Platform X and the Redefinition of Political Communication in Colombia: A Review of Recent Literature

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Abstract

Research on the significance of platform X in Colombia's political information and communication processes has grown substantially over the past two decades. This study presents a systematic review of the literature published between 2016 and 2022, employing a multidimensional methodological approach to identify the contexts in which these studies were conducted and the challenges faced within this field of inquiry. Drawing on peer-reviewed publications indexed in databases such as Scopus, EBSCO, ScienceDirect, JSTOR, ProQuest and Google Scholar, and applying rigorous inclusion and exclusion criteria following the PRISMA protocol, the review identified 42 relevant studies. The findings were organised into three main categories: actors (senders and recipients), political debates, and electoral campaigns, emphasising the increasing influence of microblogging on Colombian politics. The analysis reveals that platform X is extensively utilised within the country's political landscape, reshaping interaction dynamics among political actors and establishing itself as a key arena for political and electoral engagement. The results offer an analytical framework for examining the impact of digital platforms on politics and contribute to the global literature on political communication by exploring informational dynamics in democratic contexts.

Keywords

social media, platform X, political communication, Colombia, systematic literature review

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A Plataforma X e a Redefinição da Comunicação Política na Colômbia: Um Olhar Sobre a Literatura Recente

Resumo

Os estudos sobre a relevância da plataforma X nos processos de informação e comunicação política na Colômbia experimentaram um aumento considerável nas últimas duas décadas. Mediante uma revisão sistemática da literatura, que explorou os estudos publicados entre 2016 e 2022, e utilizando uma abordagem metodológica multidimensional, foram identificados os contextos em que esses estudos foram desenvolvidos e os desafios enfrentados por esse campo de pesquisa. Foram analisados 42 documentos científicos indexados em bases de dados como a Scopus, EBSCO, ScienceDirect, JSTOR, ProQuest e Google Acadêmico, aplicando rigorosos critérios de inclusão e exclusão, conforme o protocolo PRISMA. Os resultados foram organizados em três categorias principais: atores (emissores e destinatários), debates políticos e campanhas eleitorais, destacando-se a crescente influência do microblogue na política colombiana. Apurou-se que a plataforma X é amplamente utilizada no cenário político do país, transformando as dinâmicas de interação entre atores políticos, e consolidou-se como um espaço chave para o engajamento político e eleitoral na Colômbia. Os resultados fornecem um quadro analítico para estudar o impacto das plataformas digitais na política e contribuem para a literatura global em comunicação política, explorando dinâmicas informacionais em contextos democráticos.

Palavras-chave

redes sociais, plataforma X, comunicação política, Colômbia, revisão sistemática da literatura

1. Introduction

Academic interest in the adoption, use, and impact of platform X (formerly known as Twitter)[1] as a resource for creating communicational processes by various political actors has been a central theme within the scholarly community (Nunomura, 2013). From the earliest studies (Aharony, 2012; Barberá & Rivero, 2014; Bruns & Highfield, 2014; Golbeck et al., 2010; Jungherr, 2014, 2016; Kim & Park, 2012; Moya Sánchez & Herrera Damas, 2015; Parmelee & Bichard, 2011; Rossetto et al., 2013) to more recent contributions (Antypas et al., 2023; Borja-Orozco, 2024; Pano Alamán, 2020; Renobell, 2021), the communication paradigm faces the challenge of strengthening X as a device that consolidates political communication, as it facilitates the rapid dissemination of brief messages and promotes the spread of informal discourses (González-List, 2022).

Following the presidential campaigns of Barack Obama (2008) and Donald Trump (2016), political leaders worldwide began to adopt and utilise X to communicate with their audiences, promote their agendas, and influence public opinion (Barberá & Zeitzoff, 2018). This expansion granted the platform increasing importance in political information and communication processes, within a context in which social media are shaping a new public sphere (Chaves-Montero, 2018).

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[1] On 27 October 2022, South African entrepreneur Elon Musk acquired Twitter for US$46.5 billion in cash.

Accordingly, this article aims to understand the impact and relevance of platform X in political information and communication in Colombia, through a systematic review of academic literature focused on political parties, leaders, and users (excluding publications centred on the media). A critical analysis of the convergences and divergences among the identified approaches will enable future researchers to ground their methodological frameworks in the different research perspectives.

This study analyses 42 investigations conducted between 2016 and 2022, which examine the reach of platform X in aspects of political information and communication in Colombia, identifying key areas of interest such as electoral campaigns, political debates, and the roles of senders and recipients, as proposed by Campos Domínguez (2017). This review is both timely and relevant, not only for its theoretical contribution but also for addressing a gap in the field of political communication in Colombia by responding to key research questions (RQs):

RQ1: what themes predominate in studies on platform X and political information and communication in Colombia?

RQ2: what are the most common research approaches in these studies?

RQ3: which research techniques and instruments stand out for their relevance in this context?

2. Theoretical Perspective

Research on X within the field of political communication encompasses a wide range of approaches, with a significant increase in scholarly work highlighting its influence. Academic analysis explores various dimensions of the platform, including parliamentary contexts, political leaders, parties, and institutions, demonstrating that X facilitates communication among political actors (Gómez Céspedes, 2016) and enables interaction through content (Espino Sánchez, 2014; Girón Sellés, 2019).

The platform offers new opportunities to engage political leaders and citizens in public debate, improving the relationship between representatives and the represented (Zamora Medina, 2015). The public nature of the microblog (Congosto et al., 2011) allows for user segmentation and offers insights into citizen participation in political dialogue. Moreover, X creates a specific digital environment for political issues (Chaves-Montero, 2018), standing out as a political space in its own right, distinct from other platforms (Freire Castello, 2019).

However, critical disadvantages arise from the platform's algorithmic structure, which fosters polarisation and disinformation, as well as from moderation limitations that enable the activity of automated accounts and fake profiles. These factors may compromise the authenticity of interactions and the fairness of public debate (Machado & Miskolci, 2019). For a systematic literature review, it is essential to consider both the potential of X as a dynamic political space and the risks and distortions that affect representativeness and the development of the texts under analysis.

2.1. Platform X and Political Information and Communication

The literature on the use of X in politics is extensive. Jungherr (2014, 2016) was one of the first authors to analyse the platform holistically, categorising its uses into three levels: political and electoral campaigns, public participation in political events, and commentary during campaigns. Pal and Gonawela (2017) propose complementary classifications regarding the political use of the microblog, focusing on the study of small data and grouping the subjective domains of research into seven categories: subjects of online discourse, polarisation, communicative style, participation in social networks, network influence, electoral outcomes, and meta-studies.

In line with the above studies in terms of categorisation, Campos Domínguez (2017) classified the political use of the platform into three dimensions: senders and recipients (including parliamentarians, politicians, political parties, interest groups, institutions, and citizens themselves as content producers); political debate; and electoral campaigns. In a similar vein, Percastre Mendizábal et al. (2017) developed a sampling design approach for analysing political communication on the platform, based on the observation of different cases: electoral processes, the management of an emergency, and a public health crisis. Marín Dueñas et al. (2019) employed a qualitative approach, using content and discourse analysis to explore the nature of political relationships on the platform.

These studies converge in identifying X as a central space for political communication, while differing in their methodologies and approaches, highlighting the platform's complexity and analytical richness as an object of study within this scientific field.

This study is grounded in the approach proposed by Campos Domínguez (2017), whose structured and multidimensional framework applies to contemporary political dynamics. The scope of this orientation is to understand how different studies and authors address the processes undertaken by Colombian political actors (legislators and citizens) on X, within the field of political communication. By adopting this perspective, the research contributes to an in-depth analysis of the role of the microblog in the complex reality of Colombian politics, with an emphasis on the forms of interaction and organisation observed in this digital environment.

2.2. Background of X in Colombia

The emergence of X in Colombia was marked by the rapid adoption by journalists and columnists such as María Antonia García de la Torre (@caidadelatorre) and the newspaper *El Tiempo* (@ElTiempo). In 2008, the platform gained even greater visibility with the presence of publications such as the newspaper *El Espectador* (@elespectador), *Revista Semana* (@RevistaSemana), and the news programme *Noticias Caracol* (@NoticiasCaracol), consolidating the media as pioneers on the platform in the country.

The Colombian political establishment, inspired by Barack Obama's 2008 campaign, also adopted X starting in 2009. Figures such as Iván Duque (@IvanDuque), Viviane Morales (@MoralesViviane), Álvaro Uribe Vélez (@AlvaroUribeVel), Iván Cepeda

(@IvanCepedaCast), Antanas Mockus (@AntanasMockus), Gustavo Petro (@petrogustavo), Gustavo Bolívar (@GustavoBolivar), and Angélica Lozano (@AngelicaLozanoC), along with the Polo Democrático party (@PoloDemocratico), were among the first politicians to use the platform (Tabares Higuita, 2023).

Since its adoption by Colombian parties and political leaders, the platform has consolidated itself as an essential tool in the country's political information and communication processes. Initially peripheral, X became a microblog used by politicians, officials, and opinion leaders to disseminate information, news, opinions, and party propaganda. In this context, X emerged as a political communication device during the 2010 presidential elections, when Antanas Mockus, former mayor of Bogotá, used it in his campaign to communicate and promote his candidacy (Cárdenas Ruiz, 2014). A pioneer in social media use in Colombia, Mockus employed X to reach young urban voters through the initiative #OlaVerde (Pedro-Carañana et al., 2020).

A significant milestone in the advancement of the microblog in Colombia was the 2016 plebiscite, which aimed to ratify the peace agreements between the Colombian State and the Revolutionary Armed Forces of Colombia (FARC). In this context, the far right used the platform to delegitimise the peace process, employing hashtags such as #Noalprocesodepaz, #NoALaPazFARC, and #Losdelno, turning it into a space of political confrontation aimed at ideological polarisation (Romero-Moreno & Arroyave Cabrera, 2022). The strategy involved creating fake accounts on X, known as "bodegas" (cyber troops; Rincón Martínez, 2022), which were used to manipulate information and promote disinformation campaigns and hate speech, exacerbating divisions within Colombian society.

3. Methodology

To study recent academic production (2016–2022) on the impact of X on political information and communication in Colombia, a multidimensional methodological approach was adopted (Calvo Rubio & Ufarte Ruiz, 2021), consisting of:

- Chronological analysis: a diachronic exploration to validate and consolidate this field of study;
- Bibliographic analysis: identification of patterns and underlying relationships across various research topics;
- Content analysis: examination of the main themes, highlighting research approaches, techniques, and instruments.

The method employed was a systematic literature review (Heyn et al., 2019), following the PRISMA protocol (Page et al., 2020), a recognised technique that allows for the characterisation, evaluation, and interpretation of the available data within a given field over a specific period, ensuring the presentation of accurate results.

This longitudinal systematic review covered seven years, analysing studies published between 2016 and 2022. The choice of 2016 as the starting point is justified by the fact that, from this year onwards, the Colombian academic community began to investigate the influence of X on political information and communication processes in a more systematic manner.

3.1. Methodological Procedures

A keyword-based search was conducted across five academic databases — Scopus, ProQuest, EBSCO, ScienceDirect, and JSTOR — in addition to supplementary searches on Google Scholar, aimed at identifying non-systematised studies. A secondary literature search was also carried out by tracking the reference chains of articles found in the systematic search. The review period extended from November 2022 to February 2023 and included journal articles indexed in SCImago, the Information Matrix for the Analysis of Journals, and the CAPES Portal, as well as books and book chapters, while excluding dissertations and doctoral theses.

To identify relevant articles, a Boolean search was applied in the central databases using the equation: "TITLE-ABS-KEY (*twitter) AND communication AND policy OR politicians OR politics AND Colombia". The prioritised publications fell within the field of the social sciences. Mendeley and Zotero were used to manage citations and references. Each selected text was analysed in detail using SciSpace. The Rayyan application facilitated the process of including and excluding texts, in line with the PRISMA protocol (Figure 1), resulting in a *corpus* of 42 academic studies.
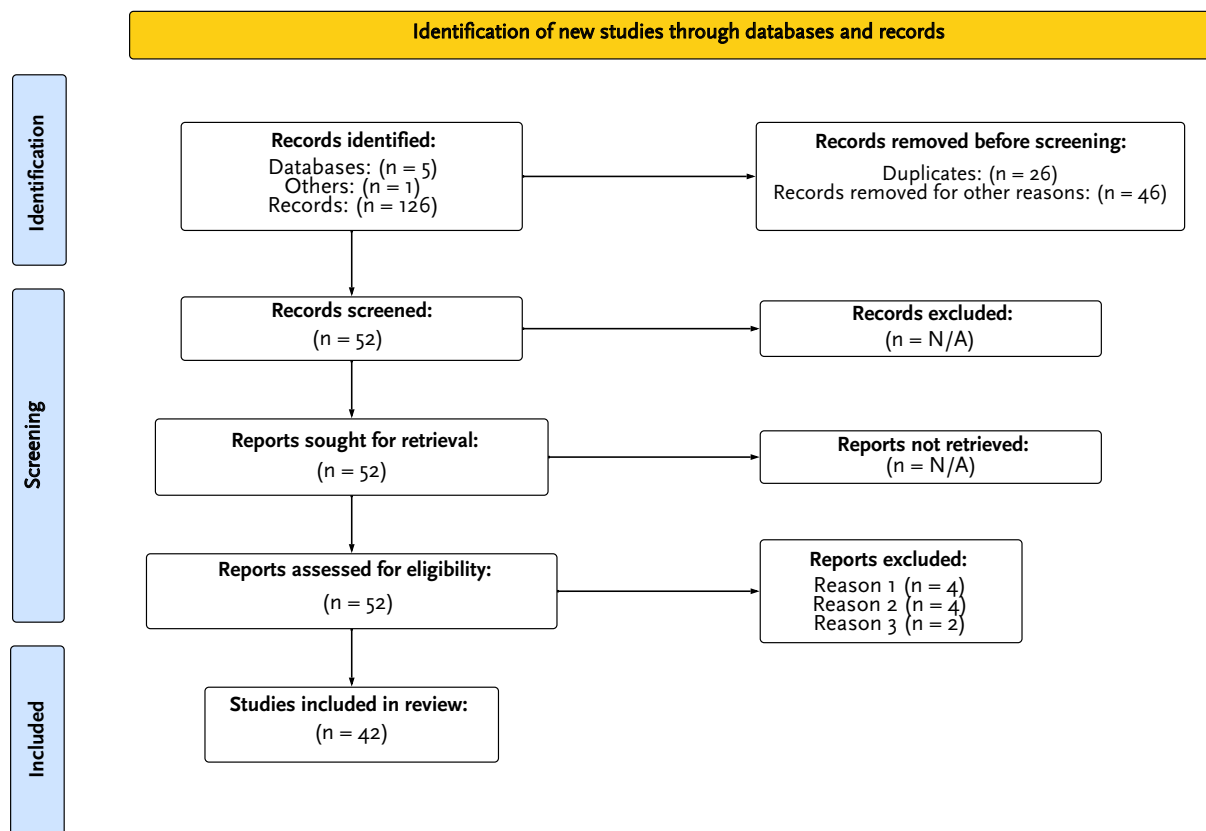

Figure 1. *Flowchart of the study selection process (PRISMA)*

Note. Author's own elaboration using Rayyan.

Once the data were collected, a two-stage content analysis was carried out. Firstly, an automated cluster analysis of key terms was conducted using the VOSviewer software

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(Figure 2 and Table 1), without limiting the search to the term "Twitter". This was followed by a manual, qualitative, and inductive analysis (Creswell, 2003/2007), aimed at identifying emerging patterns and categorising the studies.

Figure 2. *Topic network*

Note. Author's own elaboration using VOSviewer.

Selected	Keyword	Occurences	Total link strength
x	Twitter	16	70
x	Colombia	8	33
x	Social media	5	30
x	Social networks	2	18
x	Political communication	4	16
x	Social activism	4	15
x	Data analysis	1	12
x	Communication	1	12
x	Digital content	1	12
x	News dissemination	1	12
x	Visual identity	1	12
x	Microblogging	1	12
x	News	1	12
x	Journalism	1	12
x	Visualisation	1	12
x	Content analysis	2	11
x	Elections	3	11
x	Peace	2	10
x	Post-conflict	2	8
x	Facebook	2	7

Table 1. *Topic network*

Next, the temporal evolution of the articles published between 2016 and 2022 was examined. A general upward trend was observed in the number of publications, with peaks in 2020 and 2022, indicating growing academic interest in the topic (trend line) (Figure 3).
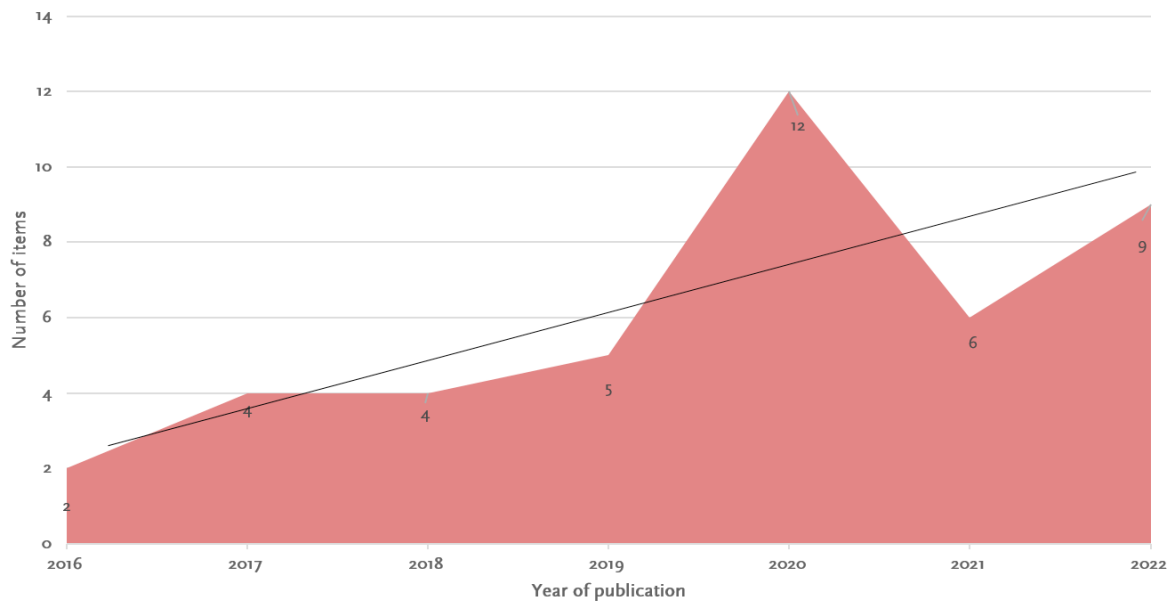
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Figure 3. *Evolution of academic output, 2016–2022*

Note. Author's own elaboration using Tableau.

To categorise each study based on its content and main themes, the typology proposed by Campos Domínguez (2017) in her analysis of X and political communication was adopted:

- Senders and recipients: research focusing on the actors involved in political communication (politicians, parties, candidates, journalists, followers, and citizens);

- Political debate: studies dedicated to discourse analysis, polarisation, public controversy, and deliberation on the platform;

- Electoral campaigns: studies focused on the use of the platform during electoral periods, with an emphasis on narrative strategies and mobilisation.

The researchers analysed each of the 42 studies at two different points in time, assigning one of the three theoretical categories based on the title, abstract, keywords, objectives, methodological procedures, and results. The classifications were recorded in an Excel spreadsheet.

To assess the degree of agreement between the two rounds of coding, Cohen's kappa coefficient was used (Gómez Ortega & Amaya Rey, 2013), which is appropriate for categorical data with two evaluations conducted at different times. This coefficient accounts for agreement "beyond chance" and is preferred over a simple percentage of observed agreement. The formula and its interpretation are presented below.

$$\kappa = \frac{Po - Pe}{1 - Pe}$$

Po: observed proportion of agreement
Pe: expected proportion of agreement by chance

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The Landis and Koch interpretation scale (Cerda & Villarroel, 2008) was used to interpret the value of Cohen's kappa coefficient across two observation points when classifying categorical data (Table 2).

Kappa value	Level of agreement
< 0,20	Slight or no agreement
0.21 – 0.40	Fair agreement
0.41 – 0.60	Moderate agreement
0.61 – 0.80	Substantial agreement
0.81 – 1.00	Almost perfect agreement

Table 2. *Interpretation scale*

Note. Author's own elaboration based on Cerda and Villarroel (2008).

Based on the direct comparison of the results from the two evaluations, 24 studies showed complete agreement (57%), 18 showed disagreement (43%), and one had a k = 0.35. Given the low kappa coefficient (indicating a fair level of agreement), the 18 discordant cases were reviewed. After a second reading and a more rigorous application of the previously established hierarchical criteria, a final categorisation was defined for each study: senders and recipients (nine; 21.42%), political debate (15; 35.71%), and electoral campaigns (18; 42.85%; Figure 4).
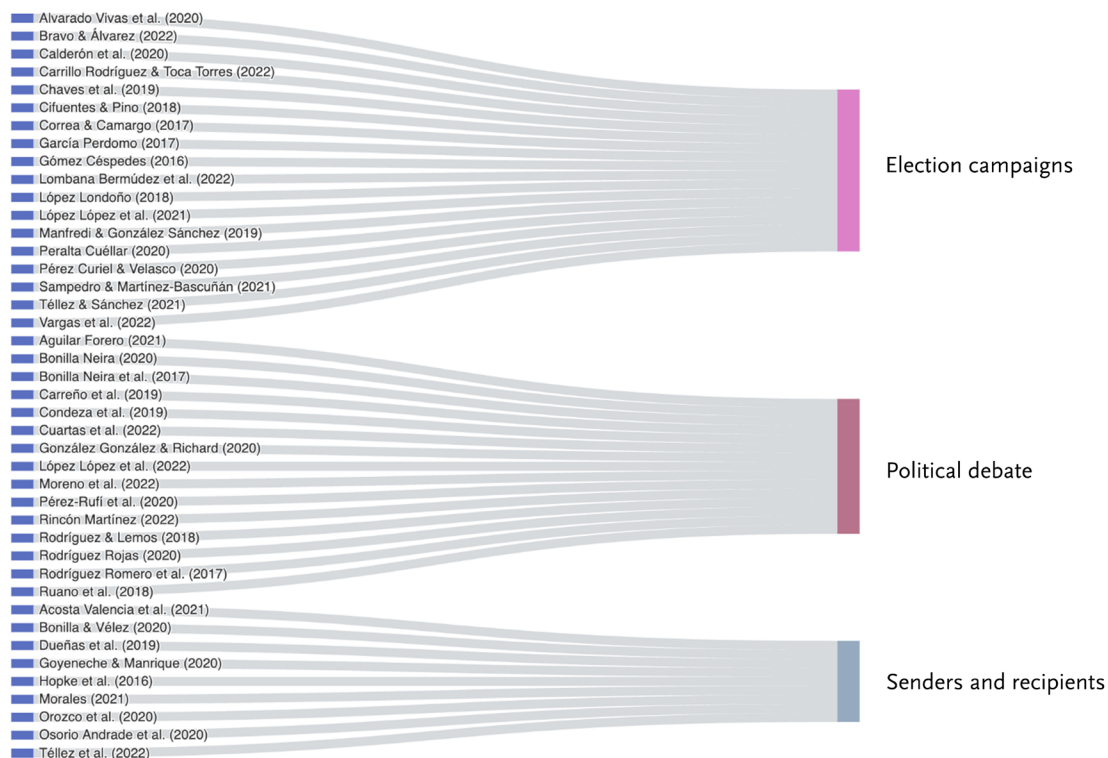

Figure 4. *Classification of records and authors in the* corpus

Note. Author's own elaboration using Knime.

Next, the development of publications regarding the three typologies established in the study is shown (Figure 5).
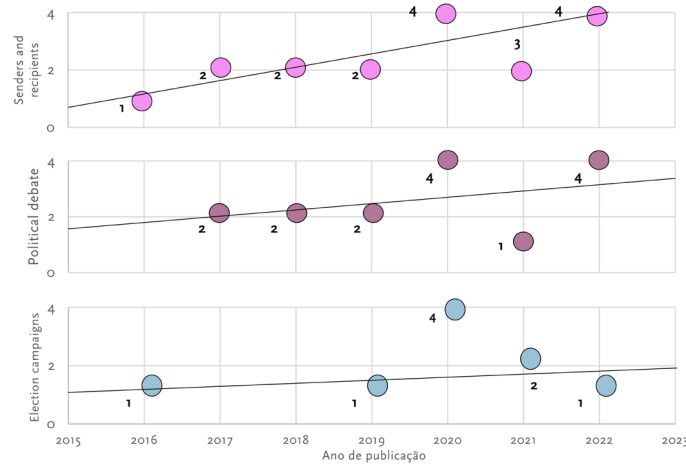

Figure 5. *Temporal evolution of publications according to categories*

Note. Author's own elaboration using Tableau.

The graph indicates a growing interest in the study of X (trend lines), especially from 2016 onwards, a decisive year for the impact of social media on Colombian politics (Chenou & Restrepo, 2024). Research across the three typologies reveals an increase in approaches, primarily driven by the peace plebiscite held that year. The event catalysed intense debates, which intensified further during the 2019 regional elections, as well as the 2018 and 2022 legislative and presidential elections (Lombana Bermúdez et al., 2022). Consequently, platforms such as X have become epicentres for these debates, fostering academic research on digital communication dynamics.

4. Findings

4.1. Thematic Analysis

4.1.1. Senders and Recipients

A wide range of political and social phenomena in Colombia was analysed. Recurring content included ideological polarisation, disinformation, defamation campaigns, and social mobilisation. Senders, such as members of the Centro Democrático party, used the microblogging platform to promote agendas, attack opponents, and mobilise followers. Users (recipients) engaged with this content, participating in debates and contributing to the dissemination of information. The role of bots in political influence and the emergence of echo chambers reinforcing polarisation were also identified (Lombana

Bermúdez et al., 2022). It was evident that senders and recipients are immersed in complex dynamics shaping the Colombian political landscape. The themes and approaches of studies focusing on senders and recipients are presented below (Table 3).

Topics	Approaches
2014 presidential election	Journalists: hate/public: peace
Impact on social media	The revolution in political communication
Disinformation and polarisation	Negative influence on elections
Verbal violence against journalists	Effect of political pluralism
Necropolitics and cyberactivism	Youth response to the crisis
Manipulation of public opinion	The fabrication of public sentiments
Legislative behaviour	Political response to violence
Use of X in political events	Influence on public image
Gender stereotypes and disinformation	Impact on political career

Table 3. *Recurring themes and approaches among senders and recipients*

4.1.2. Political Debate and Its Effects

The discrepancy between citizens' priorities and the topics discussed on the platform during the 2018 presidential campaign became evident, highlighting the gap between the traditional political agenda and the digital one. It is essential to emphasise the influence of political leaders and the media in shaping political debate on X, suggesting a hegemonisation of specific themes and voices.

Active citizen participation in these debates was notable. However, a tendency towards misleading statements and a negative tone in interactions was observed, resulting in a digital space marked by information manipulation. Platform X amplified political polarisation during the 2016 peace plebiscite, as evidenced by the analysis of the rhetoric used by supporters of both the "yes" and "no" campaigns, with frequent references to the armed conflict and delegitimisation of the FARC. Political leaders such as Álvaro Uribe Vélez and Gustavo Petro used the platform during the 2021 national strike to express their positions and mobilise support.

The political response to violence was addressed, highlighting how attacks by illegal armed groups increased citizen participation on X and support for the government, especially when it adopted a firm stance. Analyses of expectations regarding the peace process on the platform underscore the need to build genuine peace through dialogue and citizen participation, reflecting the diversity of actors and the platform's role in shaping political opinions (Table 4).

Topics	Approaches
Polarisation and conflict on social media	Dehumanisation and promotion of violence in social media narratives. Impact of hate messages on political fragmentation.
Political discourse	Differences in styles and themes between presidential candidates and presidents. The importance of clarity in structuring a memorable speech.
Influence of bots on political discussion	Impact on political attitudes and online behaviour during political events.
Influence of political hashtags on opinion formation	Influence on voters' emotions and decisions.
Discursive strategies adopted by presidential candidates	Strategic and tactical approaches to solving the country's problems.
Ideological rhetoric as a tool for promoting peace	Fostering tolerance and coexistence in peace negotiation contexts.
Speech acts during political events	Challenging and direct political discourse at events such as the national strike.

Table 4. *Recurring topics and approaches in political debate*

4.1.3. Electoral Campaigns

The analysis of regional, legislative, and presidential campaigns and electoral processes revealed recurring phenomena. The role of the platform as a channel for information dissemination and interaction between candidates and citizens stood out. The platform was frequently used for propaganda purposes, with candidates seeking to influence public perception and attract voters. Studies highlight the relevance of traditional media in shaping the political agenda on the platform. Although citizens participate in political discussions, the media determine the predominant topics and shape public perception.

A discrepancy between the online agenda and electoral results was observed, suggesting that digital discussion does not always reflect real electoral preferences. Another important phenomenon is the ingenious use of the microblogging platform by candidates to promote messages and create campaign narratives, with changes in strategies throughout the electoral process, prioritising emotional appeals over rational ones through hashtags. Radicalisation and confrontation between opposing ideological blocs were evident, reflected in discourse and interactions.

Conflicts between political sectors generated hostility and fragmentation in debate. Thus, platform X emerged as a decisive space for political information and communication in Colombia, with dynamic interaction among candidates, citizens, and the media. However, challenges remain regarding the real influence of this platform on electoral outcomes and the construction of a democratic public sphere (Table 5).

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Topics	Approaches
Agenda setting	Traditional media shape the political agenda, while citizen participation is crucial in public discussion. Electoral debate predominates, but the relationship between online activity and electoral results is tenuous. Discourse generally displays a positive bias.
Election framing	Influence of journalistic framing on public opinion construction. Strategic use of the "hate" and "peace" dichotomy in information production.
Platform impact	Growing importance of social media in political communication. X as an innovative channel for propaganda during campaigns.
Communication strategies	Use of X to mobilise voters and engage in confrontational practices. Analysis of political propaganda impact.
Construction of the political dimension	Shaping political dimensions through discourse. Preference for emotional appeals in campaign narratives.
Dynamics of electoral competition	Competition defined by visibility, aggressiveness, and agenda. New ways of practising politics on social media. Relationship between political, media, and public agendas on X.

Table 5. *Recurring topics and approaches in electoral processes*

Addressing RQ1, platform X, essential in Colombian political communication, is marked by polarisation, disinformation, and challenges to a democratic public sphere. The dynamics among senders, recipients, and traditional media reveal confrontation and manipulation, with a weak correlation to electoral outcomes. Promoting inclusive, transparent, and representative dialogue remains a pressing need.

4.2. Analysis of Research Approaches

After a quantitative assessment, the following distribution of research approaches was identified across the studies: 16 used mixed methods, 15 employed qualitative methods, and 11 applied quantitative methods (Figure 6).
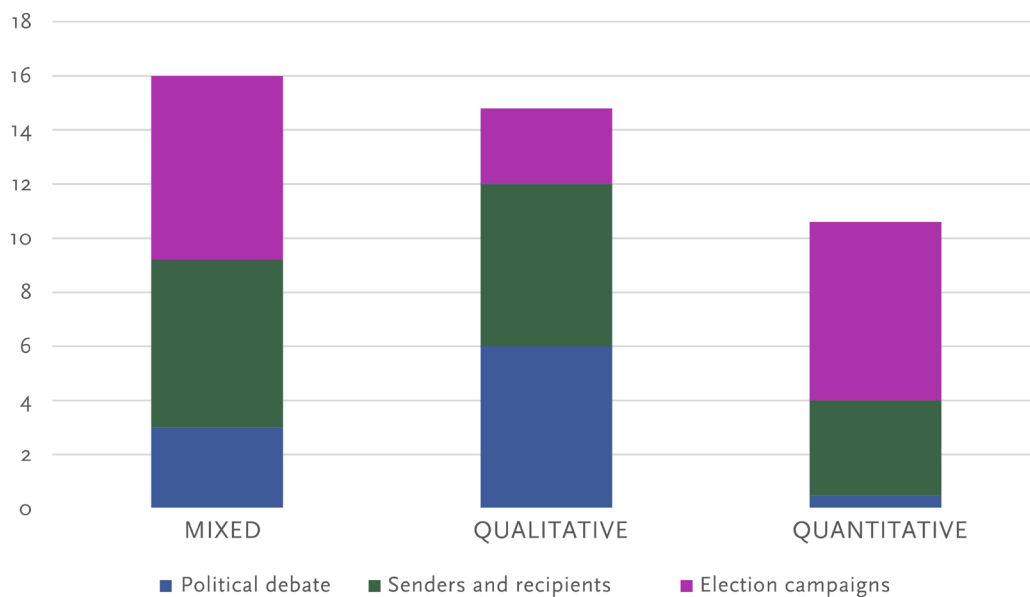

Figure 6. *Proportion of different approaches and focuses in each research typology*

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4.2.1. Analysis of Research Approaches

The qualitative approach is the most frequently used, suggesting a strong interest among researchers in gaining a deeper understanding of users' opinions, perceptions, and experiences on X concerning politics, enabling richer and more contextualised analyses.

The relevance of the quantitative approach denotes an effort to analyse large volumes of data to identify patterns and trends. This approach enables the generalisation of findings and the measurement of the impact of specific factors in political communication.

The growing use of the mixed approach, which combines qualitative and quantitative elements, reflects the pursuit of more robust and comprehensive research capable of offering both broad and in-depth insights into the complex phenomena of political communication. Combining both approaches (qual-quant) allows for a more detailed and multifaceted understanding of political communication processes, contributing to the advancement of knowledge in the field.

Political communication phenomena in Colombia are complex and multidimensional. The mixed approach enables the integration of different perspectives and a more complete understanding of these events.

4.2.2. Typological Analysis

The prevalence of the qualitative approach in the study of senders and recipients suggests a strong interest among researchers in deeply understanding the perspectives, motivations, and roles of those who produce and receive political messages. The mixed approach shows a more balanced distribution across the three categories, indicating that it is employed to address a variety of topics. The quantitative approach appears to be less frequently used in the study of political debates, possibly due to the difficulty of quantifying certain qualitative aspects such as tone, language, and emotional content. The conclusions of this analysis are illustrated in Figure 7.
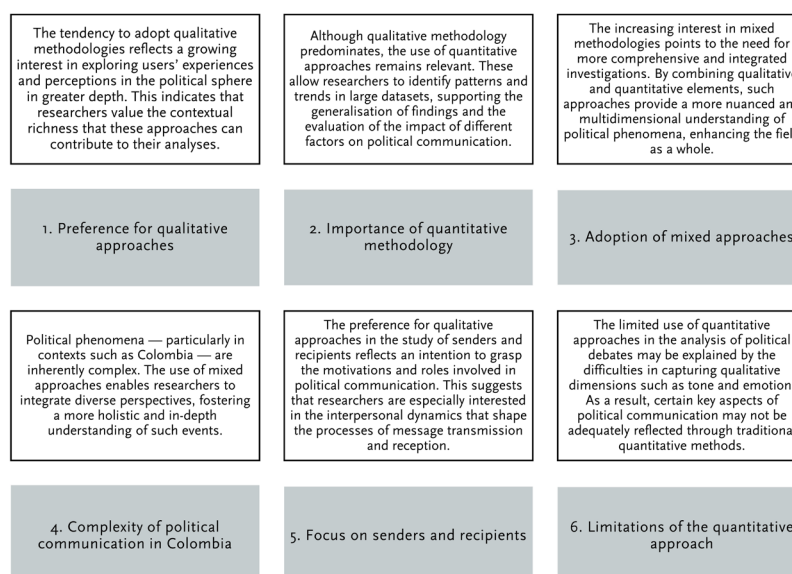

The tendency to adopt qualitative methodologies reflects a growing interest in exploring users' experiences and perceptions in the political sphere in greater depth. This indicates that researchers value the contextual richness that these approaches can contribute to their analyses.

1. Preference for qualitative approaches

Although qualitative methodology predominates, the use of quantitative approaches remains relevant. These allow researchers to identify patterns and trends in large datasets, supporting the generalisation of findings and the evaluation of the impact of different factors on political communication.

2. Importance of quantitative methodology

The increasing interest in mixed methodologies points to the need for more comprehensive and integrated investigations. By combining qualitative and quantitative elements, such approaches provide a more nuanced and multidimensional understanding of political phenomena, enhancing the field as a whole.

3. Adoption of mixed approaches

Political phenomena — particularly in contexts such as Colombia — are inherently complex. The use of mixed approaches enables researchers to integrate diverse perspectives, fostering a more holistic and in-depth understanding of such events.

4. Complexity of political communication in Colombia

The preference for qualitative approaches in the study of senders and recipients reflects an intention to grasp the motivations and roles involved in political communication. This suggests that researchers are especially interested in the interpersonal dynamics that shape the processes of message transmission and reception.

5. Focus on senders and recipients

The limited use of quantitative approaches in the analysis of political debates may be explained by the difficulties in capturing qualitative dimensions such as tone and emotion. As a result, certain key aspects of political communication may not be adequately reflected through traditional quantitative methods.

6. Limitations of the quantitative approach

Figure 7. *Highlights of the Analysis*

Regarding RQ2, the mixed approach predominates due to its capacity to integrate qualitative and quantitative analyses for a more comprehensive understanding. The qualitative approach stands out for its ability to explore opinions and experiences in depth. In contrast, the quantitative approach, although less frequent, is relevant for identifying patterns in large volumes of data, but is less applied in political debate due to the difficulty of quantifying subjective aspects.

4.3. Analysis of Research Methods, Techniques, Tools and Procedures

Based on the *corpus* analysed, the various research techniques and instruments were classified according to their focus (qualitative, quantitative, or mixed) and their specific nature.

The research techniques used in the studies are diverse, according to the research approach type. Content analysis was the most widely used, appearing in 15 studies, and was predominantly associated with mixed approaches. This reveals its versatility for analysing textual and contextual data. Next were qualitative coding techniques (seven studies, mixed approach) and interviews (four studies, qualitative approach), also standing out and underlining the relevance of techniques that allow for the detailed organisation and interpretation of data. Technical procedures such as bootstrapping, axial coding, OpenOrd, and the Kruskal-Wallis H test appeared in only one study each, indicating more specific or emerging uses within the systematic review (Table 6).

Research methods, techniques and procedures by approach	Use in the *corpus*
Mixed	31
Content analysis	15
Qualitative coding techniques	7
Sentiment analysis	3
Statistical methods	1
Predictive variables	1
Kernel regression model	1
Analysis of variance (ANOVA)	1
Network studies	1
Network construction	1
Qualitative	20
Interviews	4
Discourse analysis	3
Case study	2
Virtual ethnography	2
Pragmatic theories	1
Functional analysis theory	1
Observation	1
Tropes. Classification of digitised content	1
Enunciation theories	1
Axial codes	1
Descriptive codes	1

Netnography	1
Lemish and Tidhar's model for reliability analysis	1
Quantitative	18
Twitter API	4
Social media analysis	4
Descriptive statistics	2
Statistical analysis	2
Kruskal-Wallis H test	1
Web Scraping	1
Bootstrapping	1
Simple model of legislative behaviour based on Levitt's framework	1
OpenOrd. Graph algorithms	1
Generalised linear regression model	1
Codebook	1

Table 6. *Research methods, techniques and procedures used in the studies*

Notes. *Molina (2007) indicates that social networks are a natural object of study. **The concept of "network construction" was addressed by Revuelta Domínguez and Fernández Sánchez (2010) and van Dijck (2013/2016).

The research tools also show diversity, with a notable presence of computational applications and analytical procedures. R software was the most used, featuring in 10 studies, all with a quantitative approach, highlighting its acceptance for robust statistical analyses. The analysis matrix (five studies, mixed approach) and SPSS (four studies, qualitative approach) are also widely used, showing the importance of tools that support both statistical analysis and the organisation of qualitative data.

Resources associated with quantitative approaches — such as R, SPSS, Gephi (two studies) and SenticNet (one study) — are predominant, emphasising the need to process large volumes of data. Procedures aligned with mixed approaches (analysis matrix, Crimson Hexagon, surveys/polls) also have a strong presence. At the same time, qualitative tools (Atlas.ti, AntConc, and MAXQDA) are less frequent but essential for detailed textual analysis. Tools such as Botometer, Twitonomy, Noverlap, Pocket and Spad VII indicate specific uses, often linked to social network or sentiment analysis (Table 7).

RESEARCH TOOLS BY APPROACH	USE IN THE CORPUS
Quantitative	24
R	10
SPSS	4
Gephi	2
Python	2
SenticNet	1
Botometer	1
Buzz Monitors	1
Spad VII	1
Twitonomy	1

Mixed	22
Analysis matrix	5
Surveys/polls	3
Crimson Hexagon	2
Import.io	1
Open Refine	1
Excel	1
NRC Word-Emotion Association Lexicon	1
Lingmotif	1
Noverlap	1
Linguistic tools	1
Dmi-Tcat — Twitter Capture and Analysis Toolset	1
Word clouds	1
PSPP	1
NodeXL	1
Opinion monitors	1
Qualitative	10
Opinion monitors	3
AntConc	2
Pocket. Influence network analysis	1
Multimodality tools for semiotic mode analysis	1
Text processing (X posts)	1
MAXQDA	1

Table 7. *Research tools used in the studies*

Addressing RQ3, the analysis reveals a preference for techniques and instruments that combine versatility, the capacity to process large volumes of data, and in-depth analysis, reflecting the methodological diversity in the field of platform X studies in Colombian political communication.

5. Final Considerations

Studies on the role of X in political information and communication in Colombia, though still developing, have yielded valuable findings. The research conducted so far combines quantitative and qualitative methods, exploring the vast array of data available on the platform. X plays a central role in campaigns and elections, but its representation of society must be interpreted with caution. The academic community is showing increasing interest in the topic, driven by the impact of X on the Colombian political context. However, the lack of a shared methodological framework and the fragmentation of case studies limit the generalisability of the findings. It is crucial to move towards greater systematisation of research, making use of the available evidence to establish patterns of use and expected phenomena, thus contributing to a deeper understanding of the role of X in Colombian political information and communication.

5.1. The Challenge of Campaigns: Candidates' Strategies and Tactics

The use of X in political campaigns is strategic, with platform users consciously selecting topics. Although traditional media still exert considerable influence, electoral campaigns in Colombia are increasingly shaped by a new communicative dimension. A growth in the development and coverage of campaigns has been observed, resulting from the professionalisation of communication processes. Campaigns depend on media structures, image projection, and the emotional tone of discourse.

Polarisation in electoral processes has become evident, with media outlets seeking to position their preferred candidates. The discourse also included references to the Colombian conflict. Electoral actors use X for propagandistic purposes, intensifying digital campaigning with abundant content. In the 2018 elections, for instance, X played a significant role, with the focus placed on the candidates' personal narratives, who used their social media to enhance their electoral appeal.

In electoral disputes, X is susceptible to manipulation through political marketing strategies, amplified by users' lack of awareness. Verbal — and potentially physical — violence against the press was also identified, through hate speech on the platform. Individuals involved in offline politics expanded their online participation during campaigns.

5.2. Unveiling the Debates: What Really Matters

Echo chambers on social media distort political debate in Colombia, amplifying content aimed at discrediting opponents and deepening ideological polarisation. The division surrounding the peace agreements with the FARC and the lack of consensus on the end of the Colombian conflict exacerbate this polarisation. Rather than fostering dialogue, political parties engage in unidirectional discourse, reinforcing divisions.

Social networks, political hierarchies, and public figures influence opinion formation and political decisions in Colombia. Polarisation manifests itself through discursive practices that reinforce existing divides, alongside growing voter fatigue with both right- and left-wing candidates. However, gender stereotypes continue to hinder women's political participation.

5.3. Who Holds the Power? The Role of Senders and Recipients on the Platform

The political agenda on X is primarily set by powerful actors, especially traditional media, which dominate social networks. This dynamic reveals a significant alignment between the agendas of major media outlets and X. Disinformation campaigns originating from a mechanism known as "bodegas do X" were identified. The use of the microblog by adults in urban areas of Colombia is associated with greater political participation both online and offline, evidenced by cyberactivism in various political-communicative practices. Journalists from traditional media share their opinions less frequently and hold a less pessimistic view of former Colombian president and senator Álvaro Uribe Vélez, in contrast

with colleagues from alternative media. Posts by politicians using harsh language show an increase in follower engagement, suggesting a relationship between political violence and voter behaviour.

5.4. Study Limitations

By limiting itself to works published in international academic databases, this research excludes a significant portion of scientific production on the topic. This opens the door for future investigations that include other sources, such as grey literature and local publications, broadening the understanding of trends and approaches used in the field. Topics such as disinformation, fake news, and citizen participation still require deeper exploration, offering rich opportunities for future research.

5.5. Suggestions for Future Research

Based on the analysis carried out, methodological recommendations are proposed for future research on the role of platform X in political communication within the Colombian information context (Table 8), guiding researchers regarding the diversity of aims, paradigms, methods, techniques, and applicable instruments. The framework suggests mixed approaches, integrating qualitative and quantitative analysis to explore various typologies. These guidelines aim to enhance research, considering the complexity of the political information context.

	Electoral campaigns	Senders and recipients	Political debates
Purpose	Exploratory	Descriptive	Explanatory
Paradigms	Participatory/advocacy	Constructivist	Post-positivist
Approaches	Mixed		
Methods		Social media analysis	Case study Experimental method
Data collection and analysis techniques	Content analysis		Discourse analysis Interviews Surveys
Methodological procedures	Data collection, processing, and analysis (qualitative-quantitative)		Micro and macro data
Tools	Programming in R or Python (and libraries) Qualitative analysis tools (Orange, KNIME, Tableau, PSPP, and Atlas.ti) Statistical analysis tools (Jamovi or JASP) Network analysis and visualisation tools (Pajek, NetworkX, Gephi, Cytoscape, and VOSviewer) Natural language processing (computational linguistics) Machine learning		

Table 8. *Proposed framework based on research references on X*

The recommendations presented in this study open new perspectives for future research on this constantly evolving phenomenon, although their application will depend on the specificities and objectives of each study.

The article highlights phenomena such as polarisation, disinformation, and the use of bots, contributing to a deeper understanding of how social media, structured on digital platforms, shape the public sphere — especially in contexts of intense polarisation, such as the 2016 peace plebiscite. These findings have global relevance, as they reveal universal dynamics of information manipulation, campaign strategies, and interaction among political actors in digital democracies, as observed in several Latin American countries and other regions. Moreover, the proposed mixed approaches combined with computational tools provide a flexible methodological foundation for research in different contexts, encouraging comparative and interdisciplinary studies in the field of digital political communication.

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