

Methodology for studying digital public spaces produced by institutions

Metodología para estudiar los espacios públicos digitales producidos por las instituciones

Metodologia de estudo dos espaços públicos digitais produzidos pelas instituições

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ABSTRACT | We present a proposal of methodology to study the institutional websites considered as digital public spaces. The theoretical foundation comes from the discussions on public communication and citizenship, articulated with a sociocultural approach to the study of the Internet. It consists of a mixed, tested methodology that incorporates evaluative metrics, a qualitative approach and a social intervention strategy. The article ends with a discussion reflecting on its scope and limitations, as well as a conclusion that establishes the nature of its contribution.

KEYWORDS: methodology; Internet; public space; public communication; citizenship.

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RESUMEN | Se presenta una propuesta de metodología para estudiar los sitios web institucionales considerados como espacios públicos digitales. La fundamentación teórica procede de las discusiones sobre la comunicación pública y la ciudadanía, articuladas con un enfoque sociocultural para el estudio de Internet. Consiste en una metodología mixta, probada, que incorpora métricas evaluativas, una aproximación cualitativa y una estrategia de intervención social. El artículo finaliza con una discusión en la que se reflexiona sobre sus alcances y limitaciones, así como una conclusión en la que establece la naturaleza de su aporte.

PALABRAS CLAVE: metodología; Internet; espacio público; comunicación pública; ciudadanía.

SUMÁRIO | É apresentada uma metodologia proposta para o estudo de sites institucionais como espaços públicos digitais. O fundamento teórico vem das discussões sobre comunicação pública e cidadania, articuladas com uma abordagem sociocultural para o estudo da Internet. Ela consiste de uma metodologia mista e testada que incorpora métricas de avaliação, uma abordagem qualitativa e uma estratégia de intervenção social. O artigo termina com uma discussão refletindo sobre seu escopo e limitações, assim como uma conclusão estabelecendo a natureza de sua contribuição.

PALAVRAS-CHAVE: metodologia; Internet; espaço público; comunicação pública; cidadania.

INTRODUCTION

The general aim of this article is to present a methodological proposal for the study of digital public spaces created by institutions. The proposal is based on an evaluative formulation of three categories: informative, transactional and communicative, which are constitutive of a sociocultural approach to the study of the Internet (Fuentes, 2001; Martínez & Thiri6n, 2005; Polat, 2005; Wolton, 2000). It includes a qualitative approach to the producing actors in order to identify the productive logics and is complemented by an intervention with civil society organizations in order to experience the actual effectiveness of digital spaces. Its theoretical postulates are derived from an approach that takes into account public communication (Demers & Lavigne, 2007) on the one hand and citizenship (Marshall & Bottomore, 2005) on the other. The proposal can be applied partially or fully depending on research needs and can even be combined with other proposals.

The convergence of practices for the exercise of public administration in our technological age, such as electronic, open and smart government, digital citizenship or technopolitics, has contributed to the creation of digital public spaces. These are areas of political participation in cyberspace where the three social spheres meet: the state, the market and civil society.

Digital public spaces have the common denominator that they use the Internet as a platform for interaction. Because of their purpose, they are used in a very wide variety, as wide as the ability of people to form virtual communities from which we inhabit them. It is necessary to establish an analytical framework to achieve precision and methodological rigor, knowing that the richness of diversity is sacrificed to accommodate specificity. In this work, the analytical framework is based on the selection of digital public spaces created by public institutions.

The proposal is based on the idea that, in a democratic context, State institutions are the guarantors of citizenship (Marshall & Bottomore, 2005; Ram6rez, 1995). Within the concept of electronic and open government, these institutions are obliged to have websites that meet the requirements of transparency, accountability, transactional activities, contact with citizens and, ultimately, social communication (Negrete Huelga, 2022).

These premises lead us to consider that institutional websites embody the ultimate purpose of the institutions that produce them: to ensure the exercise of citizenship through the resources provided in their architecture. In this sense, they should be spaces that can be appropriated and inhabited by citizens, because

The goal of a smarter state is to provide the theory and a practical model for the transition from mere transparency and passive citizenship to a world in which citizenship is active and institutions are “always open” (Noveck, 2017, p. 29).

These formulations are ideal. The empirical approach offers the opportunity to examine how particular contexts or cases move away from the ideal approaches and to understand why this is the case. Given the normative statements, it becomes relevant to specify under which conditions, through which logics of symbolic production, through which practices and with which intentions institutional digital public spaces are created.

This proposal consists of a mixed approach combining a categorized metric of resources provided on institutional websites, a qualitative approach through in-depth interviews with institutional website developers and finally a social intervention work with citizen organizations. The proposal has already been tested with satisfactory results presented in De-León-Vázquez (2015) and De-León-Vázquez and Medina (2013).

It can be noted that the strategy was originally developed to study online citizen participation through the institutional websites of the city of Aguascalientes, Mexico. The aim was to find out whether the resources provided there encourage or inhibit participation. The study included a comparative phase with the city of Quebec, Canada, to compare a case in democratic transition (Mexico) with another with a consolidated democracy (Canada).

BACKGROUND AND THEORETICAL APPROACHES

The study of institutional communication via the Internet, especially via websites, is limited. The literature review shows that interest in this topic – which was relevant at the beginning of the 21st century due to the emergence of e-government and open government– has declined in favor of new problems, such as the use of socio-digital networks for various forms of citizen and institutional participation. This is confirmed by Jiang and colleagues (2022), who find a decline in studies on e-government in a bibliometric study, while new problematizations point to smart government (SMARTGOV) and other categories (Hujran et al., 2021).

While socio-digital networks are an important extension of institutional communication, websites represent their official presence on the Internet. They represent the space that anchors the communicative acts in the three categories of this approach (informational, transactional and communicative)

to then unfold in other spaces such as socio-digital networks. It is necessary to continue their study and observe their processes of change, which are not only technical but also cultural. These websites, which we will also refer to as portals, form our unit of analysis and are what we call digital public spaces produced by institutions.

The study of online institutional communication includes practices such as adherence to transparency and accountability, understood as access to information requested by citizens through portals (Lara et al., 2013). It is complemented by measures such as direct or mediated communication with citizens in various forms, the management of online procedures or transactions, and citizen consultation and participation. It is also related to other concepts that are close to it or cross it, such as e-government, which consists of interactions between citizens and public administrations mediated by information technologies (Criado & Gil-García, 2013), open government, deliberative democracy, public outreach and citizen participation, to name but a few.

Recent academic production has made various contributions. The most studied topic is the analysis of electronic and open government, examining the transactional dimension, digital cities, transparency and accountability (Azamela et al, 2022; Briceño Brock, 2019; Georgiou, 2019; Mensah et al, 2020; Negrete Huelga, 2022; Ochoa Chaves et al, 2020; Raca et al, 2022; Rosenberg, 2019, 2021; Vaccaro et al, 2021; Viñarás-Abad et al, 2017).

Another important topic is the study of the use of information and communication technologies (ICTs) by governments to manage, promote and represent citizen participation (González Galván et al, 2021; Gonzalez-Galvan & Espín-Espinoza, 2020; Hansson & Page, 2022; Hao et al, 2022; Haro-deRosario et al, 2018; de Quadros & Bastos de Quadros Junior, 2015). More recently, the inclusion of new trends such as datification and algorithms in the management of public administration has been addressed (Chaudhuri, 2022; Reutter, 2022), as has the evaluation of public relations (Cuenca-Fontbona et al., 2022).

The COVID-19 pandemic stimulated studies that addressed the role of state institutions and the public's response to the outbreak from a communication perspective, particularly the promotion of reliable information and the use of vaccines (Adiyoso, 2022; Cárdenas et al, 2021; García et al, 2021; Peña-Fernández et al, 2022; Wang & Yao, 2022).

The starting point for this proposal is the citizenship approach, which, according to Marshall and Bottomore (2005), corresponds to a founding process of the social sphere based on the exercise of rights and the fulfillment of duties

recognized by a political community that grants them, and which is expressed in the formation of the State. According to these authors, three other elements are added: institutions, identity and exercise or practice. From a phenomenological perspective, citizenship is constructed from the interaction between social actors whose practices, meaning and relevance are constantly negotiated (Berger & Luckmann, 2006; Schutz, 2003).

According to Ramírez (1995), citizenship is an attitude or awareness of belonging to a collective: “To be a citizen, therefore, is to feel responsible for the proper functioning of the institutions that protect these rights in the country to which one belongs” (p. 60). Based on this argument that the institutions are guarantors of the recognition of citizenship, the idea is formulated that the institutionally created spaces must fulfill this task and must therefore be public, i.e. available to citizens.

These public spaces include those created digitally, as they represent a place from which a new type of citizenship is exercised, the digital one, in which citizens and institutions enter into a relationship through the use of information technologies (Galindo, 2009). Thus, recognizing institutional web portals as public spaces raises the problem of how to manage their resources for the exercise of citizenship in digital terms.

On the other hand, the theoretical discussion on public communication is oriented towards recognizing a space of participation where public actors come together and interact. These actors are diverse, but in their categorization we can consider media actors, government actors, organized civil society actors, economic actors and ordinary citizens when they participate publicly. Their specificity is the search for a dialogic and deliberative configuration that, in a democratic setting, offers everyone an equal guarantee of having a voice and expressing their position in the discussion of public affairs (Bernier et al., 2005; Demers & Lavigne, 2007; Lavigne, 2008). In this sense, democracy should be understood in substantive rather than procedural terms, i.e. as the societal goal of reconciling the greatest possible diversity with the participation of the greatest possible number (Alonso, 1995).

More specifically, the practice of public communication, which Lavigne (2008) refers to as public relations, Riorda (2006) as government communication and Zémor (2008) as its very essence, refers to the need for public institutions to interact directly with citizens through various mechanisms. This communication serves to socialize projects, plans and programs, to connect with their public, to be accountable and to contribute to community building.

This methodological proposal is theoretically based on the above premises. Likewise, it establishes its limits for the empirical approach to the study of the websites in which the presence of public institutions is anchored, whose function is to guarantee the exercise of citizenship rights in information societies (Castells, 2002).

If the traditional mass media were once considered the new public space because it was in them that the political life of contemporary societies took place (Ferry, 1998), the extension of this idea to digital media is the result of the expansion of media activity on the net.

METHODOLOGICAL PROPOSAL FOR THE STUDY OF INSTITUTIONAL DIGITAL PUBLIC SPACES

The proposal is based on three elements. The first is a measurement of the digital resources of institutional portals, divided into three categories. This involves identifying a virtual architecture in which the possibility of citizen participation in digital public spaces is made visible through the resources enabled on the websites. Its specific objective is to evaluate the general characteristics of each portal.

The second part is a qualitative approach in which the actors who create the virtual public spaces are interviewed through in-depth interviews to identify the production logics with which the portals are developed. These logics are cultural and political rather than technical, opening or closing the possibilities for citizen participation depending on the choices made to activate or reject resources on the sites. Their specific aim is to understand the production practices of institutional portals.

The third consists of a social intervention in the form of a workshop aimed at civil society organizations (CSOs). It takes into account that these entities claim the exercise of citizenship rights in a segmented way that coincides with the areas in which the institutions that produce digital public spaces operate. Their specific aim is to determine the usability and relevance of the portals from the citizens' perspective.

Although the object of study for which this methodological strategy was developed is digital in nature, the proposal is not technocentric. That is, the strategy focuses on social practices that are problematized through technological mediation, on the mutual construction of the social and the digital (Flores-Márquez, 2021; Sued, 2021).

Under this premise, the methodological strategy proposed here utilizes techniques widely known in the social sciences. Although this presentation does not propose a sophisticated use of techniques from data science, such as those proposed by Rodríguez (2021), they are not excluded a priori, as these techniques could complement this proposal.

Evaluative metrics of the digital resources of institutional web portals.

This methodological proposal is operationalized in three categories developed from a sociocultural approach to the study of the Internet. For methodological purposes, these three categories are defined as they represent practices of communication culture that characterize contemporary societies:

In order to approach the investigation of the sociocultural uses of the Internet, it is useful to start from an analytical distinction between the different communicative functions made possible by the various “services” of the network due to its hypermedia character: on the one hand, the Internet is a source of information; on the other, it is a means of communication and, increasingly, a means of dissemination. The aim of this distinction is, on the one hand, to facilitate the (re)construction of a framework for communication analysis suitable for sociocultural research on the use of the Internet and, on the other hand, to distinguish the different specific competences that subjects need in order to appropriate its use, interact efficiently with the medium and develop their personal or professional tasks involving the Internet as a resource (Fuentes, 2001, p. 240).

This quotation allows us to identify the three categories to which we are alluding: Information, dissemination and communication. Several authors agree with this theoretical and methodological formulation. Polat (2005), for example, suggests looking at the Internet from at least three points of view: as a source of information, as a means of communication that enables the dissemination of news, and as a virtual public sphere in which online communities emerge. Wolton (2000) argues that the three functions coexist on the web and face their respective problems: the dissemination of information necessary for the functioning of society, that of expression to make oneself heard in a free society, and that of communication or mutual understanding. When analyzing the institutional portals of local governments in Mexico, Martínez and Thiri6n (2005) propose the categories of communication, transaction and information to evaluate their performance. More recently, Hujran and colleagues (2021) established basic information, interactive and transactional services, participation and intelligent services as categories of analysis that have parallels with those considered here.

On this basis, an analysis of the resources provided in digital public spaces was designed, taking into account an evaluation metric in terms of the opportunities available to users to exercise their citizenship rights. The analysis considers three categories: informative, which refers to the relevant placement of data on the Internet; transactional, which consists of resources for interaction, contact and completion of online procedures; and communicative, which corresponds to the possibility of dense participation and appropriation of spaces by citizens as a form of transit into a digital public sphere. Table 1 shows the operationalization of these categories.

The indicators proposed in the tool support nominal, ordinal or ratio variables (Ritchey, 2007). The choice and therefore the form in which the data is generated cannot be determined a priori, as it depends on the degree of complexity and depth required by the analysis to answer the research questions.

The results of the measurement of web portals obtained by the method described above provide information about the characteristics of digital public spaces. They make it possible to evaluate the focus of institutional websites in relation to the three central categories. The assumption underlying the interpretation of the data is that it is a weak public space if the portals present a large number of information resources at the expense of transactional and communicative resources. In this case, the decrease of resources in the other two categories, whose dimensions include participatory activities, reveals a virtual architecture that is one-sided, authoritarian and little committed to citizen participation.

On the other hand, the lack of information resources that would allow citizens to obtain the necessary data to guide their participation is also undesirable. The ideal configuration would consist of a balance of quality, not necessarily quantity, between the three dimensions. This would reveal digital public spaces with democratic power, whose producing institutions would show openness to dialog with citizens and the willingness of users to appropriate them in communicative and political terms.

Categories	Dimensions	Examples of indicators
Informative	Basic information	Webmaster's contact information, home page, home page, history and background, institutional data, news, messages, location, site map.
	Advanced information	Documents, languages, sections for specific audiences, links to other sites.
	Multimedia information	Galleries, presentations, videos, podcasts, stream.
	Updating of the information	Updated data, date and time of update, summary of changes, links enabled.
	Transparency	Compliance with transparency and accountability obligations.
Transactional	Integration	Vertical integration, integration with other sites, validation processes, concentration of information and procedures, homogeneous format, standardized menus, standardized distribution.
	Contact	Contact with staff and webmaster, online contact forms, online acknowledgement, contact email address, email hyperlink, chat room, support forums, virtual assistant.
	Downloads	Available forms, download instructions, online filling, instructions for sending documents.
	Search for information	Search engine, search by area, search by name, alternate search options, search rating.
	Customization of the information	Interaction with data, RSS reader, subscription-based publishing.
	Online transactions	Diversification of online procedures, access page to procedures, secure online payment, payment alternatives, security policies, privacy policies, single page of procedures and payments.
	Access alternatives	Services for mobile devices, offline services.
Communicative	Online discussions	Blogs and social media, discussion forums, electronic voting.
	Citizen consultation	Online public consultations, deadline for consultations, Search history, sending of results.
	Appropriation	Citizen blogs, citizen forums, social media, virtual communities, social bookmarking, social tagging, direct data submission.
	Intensity	Constant participation, relevant participation, prompt responses.
Total: 3 categories	17 dimensions	

Table 1. Operationalization for the analysis of institutional digital public spaces

Source: Own elaboration based on De-León-Vázquez & Medina (2013).

The voice of the producers of the digital public spaces of the institutions

Once the evaluation has been carried out, it is important to understand the reasons for the results obtained. Since the virtual architecture is the result of the choices of certain actors, it is essential to question the producers in depth in order to understand the logic that determines the production of these spaces.

Research experience shows that it is necessary to evaluate the technical environment (Pacheco Redondo et al., 2017), but the technical logics are actually political. We must not lose sight of the fact that this type of device is inhabited by a fiction of the technical and the political that makes it a technological fetish (Sfez, 2005). The fetish consists in believing that communication with citizens is installed with the mere fact of producing and distributing the portal. However, Campillo Alhama (2010) and Riorda (2006) warn that it is necessary to permanently manage and reinforce public communication with a narrative related to the fulfillment of the institutional functions entrusted to it.

The qualitative approach is necessary because it allows us to understand the intentionality that goes into the flow of decision-making that is objectified on institutional websites in the form of digital resources. This is key to understanding that the way in which these resources are distributed promotes or inhibits citizen participation by determining forms of interaction. With the intention of linking the previously outlined evaluative metrics in their three categories to the qualitative phase of this methodological proposal, we draw on the following consideration:

Sociocultural research on the use of the Internet can start from the triple dimension of the informative, communicative and disseminative functions of the Internet, in relation to at least four resources: infrastructure, codes, habits and representations of a particular group or type of user (Fuentes, 2001, p. 241).

Based on these arguments, it is proposed to conduct in-depth interviews with the producers of institutional websites. The aim of this technique is to get in touch with the actors responsible for the development and management of the websites and to have a conversation in which the sociopolitical interactions that determine their production are discussed. Vela (2001) emphasizes that the interview provides a gateway to understanding the processes of cultural integration, and Guber (2011) recognizes it as a strategy for getting people to talk about what they know.

The interview will be important to find out who and how they make decisions about the socio-technical features of institutional portals; who and how they carry out the actions derived from these decisions; what technological equipment conditions are required for the creation and management of institutional portals or

how they can be accessed; and finally, what kind of citizen interaction they think about when creating or managing institutional websites, i.e. how they envision their users and their needs.

Based on the above, a minimal guide for in-depth interviews that meets the information needs to complement the analysis of digital public spaces could be established in the following themes or axes, which emerged from their own reflection in dialog with works such as that of Rosenberg (2019), which critically analyzes the way in which institutions address citizens through their strategies on websites.

- a. Decision-making procedures.
- b. Organization of the work team.
- c. Technical equipment.
- d. Imaginary of the users.

The first theme would allow the reconstruction of the decision-making process in historical, political and technical terms. This axis begins by exploring the characteristics of the individual and collective actors who have the power to set the guidelines according to which institutional web portals are designed. It is then of interest to understand the rules, procedures, channels (formal and informal), hierarchies, etc. involved in deciding what, how and why digital resources are - or are not - made available to citizens.

The second axis is to know the characteristics of the team responsible for creating or managing the institutional websites. In this area, it is important to identify the professional profiles of the members, the way they are organized and the responsibilities, among other things.

The third point is to determine the technical capacity of the institutions to develop their web portals independently. In this case, three assumptions are made: the first is that the institution has sufficient equipment such as servers, network infrastructure, technical protocols and all the necessary tools to take on the responsibility; the second is that the institution does not have these elements and it is necessary to hire private services to take on the responsibility; the third would be an intermediate position in which the institution itself can take on certain aspects of the production and management of its website, but considers it necessary to hire private services to complete the tasks. The interview would make it possible to find out which of these scenarios the case study falls into and how it resolves the situations that arise on a daily basis.

The fourth subchapter aims to investigate the perception that the actors who produce and manage digital public spaces have of the users to whom they address

the website. A matrix with two entries can be created as an interpretation key: Users are seen as visitors to the website who provide productivity value (how many clicks they make on online services and how much satisfaction they find), and users are seen as citizens with socio-political needs to be addressed. The interview would allow us to nuance how the case study falls between these two poles.

According to Hammersley and Atkinson (1994), informants should be people whose experience of the subject is key to accessing their knowledge. At the same time, it is desirable to obtain the testimony of people involved in different parts of the process in order to have the opportunity to learn how they are seen and the production logic of the portals from different positions. Four categories of informants are thus proposed:

- a. Top-level officials who make decisions and approve portal features.
- b. Leaders of the technical production teams, who organize the team to meet the goals.
- c. Leaders of the institutional communication strategy teams in charge of producing the structure, content and narrative of the portals.
- d. Personnel under the command of both types of leaders.

The appropriation of digital public spaces by users

The last part of the methodological proposal for the analysis of institutional digital public studies is the appropriation of users. It is necessary to address this phase because it is not enough to understand the processes of website production and management, but it is also important to investigate whether these institutional efforts find relevance and resonance with citizens, which is ultimately their goal (Hujran et al., 2021; Pacheco Redondo et al., 2017). Fuentes (2001) suggests that:

This last factor can be the starting point for an ethnographic reconstruction of the communicative skills employed by the users, since in the subjects' representations one can more directly observe the constructed appropriation of the resource and the operative schemes of the activity (be it entertainment, work, socialization, learning, etc.) (p. 241).

To address this research need, we propose to formulate a social intervention in the form of a digital skills workshop aimed at civil society organizations (CSOs). This proposal has two objectives: first, the structure of an ethnographic approach for users with critical and reflective skills who have clear interests from which they question institutions in search of solutions; second, retribution, as it aims to escape an extractive practice of scientific research through the exchange of knowledge between participants and researchers.

This technique is positioned as a form of sociological intervention that involves the joint participation of the researcher with the participants reflecting on themselves, their relationships and their practices to reveal the cultural orientations that determine the functioning of society (Bobes, 2001), with a strong community component (Tufte, 2015).

The type of CSO selected will depend on the research questions posed, as there is a wide variety. The goal of the workshop is to provide sociotechnical training to the members of the selected organizations so that they can use the resources provided by the institutional web portals. The topics for the workshop sessions form a whole universe. To select them and determine the number of sessions to be devoted to them, it is advisable to hold a meeting in which the participants and the researchers make this decision together.

Once the topic and duration of the workshop have been determined, it is advisable to have short and pedagogically clear presentations by the facilitators, followed by a plenary dialog in which the participants' experiences with the topic of the session are discussed and reflected upon, always with a view to the use of institutional digital public spaces. The recommended duration for a session with these characteristics is one to two hours.

What has been taught in the session goes beyond its status as a mere lesson. It becomes a discussion amplifier, a trigger that allows researchers to deepen the experiences of social actors in establishing relationships with institutions through digital means. At the same time, it serves the participants to promote self-reflexivity in their social action in digital spaces.

DISCUSSION

Castells' (2002) assertion that the revolution in information technology means that all social processes are mediated by digital technology is an axiom of our time. However, there is still a significant gap between those who have access to technology and those who do not. Although the gap tends to narrow in material terms as devices become cheaper, the discussion about access is now opening up in terms of the digital literacy necessary for critical appropriation of digital content and spaces (Singh & Banga, 2022).

Web portals bring citizens closer to institutions, to the extent that the barrier of physical distance is overcome and it is possible to penetrate their network of services through digital means. However, the logic of their production and management can distance itself from the experiences of the users to whom they are addressed and lead to misunderstandings. This distancing poses a risk to

ensuring the full exercise of citizens' rights, which is the primary purpose of institutions (Rosenberg, 2021).

Following this line of reasoning, institutional web portals, which are an extension of public institutions in the digital realm (Bouzas-Lorenzo & Mahou, 2013), are vulnerable to appropriation by citizens because they are part of the common good, are produced and managed with public funds, and therefore constitute a public space that must be inhabited.

The diversity of online practices exercised by both citizens and institutions and deployed in a variety of digital scenarios, such as socio-digital networks, pose the challenge of exponential dispersion. Considering institutional websites as a unit of analysis represents a significant empirical approach, as it is from there that the trajectories of these dispersed practices can be traced, helping to address the challenge.

This proposal has the particularity - which could be seen as a limitation, but it seems to us that it is more a question of methodological rigor - of studying the processes of production, management and appropriation of digital public spaces, taking the institutional context as a starting point.

The information and data obtained through the application of this methodological strategy, while limited by the analytical axes outlined in this article, also contribute to them. We are confident that the results obtained by applying this proposal will complement the results of the other approaches. Each strategy thus looks where the others do not, contributing to the expansion of knowledge about its own specificities.

CONCLUSIONS

The methodological strategy presented here aims to analyze institutional digital public spaces. As such, they are not limited to a symbolic object such as the web portal of a public institution. The intended contribution is to identify the way in which a space of relations and participation is constructed in which public institutions and citizens come into contact so that the exercise of citizenship can be fully realized.

First, the quality of web portals as facilitators of these relationships will be assessed, taking into account the three categories of information, transaction and communication. This is a fundamental prerequisite for the creation of institutional digital public spaces from which various civic practices are linked online and offline. Subsequently, an essentialist view of public institutions is avoided

through a qualitative approach with their actors, especially the producers and managers of websites. Finally, the appropriation of digital public spaces by citizens will be explored through a social intervention with civil society organizations, demonstrating the potential of these spaces to form active public spheres from which to participate, ask questions and demand guarantees for the exercise of digital citizenship.

the methodological strategy cannot therefore be separated from its theoretical foundation, which forms the basis for its categories and procedures. As already explained, it is anchored in an articulation of public communication and citizenship theory. Epistemologically, it is based on a sociocultural approach to the study of the Internet.

Like any proposal, the one presented here is put forward with the intention of being considered and discussed by the academic community. If it is deemed useful, it should be applied and tested through its use to verify its usefulness. Similarly, the proposal may be used in whole or in part, depending on the needs of the particular study, and may even be critically reworded if gaps or shortcomings are identified that need to be filled.

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REFERENCES

- Adiyoso, W. (2022). Assessing Governments' Emergency Responses to the COVID-19 Outbreak Using a Social Network Analysis (SNA). *SAGE Open*, 12(2), 1-16. <https://doi.org/10.1177/21582440211071101>
- Alonso, J. (1995). Construir la democracia desde abajo (Building democracy from below). *Nueva Antropología*, 14(48), 67-82. <https://bit.ly/2UQuCug>
- Azamela, J. C., Tang, Z., Ackah, O., & Awozum, S. (2022). Assessing the Antecedents of E-Government Adoption: A Case of the Ghanaian Public Sector. *SAGE Open*, 12(2), 1-13. <https://doi.org/10.1177/21582440221101040>
- Berger, P. L. & Luckmann, T. (2006). *La construcción social de la realidad (The Social Construction of Reality)*. Amorrortu.

- Bernier, M.-F., Watine, T., Demers, F., Lavigne, A., & Moumouni, C. (2005). *Pratiques novatrices en communication publique* (Innovative practices in public communication). Les presses de l'Université Laval.
- Bobes, V. C. (2001). Buscando al actor. La intervención sociológica (Looking for the actor. Sociological intervention). In M. L. Tarrés (Ed.), *Observar, escuchar, comprender. Sobre la tradición cualitativa en la investigación social* (Watching, listening, understanding. About qualitative tradition in social research) (pp. 225–248). Grupo Editorial Miguel Ángel Porrúa.
- Bouzas-Lorenzo, R. & Mahou, X. M. (2013). El estudio de la funcionalidad de los portales gubernamentales. Una propuesta metodológica desde la e-salud (The Study of the Functionality of Government Portals: A Methodological Proposal from the E-health). *Gestión y Política Pública*, 22(SPE), 259–305.
- Briceño Brcok, L. A. (2019). Realidad del gobierno electrónico en los municipios zulianos: un enfoque democrático (Reality of electronic government in Zulia municipalities: a democratic approach). *Quórum Académico*, 15(2), 60–76.
<https://produccioncientificaluz.org/index.php/quorum/article/view/29413>
- Campillo Alhama, C. (2010). Comunicación pública y administración municipal. Una propuesta de modelo estructural (Public Communication and Municipal Administration: A Structural Model Proposal). *Pensar La Publicidad*, 4(1), 45–62.
<https://revistas.ucm.es/index.php/PEPU/article/view/PEPU1010120045A>
- Cárdenas, J. D., Pineda, N. K., Ruiz, J. D. C., & Rodríguez, N. K. P. (2021). La gestión de la comunicación de riesgo a través de Facebook: Análisis exploratorio de las estrategias iniciales de 12 gobiernos de América Latina frente a la pandemia de la COVID 19 (Risk communication management through Facebook: Exploratory analysis of the initial strategies of 12 Latin American governments in the COVID 19 pandemic). *Revista de Comunicación*, 20(2), 73–91. <https://revistadecomunicacion.com/article/view/2353>
- Castells, M. (2002). *La era de la información: economía, sociedad y cultura. Volumen I* (The Information Age: Economy, Society and Culture. Vol. I). Siglo XXI.
- Chaudhuri, B. (2022). Programmed welfare: An ethnographic account of algorithmic practices in the public distribution system in India. *New Media & Society*, 24(4), 887–902.
<https://doi.org/10.1177/14614448221079034>
- Criado, J. I. & Gil-García, J. R. (2013). Gobierno electrónico, gestión y políticas públicas. Estado actual y tendencias futuras en América Latina (Electronic Government, Management and Public Policies: Current Status and Future Trends in Latin America). *Gestión y Política Pública*, 22, 3–48.
- Cuenca-Fontbona, J., Compte-Pujol, M., Martín-Guarta, R., & Matilla, K. (2022). Desarrollo de un nuevo modelo de evaluación competencial para la selección de una agencia de relaciones públicas y comunicación (Developing a new competency assessment model for selecting a public relations and communication agency). *Revista de Comunicación*, 21(1), 137–157. <https://doi.org/10.26441/RC21.1-2022-A7>
- De-León-Vázquez, S. (2015). Estudio comparativo de espacios públicos en línea: Aguascalientes y Quebec (Comparative study of online public spaces: Aguascalientes and Quebec). *Clivajes*, 3, 34–53. <https://doi.org/10.6084/m9.figshare.21136825>

- De-León-Vázquez, S. & Medina, N. I. (2013). Portales institucionales de Internet y espacio público. El caso de Aguascalientes, México (Institutional Internet portals and public space. The case of Aguascalientes, Mexico). In I. Cornejo & L. A. Guadarrama (Eds.), *Culturas en comunicación. Entre la vocación intercultural y las tecnologías de información* (Cultures in communication. Between intercultural vocation and information technologies) (pp. 211-232). Tintable. <https://doi.org/10.6084/m9.figshare.21136816>
- De Quadros, C. I. & Bastos de Quadros Junior, I. (2015). Jóvenes y participación política desde la perspectiva del Participatório (Youth and political participation: a view over the Participatory). *Revista Latina de Comunicación Social*, (70), 782-792. <https://doi.org/10.4185/RLCS-2015-1071>
- Demers, F. & Lavigne, A. (2007). La comunicación pública: una prioridad contemporánea de investigación (Public communication: a contemporary research priority). *Comunicación y Sociedad*, 4(8), 65-87. <https://doi.org/10.32870/cys.v0i8.3830>
- Ferry, J. M. M. (1998). Las transformaciones de la publicidad política (Changes in political publicity). In J. Ferry (Ed.), *El nuevo espacio público* (The new public space) (pp. 13-27). Gedisa.
- Flores-Márquez, D. (2021). Etnografía digital y sus reconfiguraciones permanentes (Digital ethnography and its permanent reconfigurations). In D. Flores-Márquez & R. González (Eds.), *La imaginación metodológica* (The methodological imagination) (pp. 91-116). Tintable.
- Fuentes, R. (2001). Exploraciones teórico-metodológicas para la investigación sociocultural de los usos de la Internet (Theoretical-methodological explorations for sociocultural research of the uses of the Internet). In R. Fuentes & M. I. Vasallo de Lopes (Eds.), *Comunicación. Campo y objeto de estudio* (Communication. Field and object of study) (pp. 229-245). ITESO.
- Galindo, J. A. (2009). Ciudadanía digital (Digital Citizenry). *Signo y Pensamiento*, 28(54), 164-173. <https://revistas.javeriana.edu.co/index.php/signoypensamiento/article/view/26446>
- García, S. A., Márquez, F. V., & Fondevila i Gascón, J. F. (2021). Polarización en Twitter durante la crisis de la COVID-19: Caso Aislado y Periodista Digital (Polarization on Twitter during the COVID-19 crisis: Caso Aislado and Periodista Digital). *Revista de Comunicación*, 20(2), 29-47. <https://revistadecomunicacion.com/article/view/2336>
- Georgiou, M. (2019). *City of Refuge* or Digital Order? Refugee Recognition and the Digital Governmentality of Migration in the City. *Television & New Media*, 20(6), 600-616. <https://doi.org/10.1177/1527476419857683>
- Gonzalez-Galvan, O. S. & Espín-Espinoza, A. (2020). Promouvoir la saine alimentation sur Facebook Live: vers de nouvelles compétences communicationnelles dans les organisations de santé publique? (Promoting healthy eating on Facebook Live: towards new communication skills in public health organisations?). *Revue Communication & Professionnalisation*, 11, 16-43. <https://doi.org/10.14428/RGOMPRO.VI11.53343>
- González Galván, O. S., Marín Leyva, R. A., & Delfín Ortega, O. V. (2021). Framing Public Participation. An Overview of Michoacan State Government. *Opera*, 29, 11-30. <https://doi.org/10.18601/16578651.N29.02>
- Guber, R. (2011). *La etnografía. Método, campo y reflexividad* (Ethnography. Method, field and reflexivity). Siglo XXI.

- Hammersley, M. & Atkinson, P. (1994). *Etnografía. Métodos de investigación* (Ethnography. Principles in practice). Paidós.
- Hansson, S. & Page, R. (2022). Corpus-assisted analysis of legitimation strategies in government social media communication. *Discourse & Communication*, 16(5), 1–21. <https://doi.org/10.1177/17504813221099202>
- Hao, C., Nyaranga, M. S., & Hongo, D. O. (2022). Enhancing Public Participation in Governance for Sustainable Development: Evidence From Bungoma County, Kenya. *SAGE Open*, 12(1). <https://doi.org/10.1177/21582440221088855>
- Haro-de-Rosario, A., Sáez-Martín, A., & del Carmen Caba-Pérez, M. (2018). Using social media to enhance citizen engagement with local government: Twitter or Facebook? *New Media & Society*, 20(1), 29–49. <https://doi.org/10.1177/1461444816645652>
- Hujran, O., Alarabiat, A., Al-Adwan, A. S., & Al-Debei, M. (2021). Digitally Transforming Electronic Governments into Smart Governments: SMARTGOV, an Extended Maturity Model. *Information Development*, 0(0). <https://doi.org/10.1177/02666669211054188>
- Jiang, H., Wang, S., & Yao, J. (2022). Structuration analysis of e-government studies: A bibliometric analysis based on knowledge maps. *Journal of Information Science*, 48(5), 676–685. <https://doi.org/10.1177/0165551520978346>
- Lara, M. A., Pina, V., & Torres, L. (2013). El gobierno electrónico y la rendición de cuentas en la administración regional y estatal (E-government and Accountability in Regional Administration: An International Comparison). *Gestión y Política Pública*, 22, 105–135.
- Lavigne, A. (2008). Suggestion d'une modélisation de la communication publique: principales formes discursives et exemples de pratiques (Suggested modelling of public communication: main discursive forms and examples of practices). *Les Cahiers Du Journalisme*, (18), 232–245.
- Marshall, T. H., & Bottomore, T. (2005). *Ciudadanía y clase social* (Citizenship and Social Class). Losada.
- Martínez, F. & Thirió, J. M. (2005). Sociedad de la información en México: los primeros pasos de gobiernos locales (Information society in Mexico: the first steps for local governments). *El Cotidiano*, (130), 15–23.
- Mensah, I. K., Zeng, G., & Luo, C. (2020). E-Government Services Adoption: An Extension of the Unified Model of Electronic Government Adoption. *SAGE Open*, 10(2). <https://doi.org/10.1177/2158244020933593>
- Negrete Huelga, K. (2022). Comunicación en el gobierno: lo gubernamental y lo público en la transformación de la relación con el ciudadano (Communication in government: the governmental and the public in the transformation of citizen relationship). *Sintaxis*, (8), 100–112. <https://doi.org/10.36105/STX.2022N8.07>
- Noveck, B. S. (2017). *Ciudadanos inteligentes, Estado más inteligente. Las tecnologías del conocimiento y el futuro de gobernar* (Smart Citizens, Smarter State: The Technologies of Expertise and the Future of Governing). CIDE.
- Ochoa Chaves, L. E., García García, F., & Monge Espinoza, P. (2020). TICs, comunicación y participación ciudadana en los planes de Gobierno Abierto de Argentina, Costa Rica y México (ICTs, communication and citizen participation in the open government plans of Argentina, Costa Rica and Mexico). *Global Media Journal México*, 17(32), 19–41. <https://doi.org/10.29105/gmjmx17.32-2>

- Pacheco Redondo, D. E., Galvis-Lista, E. A., & González-Zabala, M. P. (2017). Análisis de variables e indicadores para medir el e-gobierno publicados en la literatura científica (Analysis of variables and indicators for measuring e-government published in scientific literature). *Ciencia e Ingeniería Neogranadina*, 27(2), 83–107. <https://doi.org/10.18359/rcin.2226>
- Peña-Fernández, S., Larrondo-Ureta, A., & Morales-i-Gras, J. (2022). Comunicación política, institucional y medios de comunicación en tiempo de pandemia. Análisis del diálogo sobre vacunas en cinco países iberoamericanos (Political and institutional communication and the media in times of pandemic. Analysis of the dialogue on vaccines in five Ibero-American countries). *Revista de Comunicación*, 21(1), 315–328. <https://doi.org/10.26441/RC21.1-2022-A16>
- Polat, R. K. (2005). The Internet and Political Participation: Exploring the Explanatory Links. *European Journal of Communication*, 20(4), 435–459. <https://doi.org/10.1177/0267323105058251>
- Raca, V., Velinov, G., Dzalev, S., & Kon-Popovska, M. (2022). A Framework for Evaluation and Improvement of Open Government Data Quality: Application to the Western Balkans National Open Data Portals. *SAGE Open*, 12(2). <https://doi.org/10.1177/21582440221104813>
- Ramírez, J. M. (1995). ¿Movimientos ciudadanos o ciudadanos en movimiento? La difícil y esperanzada construcción de la ciudadanía (Citizen movements or citizens on the move? The difficult and hopeful construction of citizenship). In H. Orozco (Ed.), *Cultura de la comunicación y sociedades contemporáneas* (Culture of communication and contemporary societies) (pp. 55–72). ITESO.
- Reutter, L. (2022). Constraining context: Situating datafication in public administration. *New Media & Society*, 24(4), 903–921. <https://doi.org/10.1177/14614448221079029>
- Riorda, M. (2006). Hacia un modelo de comunicación gubernamental para el consenso (Towards a government communication model for consensus). In L. H. Elizalde, D. Fernández, & M. Riorda (Eds.), *La construcción del consenso. Gestión de la comunicación gubernamental* (Consensus building. Management of government communication). La Crujía.
- Ritchey, F. J. (2007). *The Statistical Imagination: Elementary Statistics for the Social Sciences*. McGraw Hill.
- Rodríguez, C. A. (2021). Minería de datos y análisis de redes sociales: malabarismos de una experiencia de investigación (Data mining and social network analysis: juggling from a research experience). In D. Flores-Márquez & R. González (Eds.), *La imaginación metodológica* (The methodological imagination) (pp. 25–58). Tintable.
- Rosenberg, D. (2019). Use of e-government services in a deeply divided society: A test and an extension of the social inequality hypotheses. *New Media & Society*, 21(2), 464–482. <https://doi.org/10.1177/1461444818799632>
- Rosenberg, D. (2021). Ethnic perspective in e-government use and trust in government: A test of social inequality approaches. *New Media & Society*, 23(6), 1660–1680. <https://doi.org/10.1177/1461444820920655>
- Schutz, A. (2003). *El problema de la realidad social* (The Problem of Social Reality). Amorrortu.
- Sfez, L. (2005). *Técnica e ideología. Un juego de poder* (Technique and ideology. A power game). Siglo XXI.

- Singh, N. & Banga, G. (2022). Media and information literacy for developing resistance to 'infodemic': lessons to be learnt from the binge of misinformation during COVID-19 pandemic. *Media, Culture and Society*, 44(1), 161-171. <https://doi.org/10.1177/01634437211060201>
- Sued, G. E. (2021). Métodos digitales para estudiar la cultura y la vida digital: fotografías mexicanas en Instagram (Digital methods to study culture and digital life: Mexican photographs on Instagram). In D. Flores-Márquez & R. González (Eds.), *La imaginación metodológica* (The methodological imagination) (pp. 59-90). Tintable.
- Tufte, T. (2015). *Comunicación para el cambio social. La participación y el empoderamiento como base para el desarrollo mundial* (Communication for social change. Participation and empowerment as a basis for global development). Icaria.
- Vaccaro, N. D., Cazzolli, A., & Castro, J. F. (2021). El Gobierno Abierto en la ciudad de Córdoba, Argentina: una política de regulación de la sensibilidad (Open government in the city of Córdoba, Argentina: a sensitivity regulation policy). *Contratexto*, (035), 43-70. <https://doi.org/10.26439/CONTRATEXTO2021.N035.4899>
- Vela, F. (2001). Un acto metodológico básico de la investigación social: la entrevista cualitativa (A fundamental methodological action in social research: the qualitative interview). In M. L. Tarrés (Ed.), *Observar, escuchar y comprender. Sobre la tradición cualitativa en la investigación social* (Watching, listening, understanding. About qualitative tradition in social research) (pp. 65-96). Miguel Ángel Porrúa.
- Viñarás-Abad, M., Abad-Alcalá, L., Llorente-Barroso, C., Sánchez-Valle, M., & Pretel-Jiménez, M. (2017). Administración electrónica y e-inclusión de las personas mayores (e-Administration and the e-inclusion of the elderly). *Revista Latina de Comunicación Social*, 72, 197-219. <https://doi.org/10.4185/RLCS-2017-1161>
- Wang, X. & Yao, H. (2022). In government microblogs we trust: Doing trust work in Chinese government microblogs during COVID-19. *Discourse & Communication*, 16(6), 716-734. <https://doi.org/10.1177/17504813221109090>
- Wolton, D. (2000). *Internet, ¿y después? Una teoría crítica de los nuevos medios de comunicación* (Internet and then? A critical theory of new media). Gedisa.
- Zémor, P. (2008). *La communication publique* (Public communication). Presses Universitaires de France.

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