



Generative Artificial Intelligence and Electoral Integrity

Credible elections are underpinned by transparency, accountability and trust. However, anti-democratic actors are increasingly engaging in information manipulation to obfuscate credible sources for information surrounding elections, tilt the playing field for unfair advantage, and erode confidence in electoral institutions and safeguards. Amidst these efforts to undermine credible elections comes the emergence of widely available [generative AI \(gen AI\) tools](#), exacerbating these concerns and complicating ongoing efforts to improve electoral integrity.

Machine learning and AI have played a role in daily life, and around elections, for years. Campaigns may utilize simple chatbots to engage with voters. Media monitors and election observers may use software that includes sentiment analysis or natural language processing (NLP) to monitor traditional and social media. Optical mark recognition or optical character recognition can be used in election administration or [analysis](#). These tools have largely been used to better understand and process existing information. In contrast, novel *generative* or *gen* AI technology refers to original machine-created information or content, based on learning models that tend to be proprietary. This introduces concerns about quality control, accuracy, provenance, and, in some cases, bias.

[Artificial intelligence](#) is a field of computer science dedicated to solving cognitive problems commonly associated with human intelligence, such as learning, problem solving, and pattern recognition.

[Generative artificial intelligence](#) refers to a class of artificial intelligence techniques and models that creates new, original content based on data on which the models were trained. The output can be text, images, or videos that reflect or respond to the input.

In particular, [there is significant anxiety](#) surrounding the addition of gen AI in political campaigns and other aspects of elections. “Gen AI in Elections” has become a dominant theme in a year in which the convergence of a large number of elections and the emergence of generative AI tools in the public create the perception of a single, broad threat, as opposed to the more complex, varied, and - currently limited - use cases. Fear of the unknown, particularly as it relates to the impact of gen AI tools - both positively and negatively - in elections is compounded by its real and perceived opacity and difficulty to track. Gen AI is not yet a well understood, trusted or well-regulated technology, and the transparency and ethics of its deployment and use are largely being determined by technology companies that have their own interests and bottom lines.

The complex, opaque and multifaceted nature of gen AI can make it seem daunting for election observers to confront and hold actors accountable. However many of the threats and opportunities of gen AI are not unprecedented - electoral bodies and watchdogs are constantly adapting to technological developments in elections and digital influence in the electoral information environment. There are many pre-existing [international and regional election standards](#) that address information manipulation in elections, and those would similarly apply to use of artificially generated content in the electoral information space. In addition, there are many [new efforts underway](#) calling for [democratic norms, principles](#) and [regulations](#) for the accountable and transparent use of AI in elections. However, outside of the European Union (EU) and its Artificial Intelligence Act, there are no extrinsic incentives for companies to prioritize democratic design principles. It's important to understand the distinct areas in which gen AI may influence electoral integrity to develop clear and meaningful interventions and apply pre-existing standards.

Distilling Gen AI Election Integrity Threats

Gen AI is a tool. Tools are typically neutral, and it is only in the way in which they are deployed that present threats, complications or openings. Gen AI is an atypical tool, because it could reflect biases in the data used to train it. Understanding the uses of gen AI in elections and specific corresponding electoral integrity concerns allows for a focused and appropriate response to its use in the election context.

Gen AI intersects with electoral integrity in three major ways: 1) as a tool for election administration and observation, 2) as a tool to create information, and 3) as a source of information. Election observers, practitioners, and stakeholders should examine each of these intersections to understand each of these uses, what electoral risks they might present, and what can be done to mitigate these risks now and as they evolve. By better articulating threats, we can reduce confusion and strengthen accountability.

Generative AI in Election Administration

The use of gen AI in election administration is currently limited. Nonetheless, the technology is entering the vernacular of election vendors and administrators. Some ambitious election management bodies (EMBs) are already considering how it could be used to improve a myriad of functions, such as internal data management, voter authorization, voter list maintenance and voter education. However, as with the introduction of any new technology in the election space, decisions should be solution-oriented and deliberate. For instance, EMBs should consider whether other machine-learning or data analytics tools - which may be simpler, more transparent, have more public trust, or are less resource intensive - could address the same challenges. Many EMBs lack staff with extensive technical skills and gen AI tools can be expensive and complex, making more straightforward analytics tools a better choice. Election integrity best practices for any new electoral technology extend the principles of accountability and transparency to technology vendors. Introducing any new technology requires an understanding of how the technology is built and ensuring it will perform as expected. This presents a problem with gen AI, as the models are proprietary.

EMBs should understand the level of technical learning necessary for employing gen AI tools, the resources necessary to sustain it, how to create independence from and oversight of the vendor, how to build in quality control mechanisms, how to set up redundancies and backups, and ensure proper testing and pilots that minimize risk. Gen AI technology use in elections should be investigated against well-defined key principles that uphold international and regional electoral integrity standards: transparency, usability, auditability, secrecy of the ballot and protection of personal information. Poor

planning, procurement and implementation of gen AI in election administration could significantly undermine electoral integrity, specifically related to **transparency, accountability, and trust in the process**.

Gen AI in Electoral Content Creation and Dissemination

Gen AI is already playing a role in the electoral information space, particularly in social media. Political campaigns and their allies are using it to generate campaign products like candidate avatars, voter outreach content, and online political ads. This can help scale outreach to voters and reach them in their own language or vernacular. However, this presents a precarious line between voter outreach and voter deception. Gen AI content may be used “officially” - in which the associated campaign or political contestant is clearly identified - as well as less transparently, where the source is neither clear nor accountable. Moreover, cheap and widely available gen AI tools have resulted in an uptick of deepfakes online in the form of audio recordings, videos or pictures, often to discredit a candidate or manipulate consensus around certain political narratives. Of particular concern is manipulated content that is violent against women, particularly women candidates. These tactics **threaten the level playing field** for political contestants; **undermine voters’ ability to make an informed choice** on election day; and, in some cases, can inflict online harms and **exacerbate the potential for election-related violence**. While digitally-enabled disinformation around elections is not new, gen AI intensifies challenges specifically related to **transparency and accountability** as the speed and scale of the content it generates is difficult to detect, mitigate, and source.

Gen AI as a New Source of Electoral Information

More and more citizens are using gen AI-enabled chat bots, personal assistants, gen-AI enabled web browsers, and other tools as a source of information, which often surface “answers” based on large language models (LLMs)¹ and proprietary data models. These kinds of gen AI tools have proven unreliable in providing consistent, accurate electoral information in many country contexts, perform across multiple - especially non-English - languages, and in some cases have provided blatantly false hallucinations that can severely undermine citizens’ ability to access information needed to effectively participate in the process and cast informed votes.² This presents a serious **voter information and voter participation** challenge if the tool is not able to provide credible or up-to-date information, even if it’s only part of the time. Companies claiming model accuracy improvements relating to elections with accuracy percentages below 100% are still an electoral integrity concern. While 85% accuracy is impressive for an academic study, a model that is 85% accurate in sharing civic information is actively misinforming voters 15% of the time. Technology companies also currently have inconsistent policies about whether or not to share election related information or how to point users to credible sources of election information - which can be further complicated in closed and closing contexts where the credibility of information from EMBs may be compromised.

Election Observation in the Age of Generative AI

How can citizen and international election observers meet this moment? Given the myriad of actors involved, and possible uses, observing the use of gen AI in the election space can seem overwhelming. However, if observers approach gen AI in its more distinct uses, observation and mitigation strategies should be clearer. For instance, monitoring gen AI’s use in political campaigns should not look so different from other forms of social media monitoring observers may already be conducting, including

¹ LLMs retrieve existing content from their data set based on user prompts

² Fabricated content created by a generative AI tool that appears authentic. Read more [here](#).

defined parameters and clear objectives, such as focusing on political narratives, hate speech, voter information, or coordinated inauthentic behavior. If the use and prevalence of genAI-enabled chatbots and other information models is a concern, organizations may consider testing and assessing their accuracy vis-a-vis the electoral context and alerting the public, stakeholders, and technology companies of problematic content. While gen AI has the potential to exacerbate the scope and scale of integrity threats and complicate efforts to identify malign interference, it does not fundamentally change the threat itself of electoral information disorder.

Use of gen AI in election administration should be monitored similarly to the introduction of any new technologies in electoral functions. [NDI's Toolkit on Monitoring the Impact of New Election Technologies](#) provides a detailed framework for how to assess the use of gen AI - or any other new technology - in the election space. Regardless, the operational principle remains to keep the observation focus narrow and achievable to what presents the largest digital threat to the electoral process in the current context. Observation of gen AI should be rooted in international principles and include specific attention to the norms of gen AI's use.

Similarly, mitigation and reform efforts should follow narrow and targeted approaches. To combat the risks of gen AI as a source of information to election integrity, groups should continue outreach and efforts to share credible information. This may include increased voter education efforts and focusing attention on digital literacy and civic education to help voters understand where to find credible and trusted sources of election information.

For observation organizations that are considering incorporating gen AI into their own observation approaches, it's important to clearly set the norms of use, understand and articulate all ethical considerations, and be transparent about the use of gen AI in observer operations. While gen AI offers some exciting possibilities, [observer groups should clearly understand what it can and cannot do](#), and understand its distinct differences from broader machine-learning tools. A tool alone, no matter how novel, cannot fix a lack of political will, but it could be used creatively to build efficiencies or harness public accountability that can support democratic reform.

International and nonpartisan citizen observers have an important role to play at this critical moment, while the use cases and norms around gen AI and elections are still taking shape. Organizations should take every opportunity to advocate for transparency and accountability around these use cases, provide informed recommendations on gen AI in electoral assessments where relevant, and mount pressure around policies and technology that supports standards for genuine, democratic elections. Safeguarding electoral integrity in the age of gen AI should still be grounded in participation, transparency and accountability and the importance of trust in the electoral process.



The National Democratic Institute is a nonprofit, nonpartisan organization working to support and strengthen democratic institutions worldwide through citizen participation, openness and accountability in government.