website conception. *Revista Espanola de Documentacion Cientifica*, 41(4). https://doi.org/10.3989/redc.2018.4.1542

Sánchez-Holgado, P., Marcos-Ramos, M., & Domínguez, B. G. de G. (2021). Gender differences regarding spanish citizens' perception of data science. *Doxa Comunicacion*, 33, 235–256. https://doi.org/10.31921/doxacom.n33a1126

Statista. (2021, August 6). ¿Cuántos sitios web hay en el mundo?. https://bit.ly/49mUYFB

Suárez-Álvarez, R., & García-Jiménez, A. (2021). Research into the behaviour of minors and young people on social networks using social big data techniques. *Doxa Comunicacion*, 2021(32), 95–113. https://doi.org/10.31921/doxacom.n32a5

Valderrama Montoya Mario Andrés, & Orjuela Valderrama, R. F. (2022) *Propuesta de diseño de un mecanismo innovador de recaudación de fondos digitales por donaciones para el área de movilización de recursos del sector privado en UNICEF Colombia.* [Tesis de Maestría, Pontificia Universidad Javeriana]. https://bit.ly/3Qln4Zo

Wichels, S. (2014). Nuevos desafíos en Relaciones Públicas 2.0: La creciente influencia de las plataformas de online review en Turismo / New Challenges in Public Relations 2.0: The growing influence of online review platforms in Tourism. *Revista Internacional de Relaciones Públicas, IV*(7), 197–216. https://doi.org/10.5783/RIRP-7-2014-12-197-216