GENERATIVE AI MISINFORMATION IN THE 2024 MEXICAN ELECTIONS

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EXECUTIVE SUMMARY

Five main trends regarding AI and the 2024 Mexican elections stand out:

- Generative artificial intelligence (GenAI) has permeated political campaigns. Manipulation of both video and audio content via AI has found its way into the Mexican campaign toolkit.
- Local and regional fact-checking organizations are crucial for countering manipulative content. Networks such as Latam Chequea, which includes over 30 fact-checking organizations from 15 countries, have emerged to coordinate efforts and share best practices about countering manipulative content, including that generated by Al.
- **Prevalence of Mexican high-profile politicians in deepfakes.** The primary targets of Almanipulated content tended to be the leading political candidates in the elections.
- **Creation of fake associations or endorsements.** Fabricated images of international stars featured artists like Lady Gaga and Dua Lipa wearing attire promoting local political candidates or parties.
- **Fun or manipulation?** The presence of AI-generated satire makes it difficult to distinguish between genuine attempts at humor and malicious disinformation relying on humor especially when such content is shared across different platforms or communities without context.
- X as an important political platform. X played a large role in the elections, as an important political platform on which AI content flourishes.

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NOTEWORTHY HIGHLIGHTS

Two reasons underpinned concerns about voter manipulation in Mexico with AI content in the 2024 national elections:

- The country's high levels of crime and violence. Mexico's past had already shown that false and misleading content could fuel criminal violence or anger against politicians. The potential for higher volumes of disinformation and more sophisticated hate speech increased concerns over AI during the Mexican elections.
- **Mexico's geopolitical importance.** Mexico is geopolitically important for the US; Mexican cooperation and stability are key aims of American policy makers. When deliberating cooperation with America, Mexican politicians factor in public support, and AI-generated content's potential to sway public opinion on these topics increased American concerns about AI in the Mexican elections.

Two unique findings stand out:

- **Capitalizing on elections for fraudulent business schemes.** Al content featuring prominent politicians during the election season was used to promote fraudulent investment schemes. The use of GenAl significantly enhanced these scams' sophistication, making it easier to deceive even discerning viewers.
- Using AI for background manipulation. Instead of focusing on altering main characters' speech in a short video, AI was used to alter the environment—for example, creating boos at a rally, creating the impression of public discontent with a politician.

One important, underreported finding emerged:

• **GenAl as backbone for elaborate disinformation.** Tools like Chat-GPT can quickly and realistically create false content at scale. For example, in Mexico an entire book was invented and falsely attributed to previous President López Obrador; Al content can be used to relatively quickly build the backbone to a propaganda campaign.

KEY TERMS

- Generative Artificial Intelligence (GenAI) refers to computer systems that draw on extremely large datasets to make statistical inferences about the relationship between words in a body of text or pixels from an image. From these inferences, GenAI systems can produce human-like content quickly in response to human-provided prompts.
- Large language models (LLMs) are a form of GenAl that are trained on billions of words of human-produced text. For example, ChatGPT is powered by an LLM.
- *Synthetic Media*, or "deepfakes," can be created by generative AI in the form of imagery, audio, or video.

INTRODUCTION

In recent years, the rapid advancement of generative artificial intelligence (GenAI) has revolutionized numerous sectors, including political campaigns. However, the use of Al in political contexts is not new. Previous research has explored the application of AI in voter targeting, sentiment analysis, and automated content generation. However, the recent leap in GenAI capabilities has dramatically expanded the potential for AI-generated content in political campaigns. While some studies have examined the impact of AI on elections in other countries, there is a notable gap in research specifically addressing the Mexican political landscape and its unique socio-cultural context. This context includes Mexcico's diverse population, with varying levels of digital literacy and access to technology across different regions; the country's history of political transformation and ongoing challenges with corruption and media manipulation; and the significant role of encrypted platforms like WhatsApp in disseminating political information. In addition, Mexico's proximity to the United States and its position as a key Latin American economy add layers of geopolitical significance to its electoral processes, potentially influencing the motivations behind and impacts of AI-generated content in political campaigns. This study examines the role of GenAl in the 2024 Mexican general elections, with a specific focus on Al-generated content shared across various social media platforms.

The 2024 Mexican general election was a landmark event in the country's political landscape. Claudia Sheinbaum, who represented the ruling Morena party, emerged as the victor, becoming Mexico's first female president. Her main opponents were Xóchitl Gálvez of the opposition alliance — the Broad Front for Mexico—and Jorge Alvarez Máynez of the center-left Citizens' Movement party. Sheinbaum's victory was seen as a mandate for continuing the left-leaning policies of her predecessor, Andrés Manuel López Obrador, and it signaled the ongoing strength of the Morena party. The election was notable for its high voter turnout and the intense focus on issues such as economic inequality, security, and corruption. While Sheinbaum's victory was largely anticipated due to her party's strong support base and the incumbent government's popularity,¹ GenAl's role in this election was crucial and must be examined. While the exact impact of GenAI on the election outcome remains uncertain and difficult to quantify, analyzing how it was used provides valuable insights into evolving campaign strategies, the potential for misinformation in future closer races, and the challenges facing electoral integrity in the digital age. Moreover, understanding the use and impact of GenAl in a context where it had only limited influence on the outcome allows for a more objective assessment of its capabilities and risks. This report, therefore, serves as an important baseline for future studies, offering a look at how emerging technologies are shaping political discourse, even in elections where the results may seem predetermined.

Here, our primary objective is to conduct a comprehensive analysis of the AI-generated material identified by prominent Mexican fact-checking organizations during the electoral period. We analyze the characteristics of this AI-generated content to glean insights into the political figures and the topics targeted. We ask two key research questions: To what extent is GenAI being used in the 2024 Mexican general elections, and what are the primary themes propagated through AI-generated content? The significance of this study lies in its potential to inform policy decisions and public awareness regarding the use of AI in political campaigns. Our findings could provide valuable insights for electoral authorities, policymakers, and civil society organizations who work to safeguard the democratic process. Moreover, this research contributes to the broader global dialogue on the ethical use of AI in elections, offering a case study that may be relevant to other emerging democracies.

This paper is structured as follows: after this introduction, we present a detailed literature review on the use of AI in political campaigns. We then describe our methodology, followed by a presentation of our findings. The subsequent discussion section interprets these results in the context of Mexican politics. Finally, we conclude with a reflection on the findings, as well as suggestions for future research directions.

Related Work

The integration of GenAI in political campaigns has become a subject of increasing academic and public interest, particularly as these technologies continue to evolve and impact electoral processes worldwide.² Recently, the development of sophisticated GenAI tools has significantly expanded the potential applications and impacts of AI in political contexts in both positive and negative ways. For example, GenAI can circumvent traditional barriers to political communication: it offers politicians powerful tools for message crafting and voter engagement;³ some political candidates have begun using AI to generate speeches and respond to constituent queries;⁴ and tools like chatbots and automated content generators are being used to maintain constant and personalized communication with voters.⁵

However, researchers have also documented GenAI being used for purposes of political satire,⁶ and the advent of GenAI in image editing software has transformed the landscape of photo manipulation. For instance, Adobe Photoshop's release of GenAI features marked a significant shift in the field. Before these AI features, changing photos convincingly required a lot of skill and experience. Now, with these AI-powered tools, even beginners can make sophisticated edits, quickly matching colors, recreating textures, and blending new elements seamlessly into an image.⁷ This democratization of advanced editing capabilities has made it much easier for anyone to create or alter images with results that look remarkably real, raising both opportunities for and concerns about subtle image manipulation that could mislead voters or distort political narratives.⁸ There are also significant concerns about the misuse of GenAI for spreading disinformation and manipulating public opinion.⁹ This is because AI-generated deepfakes and other forms of synthetic media can create very convincing false narratives, potentially misleading voters and undermining the democratic process.¹⁰

In the Latin American context, research on the use of GenAl in political campaigns is still emerging. Comprehensive studies of how diaspora communities, including Latin Americans in the United States, use messaging platforms for political communication have highlighted these channels' importance in political discourse.¹¹ In Mexico, specifically, researchers have highlighting the potential for regionally popular encrypted messaging apps to be used for both good (political engagement) and ill (the spread of disinformation).¹² While these studies did not focus specifically on GenAl, they provide important context for understanding the digital landscape of Mexican political discourse in which Al-generated content circulates.

In recent years, Latin America has seen significant growth in fact-checking organizations, which now play a crucial role in combating political misinformation and disinformation in the region. Networks such as Latam Chequea, which includes over 30 fact-checking

organizations from 15 countries, have emerged to coordinate efforts and share best practices.¹³ In Mexico, fact-checking organizations like VerificadoMX and Animal Político's "El Sabueso have been at the forefront of identifying and debunking false claims, including those generated or manipulated by AI. Their work has become increasingly important as the sophistication of GenAI technologies grows, presenting new challenges in distinguishing authentic content from manipulated or entirely fabricated information.¹⁴ The strategies and findings of these fact-checking organizations provide valuable insights into the landscape of misinformation in Mexican politics, including the emerging trends in AI-generated content.

Despite these emergent efforts in both research and fact-checking in the Mexican political context, there remains a significant gap in understanding the specific role and impact of GenAI, particularly around the 2024 general elections. Such research will serve as a stepping stone toward efficient and targeted regulations around GenAI in political campaigns. This research aims to begin to address this gap by conducting a systematic analysis of AI-generated content in Mexican political campaigns, thus contributing to the growing body of literature on the intersection of AI and politics in Latin America and beyond.

Methodology

To conduct a systematic analysis of AI-generated content in Mexican political campaigns during the 2024 elections, we combined quantitative content analysis with qualitative interpretation. This methodology aimed to provide a comprehensive understanding of the prevalence and content of AI-generated material across various social media platforms.

We focused on GenAI-generated content that was identified by leading Mexican factchecking organizations (VerificadoMX, AFP Factual, Animal Político's "El Sabueso", Reuters Factcheck, and Certeza INE) rather than analyzing all political material generated or promoted by candidates and parties in the 2024 Mexican election. Although this proxy method may not capture every instance of AI use in the campaign, it enabled us to concentrate on content that fact-checking organizations considered significant enough to report on—content that had high resonance in public discourse.

We focused our data collection efforts on X, as this platform is highly used for political communication in the country.¹⁵ We collected data from the official start of the campaign period, November 20th, 2023, to two weeks after the election day, June 17th, 2024, to ensure we captured pre-election, election day, and immediate post-election content. In total, we collected 1760 posts from these organizations.

Once we collected the data, we cleaned it to remove duplicates, irrelevant content, and spam. We then manually reviewed the content to identify posts specifically addressing Algenerated content related to the political campaigns. We did so by filtering for posts that included terms related to the electoral campaign (#Elecciones2024MX, #INEInforma), the candidates (their names and usernames) and terms related to AI used to report this type of content (e.g., "inteligencia artificial," "IA," "deepfake," "video" AND ("falso" OR "manipulado"), "audio" AND ("falso(a)" OR "manipulado(a)"), "inteligencia artificial generativa," "IA generativa"). We obtained 101 unique posts with these characteristics. We then categorized these posts based on the topic of the AI content. Finally, we conducted a qualitative classification of topics through a systematic review of the content. We first identified recurring topics within the AI-generated material, then coded each piece of content according to these topics. This qualitative approach provided a nuanced understanding of the narratives being promoted and their potential impact on the electoral process.

FINDINGS

Our analysis of the fact-checked content revealed that several GenAI techniques, such as voice cloning, lip-sync manipulation, and background or text replacement, were employed. High-profile political figures—primarily political candidates—were the primary targets of these manipulated contents. According to reports from the fact-checking organizations analyzed, the disinformation spread across various platforms such as Facebook, and X and even encrypted platforms such as WhatsApp.^{20,23,25} Presidential candidates and current government officials, including Claudia Sheinbaum and Xóchitl Gálvez (both presidential candidates at the time), Andrés Manuel López Obrador (AMLO) (president of Mexico at the time of writing), and Felipe Calderón (former president of Mexico) featured prominently in these fabricated videos and audio clips. Thematically, the disinformation centered around four main themes: attribution of false statements to political figures, fraudulent investment schemes falsely associated with politicians, faked associations with or endorsements from celebrities, and the distortions of the candidate's body or voice—a form of political violence.

False Statements Attributed to Political Figures and Electoral Authorities

The majority of detected posts (63.3%) published by the fact-checking organizations belonged to this category. The posts in this category were related to AI-generated content that falsely attributed statements or actions to political figures, primarily targeting prominent candidates and officials. These fabrications created misleading narratives with the potential to sway voter opinions and generate political controversy.

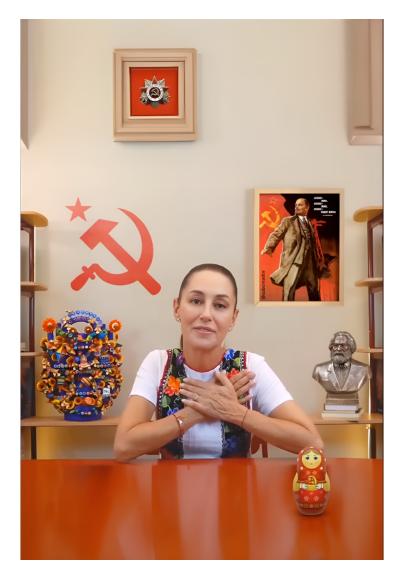


Figure 1: Example of GenAI-created content with false statements attributed to politicians: A video falsely shows Claudia Sheinbaum speaking Russian, created using voice cloning and lip-sync manipulation. The original Spanish video was altered to include Soviet symbols and a fake Russian voiceover, misleading viewers into believing she was addressing the Russian public in a communist context. (Source: AFP Factual)

For example, we encountered a video created using GenAI techniques that featured Claudia Sheinbaum speaking in Russian. This video used voice cloning and lip-sync manipulation to falsely portray Sheinbaum delivering a message in Russian, surrounded by Soviet symbols. The original footage, which she posted in Spanish on her social media, was altered to include a fake Russian voiceover and additional visual elements to mislead viewers into believing she was addressing the Russian public in a communist setting (See Fig 1). It is possible that this imagery was strategically chosen to evoke associations with communism and align with circulating narratives on social media that attempted to link Sheinbaum and President Andrés Manuel López Obrador (AMLO) with communist ideologies,¹⁶ exploiting existing accusations about the AMLO government's alleged ties with Russia.¹⁷ Fact-checkers reported that this video was shared over Facebook, TikTok, and Instagram as a parody, but many users reposted the video without clarifying that it was a parody or a joke,¹⁸ significantly contributing to its misleading impact.



Figure 2: Opposition candidate Xóchitl Gálvez shares manipulated images of INE billboards, falsely suggesting an endorsement of her social program stance, prompting INE to request their removal.

Narratives in these posts relate also to candidates' election pledges and the electoral authorities. For example, social media platforms were flooded with memes about a fictitious "mandatory circumcision" campaign, which quickly evolved into xenophobic disinformation targeting Sheinbaum's Jewish heritage.¹⁹ In another instance, the opposition candidate Xóchitl Gálvez shared manipulated National Electoral Institue (INE)) billboards that appeared to promote her stance on social programs, making it seem as though the INE endorsed her views (see Figure 2). This situation prompted the INE to request the

removal of the misleading posts.²⁰ These incidents highlight the growing sophistication of visual misinformation in political campaigns. Although it is impossible to know if those who created the posts used GenAI tools embedded in image editing software, it is important to highlight that, unlike the crude Photoshop manipulations of the past, GenAI-assisted image editing allows users to seamlessly blend fabricated elements with real backgrounds, making them particularly challenging for the average viewer to identify as false.

Narratives in these categories also took the form of fake publications, such as an apocryphal book falsely attributed to President López Obrador that contained fabricated statements against the poor and the armed forces.²¹ While there is no evidence that AI tools were used to create this book, tools like ChatGPT make it much faster and easier to create convincing false content and mislead the public.

Other false claims included fake posts with misleading information about the electoral process²² and fabricated polling data that grossly inflated voter preference.²³ These diverse examples highlight the complex landscape of misinformation that voters had to navigate during the election period.

Fraudulent Investment Schemes Falsely Associated with Politicians

Posts in this category (6.4%) contained AI-generated content in order to promote fraudulent investment schemes by exploiting the image (and the perceived credibility) of political figures and well-known entrepreneurs. These fabricated videos and advertisements typically promised unrealistic financial returns through means such as automated stock market investments or oil sector opportunities. By associating these schemes with prominent individuals, the creators attempted to lend false legitimacy to their fraudulent offers. The use of GenAI significantly enhanced the sophistication of these scams, making it easier to deceive even discerning viewers, posing a substantial threat to financial security and trust.²⁴

For instance, Figure 3 showcases AI-generated content that falsely promises returns of 50,000 pesos (approximately 2,500 USD) using a deepfake and cloned voice of President López Obrador.²⁵ Similarly, the deepfaked image and cloned voice of Claudia Sheinbaum were featured in videos related to fraudulent schemes (see Figure 4).²⁶ These incidents demonstrate a concerning trend of using AI to manipulate the images and voices of prominent politicians for financial fraud.



Figure 3: Example of GenAI-created content related to fraudulent statements: Screenshot of a deepfake video advertisement featuring a fabricated version of President Andrés Manuel López Obrador (AMLO) promoting a fraudulent oil investment scheme.



Figure 4: Example of GenAI-created content related to fraudulent statements featuring a deepfake video and cloned voice of the running presidential candidate Claudia Sheinbaum. a) A video from a financial platform, shared on social media, asking for sign-ups to earn up to 152,820 MXN (approx. 7,500 USD). b) A social media post saying that the advertised financial platform has obtained all the appropriate licenses to operate and that they can guarantee earnings of 43000 MXN (approx. 2000 USD).

Fake Associations or Endorsements

These posts (22.9%) involved creating false associations and endorsements to manipulate public perception. For instance, altered images featured edited photos of prominent artists like Lady Gaga and Dua Lipa wearing Morena attire, as well as fabrications suggesting that companies such as Starbucks endorsed Xóchitl Gálvez (see Figure 5) and a Mexican Air Force banner displaying a pro-Xóchitl Gálvez message. False claims included politicians like AMLO and Durazo being inserted into images alongside a notorious drug trafficker or alterations to images of Claudia Sheinbaum's butterfly tattoos, manipulated to added an inverted cross on her shoulder, along with a pentagram, a depiction of death, and the figure of Baphomet—all symbols associated with Satanism.²⁷



Figure 5: Manipulated images falsely showing endorsements from Dua Lipa, Lady Gaga, and Starbucks, circulated during the 2024 electoral campaign.

These examples are particularly relevant in the context of GenAI misinformation, as advanced AI tools can effortlessly create realistic and convincing false content. This capability makes it increasingly difficult for the public to discern truth from fabrication, thereby skewing public perception and undermining trust in authentic endorsements and political messaging.

Political Violence

Narratives in these posts (7.33% percent of posts) targeted the candidates' physical and vocal presentation, distorting their public image. For example, videos of Xóchitl Gálvez were frequently edited to alter the way she spoke or the way people addressed her to make it

seem as though she were unpopular with voters: one video of her at an event was altered to include boos, and another from Guerrero was edited to add an insult. Similarly, a video of Gálvez at an Independence Day celebration had its audio altered to make it seem that she was speaking irrationally, changing the perception of the event's atmosphere. Another instance involved a photograph of Claudia Sheinbaum being manipulated to change her posture, affecting her perceived physical presence. These altered physical and vocal presentations can create false perceptions, leading to misunderstandings and negative judgments from the public.

CONCLUSION

As our findings show, the rapid advancement of GenAI has allowed it to permeate political campaigns. Our analysis revealed that the most common forms of AI-generated content included politically motivated video and audio manipulations, false associations and endorsements, and alterations to candidates' physical and vocal presentations. We also observed non-political uses of GenAI that involved political figures, including financial scams. These tactics not only targeted the candidates' public images but also aimed to mislead voters by creating convincing false narratives. The presence of AI-generated satire further complicates this landscape, as it can be challenging for viewers to distinguish between genuine attempts at humor and malicious disinformation, especially when such content is shared across different platforms or communities without context. The findings highlight how the use of GenAI has introduced a new paradigm of tools to produce highly convincing content—both intentionally misleading content and satirical content—that can be rapidly produced, presenting unprecedented challenges to electoral integrity and democratic processes.

As GenAI technologies continue to advance, we can anticipate even more sophisticated and pervasive uses of these tools in future electoral cycles, not just in Mexico but globally. This trend underscores the urgent need for a multifaceted approach to addressing the challenges posed by GenAI in politics. It highlights the importance of developing robust verification mechanisms and raising public awareness to safeguard electoral integrity. However, traditional fact-checking and media literacy approaches may no longer be sufficient. As we move forward, it will be crucial for policymakers, technologists, and citizens alike to work collaboratively to harness the benefits of these technologies while mitigating their potential for harm.

LIMITATIONS

While our study focused specifically on the 2024 Mexican general elections, we acknowledge certain limitations that impacted our research. First, the identification and analysis of AI-generated content proved to be complex, and our solution—to focus on content identified by fact-checkers—might have missed some content, for certain posts generated using GenAI might evade fact-checkers. This limitation could have resulted in an underestimation of the prevalence of AI-generated content in the campaign landscape. Second, our reliance on publicly available social media data may have limited our view of the full scope of AI use in political campaigns.

Private messaging platforms and closed groups, which are increasingly important in political communication, were beyond the reach of our study. Lastly, our study was constrained by time and resources, which limited the depth and breadth of our analysis. A longer-term study spanning multiple election cycles and local elections would have provided a more comprehensive view of the evolving role of GenAI in Mexican politics. Despite these limitations, our research provides valuable insights into the use of GenAI in the 2024 Mexican general elections and contributes to the broader understanding of AI's role in political campaigns.

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