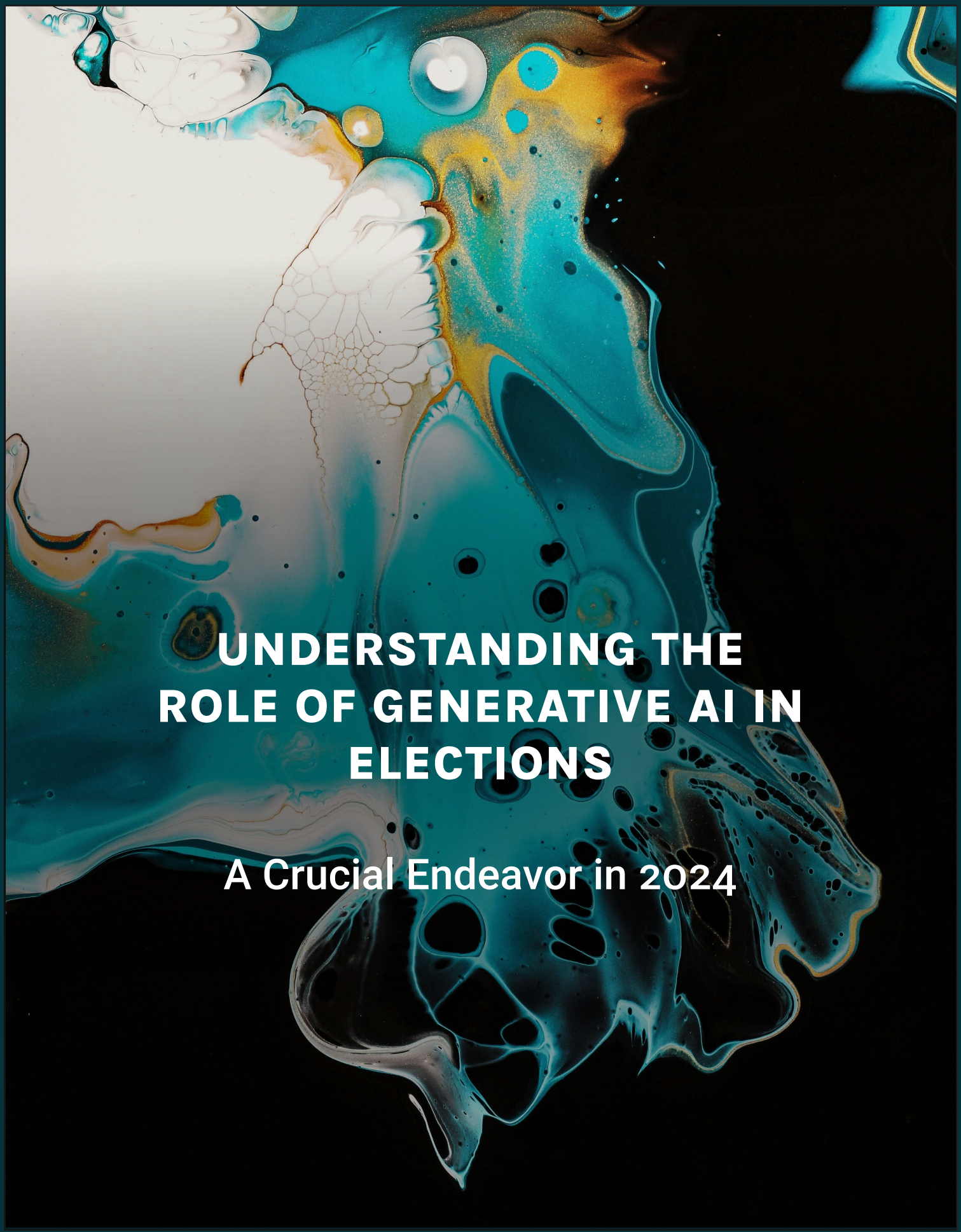


UNDERSTANDING THE ROLE OF GENERATIVE AI IN ELECTIONS

A Crucial Endeavor in 2024

TUM THINK TANK

Dr. Amélie Hennemann-Heldt

UNDERSTANDING THE ROLE OF GENERATIVE AI IN ELECTIONS

A Crucial Endeavor in 2024

ABOUT THE AUTHOR

Dr. Amélie Hennemann-Heldt, TUM Think Tank Fellow of Practice, serves as the deputy head of division 'General Digital Policy Issues' at the German Federal Chancellery and is an associated researcher with the Leibniz-Institute for Media Research (HBI). This report exclusively reflects the personal views of the author.

Munich School of Politics and Public Policy at the Technical University of Munich

TUM THINK TANK

Technical University of Munich

CONTENTS

EXECUTIVE SUMMARY

In 2024, over 70 countries held national elections, representing a combined population of about half of the people in the world, making it a pivotal year for democracies around the globe. With the rise of generative AI (henceforth genAI), we identified a pressing need to understand its impact on the integrity and fairness of electoral processes. With this project, we therefore aimed to analyze the global electoral landscape of the past year, the role of genAI, as well as the frameworks in place to address potential risks. Our findings are largely based on discussions with experts in the second half of 2024. We noticed a change in discourse compared to the beginning of 2024, when many experts expected genAI to disrupt the online information space around elections and to be heavily used by candidates around the world running for elections in 2024. Moreover, it was then assumed that genAI would primarily be used for harmful purposes.

These are our key findings:

- Until mid-2024, the discussion mainly revolved around the risks associated with genAI in the context of elections. After the election of the European Parliament was completed without any major incident (in terms of genAI), the debate among experts shifted away from a narrow focus on risks.

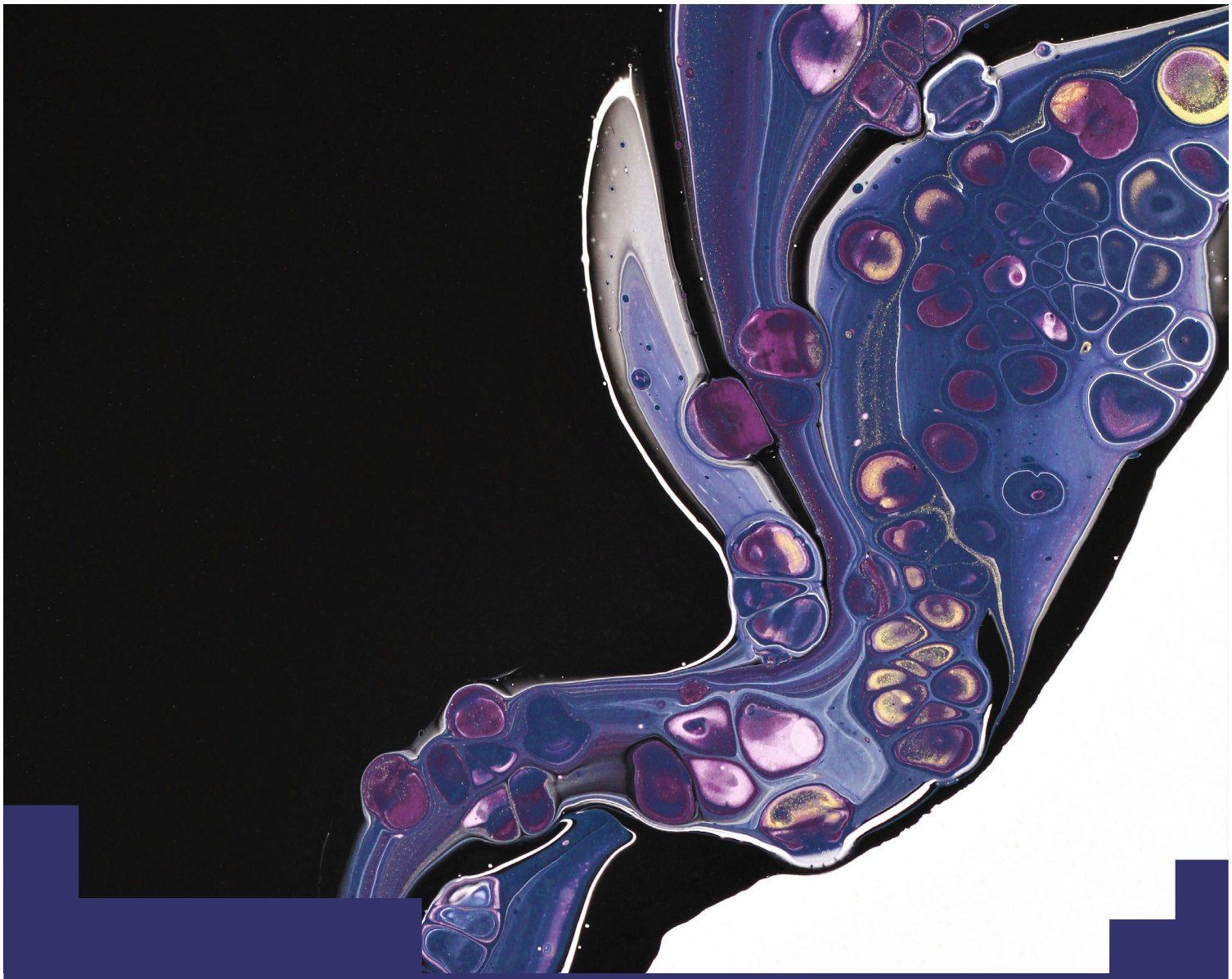
- The malign use of genAI is often unintentional rather than systematically malicious. This is not to say that certain actors who intend to manipulate the information space make very purposeful use of genAI to interfere in the democratic process.

- GenAI's potential impact on elections is amplified by its efficiency, affordability, and scale compared to other tools of social media advertising and data driven campaigning.

- Regulation mainly addresses the risk dimension. The focus is primarily on certain applications that are suspected of having a harmful effect (e.g., robocalls) or on the effect of AI applications that are used for misleading purposes.

- It is currently difficult to assess the efficiency of statutory legislation in this area. On the one hand, specific regulations for genAI do either not exist or not yet apply in full, but still lead to precautionary compliance by tech companies. On the other hand, other laws protect the election process in general and are applicable—without specifically addressing genAI.

- Self-regulation by leading AI companies can help build global standards and find solutions to short-term issues. At the same time, self-regulation is heavily dependent on the relevant companies making a permanent commitment, including but not limited to making relevant data available for research. Current developments in the USA indicate the opposite. This might make it increasingly difficult for third parties to evaluate the technology's impact.



1 Introduction

Understanding the impact of genAI on the integrity and fairness of electoral processes around the globe

“At this pivotal moment, as AI reshapes everything from elections to social discourse, we must act decisively in Europe: democratize AI literacy to equip citizens and policy makers with the knowledge they need, and drive collaborative innovation to ensure AI strengthens, rather than threatens, our democracies.”

— Isa Sonnenfeld

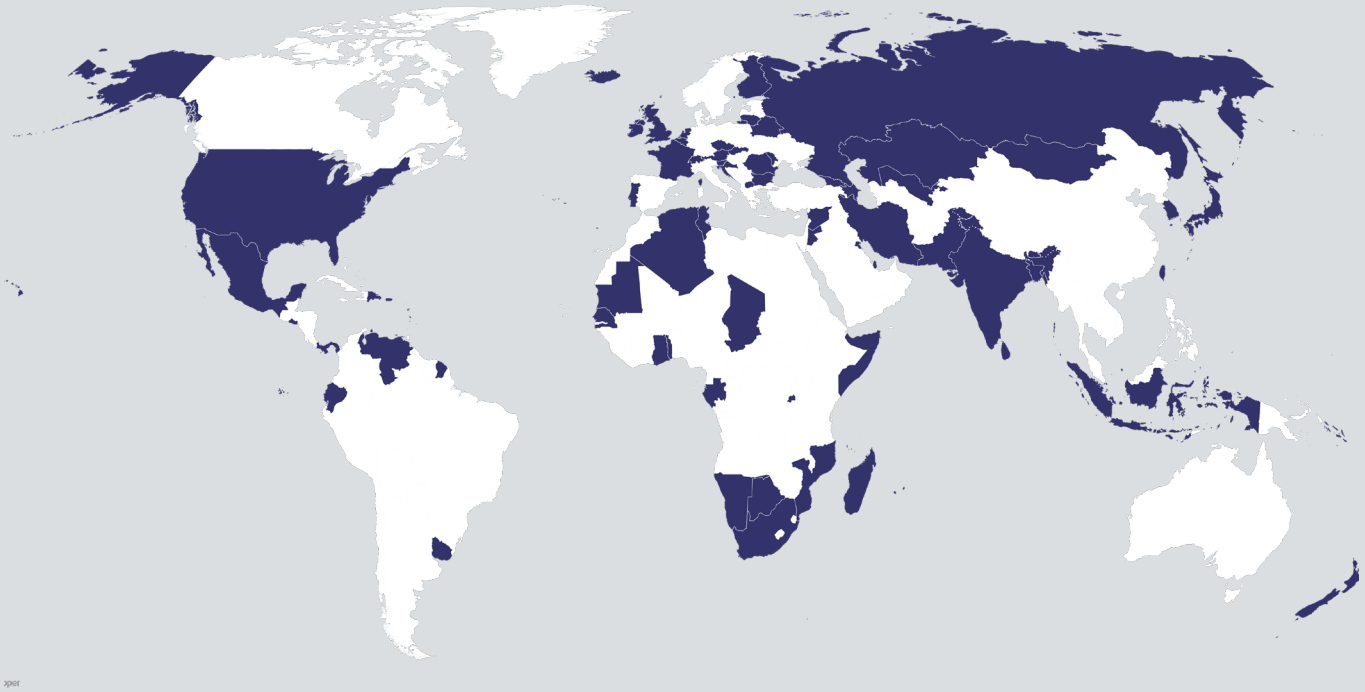
Assessing the impact of genAI on elections

The exponentially fast development and diffusion of genAI since 2022 has led to an almost hysterical fear of its impact on life as we knew it so far. Indeed, it gives people a powerful tool to create content at almost no cost, for better or worse. The focus on so-called frontier models and the existential risks of AI, exemplified by the establishment of AI Safety Summits, reinforced the threatening atmosphere. It was feared that this technology could have a detrimental effect in 2024, when half of the world held elections[1] and against the backdrop of increasing international conflicts. The impact of genAI on elections worried particularly democratic countries where experts saw it as a serious threat to the free formation of opinions, a prerequisite for democracies.

This project ‘Understanding the Role of genAI in Elections: A Crucial Endeavor in 2024’ aimed at taking a closer look at the impact of genAI on elections. The overall goal was to assess and, potentially, demystify the presumed impact of genAI on elections. To do so, we gathered feedback from renowned experts in the field, coming from various disciplines. We scrutinized what exactly is threatening about genAI in the context of elections and how that might vary from one country to another. We wanted to contribute to a better understanding of what use of this technology poses a serious risk to elections and, therefore, to liberal democracies. This entails the use of genAI for dis- and misinformation purposes, of course. We therefore reviewed frameworks and laws passed to counter harmful content online, including hate speech and disinformation. What risks do they tackle, which ones do they leave out? This then led to the third question: are interventions needed and if so, which ones? Were the opportunities of genAI for democracy neglected until now?

1 Koh Ewe, “The Ultimate Election Year: All the Elections Around the World in 2024,” TIME, December 28, 2023, https://time.com/6550920/world-elections-2024/.

In 2024, over 70 countries held national elections, representing a combined population of about half of the people in the world, making it a pivotal year for democracies around the globe.



Countries that held elections in 2024

Source: 2024 national electoral calendar. Wikipedia.
https://en.wikipedia.org/wiki/2024_national_electoral_calendar

Methodology

The first step of this project was to map the field as well as the research gaps. Our aim was to approach the issue from a global perspective. At the same time, we wanted to incorporate and take into account first-hand impressions. The project was designed to be informed by the work of various experts from academia, business, and civil society, and not to be based on a purely academic approach. Over the course of fall 2024, we held three online calls with experts around what we previously identified as the three main dimensions of this topic: 1) challenges, risks, and opportunities of genAI in the context of elections; 2) frameworks and regulations in place; and 3) tools and strategies to address the gaps regarding steps 1 and 2. Each online call started with a brief input from experts on the respective topic, followed by interactive sessions with the participants.

What do we mean by genAI?

GenAI is generally understood to be a form of artificial intelligence that is able to generate content based on existing information and user input. The content generated includes, for example, text, images, videos, audio content, program code, 3D models, molecular structures and more. One of the project goals was to obtain international perspectives from various experts. This may also have led to slightly different definitions of generative AI.

2 Three dimensions of genAI in elections

From potential effects over regulatory responses to tangible solutions

“AI helps even small campaigns to reach vast audiences, but its ability to rally people can quickly become harmful, especially if the frenzy is based on fiction.”

— Paula Köhler

First, we wanted to evaluate potential risks and discuss what we need to worry about in terms of usage of genAI in the whole electoral process, from the electoral campaigns to the elections. The participants did so by looking at specific AI applications but also by drawing insights from elections worldwide in 2024. Second, we presented and discussed a mapping of frameworks, regulations, and strategies put in place in democratic countries to counter online harms and discussed their effectiveness (as far as possible considering the lack of data). We reflected on the question whether these policies seem adequate and future-proof. Third, we pondered on the perception of these experts about how genAI impacted the elections in 2024 and how it could possibly help to enhance democratic participation in the future.

Challenges, Risks, and Opportunities

The general discourse around AI and elections in early 2024 was rather focussed on the negative impact technology, and especially genAI, could have on elections. At the beginning of 2024, this forecast only partially came true. Between January and February 2024, Taiwan, Bangladesh, Indonesia, Pakistan, Iran, Russia, and Senegal held elections:

- In Taiwan, a report from the National Taiwan University identified three categories of disinformation operations: 'AI-fabricated content', 'misleading narratives', and 'coordinated behaviour'.[2] According to the report, AI was used to alter real footage of politicians, create completely fake sexually explicit videos of politicians as well as a digital book filled with false information and slurs against members of the government.

- In Pakistan, jailed ex-leader Imran Khan used genAI to address his supporters during an election rally as well as to make a victory speech and thereby circumvent his imprisonment and the fact that his party was not allowed to participate in the elections. Apparently, his party created the deep fake video on the basis of notes provided by Khan from prison and by training the AI on footage of Khan.[3]

- In Senegal, protests and riots accompanied the electoral process, followed by internet shutdowns as a means to disrupt online communication. However, no major influence operation based on genAI was reported during the Senegalese elections.

These three countries show the spectrum we need to consider when discussing risks and opportunities of genAI in elections: it reaches from what most experts expected to happen but with only little effect on the election outcome (Taiwan) to a clear case of an AI-generated video but without the intent to pretend it was real footage (Pakistan). The latter case also raises the question about where to draw the line between malignant and benign use of genAI.

The risks initially identified in our mapping include synthetic media, e.g. robocalls, conspiracy theories on podcasts; media clones, as discovered in the so-called Doppelgänger operation;[4] cumulative effects of systematic (mis)information flooding (bots, AI agents); AI chatbots not fit for purpose when asked for information by voters; "closed" information channels, targeted messages, pernicious use of messengers; hyper-personalisation of information (content), AI assistants; concentration along the stack, i.e. AI applications integrated in social media platforms belonging to the same companies; the use of these AI tools to undermine trust in areas unrelated to elections, e.g. academia; digital hate towards candidates such as deep fake pornographic material and

2 Chen-Ling Hung et al., "AI Disinformation Attacks and Taiwan's Responses during the 2024 Presidential Election," Thomson Foundation, 2024, https://www.thomsonfoundation.org/media/268943/ai_disinformation_attacks_taiwan.pdf.

3 Siladitya Ray, "Imran Khan—Pakistan's Jailed Ex-Leader—Uses AI Deepfake to Address Online Election Rally," Forbes, December 18, 2023, https://www.forbes.com/sites/siladityaray/2023/12/18/imran-khan-pakistans-jailed-ex-leader-uses-ai-deepfake-to-address-online-election-rally/.

4 Federal Foreign Office, "Technical Report on an Analysis by the Federal Foreign Office: Germany Targeted by the Pro-Russian Disinformation Campaign 'Doppelgänger,'" June 5, 2024, https://www.auswaertiges-amt.de/resource/blob/2682484/2da31936d1cbeb9faec49df74d8bbe2e/technischer-bericht-desinformationskampagne-doppelgaenger-1--data.pdf.

scaling up of harmful campaigns. It should also be borne in mind that the latter are primarily used against women. Female politicians in particular are affected by AI-generated pornographic images and therefore more inclined to withdraw from politics.

On the positive side, our mapping included the use of AI to inform citizens by improving their access to high-quality information, making the latter more accessible to a broader audience and reaching a broader audience with civic information. Further opportunities included lowered costs for (smaller) political parties to create digital content, the improvement of representation by facilitating more personalized and targeted political messaging, the improvement of voter outreach as well as the use of AI tools to make information available in different languages.

From our discussions with experts, we learned that AI-generated content was primarily used to reinforce existing voter narratives rather than convert new voters. It was indeed used to mobilize supporters, but it did not significantly disrupt the democratic process. For instance, far-right parties used genAI to spread stereotypical and dystopian images during the EU elections.[5] This, however, reflected the narratives they have already been propagating for a while. Experts stressed the importance of understanding the context and impact of AI-generated content in political campaigns. Indeed, genAI was mostly used to save costs and time in campaigning, i.e. by targeting potential voters or creating content. One can therefore question the novelty of the risks through genAI—except for the increasing scepticism of the public towards information.

5 Valentin Châtelet, "Far-right Parties Employed Generative AI Ahead of European Parliament Elections – DFRLab," DFRLab, June 11, 2024, https://dfrlab.org/2024/06/11/far-right-parties-employed-generative-ai-ahead-of-european-parliament-elections/.

Top 5 Risks of genAI in Elections

1 Disinformation Amplification

Increased efficiency of disinformation campaigns, creating highly effective and emotionally engaging content, and mass disinformation via ads.

2 Deepfakes and Fabricated Content

The growing capabilities of AI to generate fabricated images or videos, contributing to election interference and manipulation of public opinion.

3 Erosion of Trust

Lower trust in media and democracy, compounded by phenomena like the "liars' dividend," where genuine scandals are dismissed as AI-generated fakes.

4 Polarization and "Filter Bubbles"

Increased polarization of the electorate and the reinforcement of so-called "filter bubbles."

5 "Flooding the Zone"

Overwhelming the public with AI-generated content, leading to decreased engagement and withdrawal from political discourse.

The data was collected during the sessions and ranked according to mention frequency among participants.

Top 5 Opportunities of genAI in Elections

1 Enhanced Accessibility and Literacy

Easier access to political information, such as AI-generated summaries of policies, programs, and answers to voter questions.

2 Cost Efficiency for Campaigns

Lower costs for campaigns, enabling smaller parties to participate and improving inclusivity in democratic processes.

3 Faster and Broader Information Analysis

AI tools that analyze multiple sources to provide context and derive factual information from primary sources.

4 Voter Engagement through AI Chatbots

Use of multilingual, voter-friendly AI chatbots to enhance political literacy, engage marginalized communities, and reduce conspiracy beliefs.

5 Improved Disinformation Detection

Advances in tracking FIMI (False Information and Manipulation Influence) actors, detection of AI-generated content, and holding platforms accountable through regulations.

The data was collected during the sessions and ranked according to mention frequency among participants.

One additional finding in the context of the information space around elections is that the impact of genAI on traditional media is often underestimated. Indeed, AI in journalism is less discussed than the use by other groups/actors despite the increasing use. The phenomenon is not new: so-called robot journalism based on algorithms was introduced in newsrooms and subject to research for almost ten years.[6] Competition on the online market has prompted traditional media outlets to adapt their approach, sometimes leading to clickbait and sensationalism. Nonetheless, genAI accelerated the process of including digital technology in the production and distribution of journalism. Quality online articles increasingly incorporate AI-generated content, such as images, to save costs and avoid possible copyright issues. Economic motives are particularly important for smaller news outlets. At another level, as people become more aware of potential fakes, they might develop a more discerning approach to evaluating information, potentially leading to increased trust in credible media sources.

Our main takeaways regarding this first dimension are that the harmful use of genAI is—until now—often unintentional rather than systematically malicious. GenAI's potential impact on elections—regardless of the content—is amplified by its efficiency, affordability, and scale compared to other tools of social media advertising and data driven campaigning. It is also amplified by the perception that genAI could be at play and possibly misleading.[7] Access to reliable and complete data remains a critical challenge for research and regulatory action. The dual nature of AI requires balanced approaches to maximize its benefits while mitigating risks.

6 Wiebke Loosen, "Four forms of datafied journalism: Journalism's response to the datafication of society", Communicative Figurations, research network, ZeMKI, Centre for Media, Communication and Information Research, March 18, 2018, https://zemki.uni-bremen.de/wp-content/uploads/2024/04/CoFi_EWP_No-18_Loosen.pdf.

7 See also Joshua A. Tucker, Solomon Messing, and Zeve Sanderson, "Misunderstood Mechanics: How AI, TikTok, and the Liar's Dividend Might Affect the 2024 Elections," Brookings, January 22, 2024, https://www.brookings.edu/articles/misunderstood-mechanics-how-ai-tiktok-and-the-liars-dividend-might-affect-the-2024-elections/.

Frameworks and Regulations

When looking at the responses to genAI in the context of elections, we found that frameworks mostly respond to the risk component. The answers range from statutory law and co-regulation to self-regulation, e.g. in the form of best practices. Most countries do not have laws directly regulating AI or even less the impact of genAI on elections.[8] However, other laws can potentially address the matter, such as data protection, intellectual property, media/press laws or even penal codes. Our mapping was focussed on the regulation of AI in the context of elections.

In **statutory law**, the EU Digital Services Act (DSA) and the EU AI Act (AIA) are the most prominent examples. In the US, bills addressing the use of AI in elections were introduced at the federal level, but none were adopted.[9] At the US state level, laws passed since 2019 target AI's use in political messaging. Although none contains a complete ban on deceptive AI-generated political messaging, two states prohibit deep fakes intended to influence an election in a specific time span, that is Minnesota 90 days and Texas 30 days before an election.[10] In terms of non-statutory regulation, the Federal Communications Commission (FCC) issued its Declaratory Ruling on AI-generated voices in robocalls in February 2024.[11]

Apart from the EU and the US, the Council of Europe's Framework Convention on AI (2024) contains a provision whereby the signatories commit themselves to 'adopt measures that seek to ensure that artificial intelligence systems are not used to undermine the integrity, independence and effectiveness of democratic institutions and processes' (Article 5). The resulting measures (by signatories) are still to be expected. Other laws such as the Australian Online Safety Act (2021) or the Japanese Information Distribution Providers Act (2024) focus on measures against harmful content on online platform services without regulating genAI specifically. South Korea passed an AI Basic Act in December 2024 requiring businesses to notify users of high-impact or generative AI usage and clearly label AI-generated content (set to take effect in January 2026).[12]

In the realm of **co-regulation**, the EU Code of Practice on Disinformation (2022) contains a commitment against 'conduct aimed at artificially amplifying the reach or perceived public support for disinformation' (Comm. 14) as well as transparency obligations for AI systems, linked to the AIA (Comm. 15).[13] Singapore published its Model AI Governance Framework for Generative AI (2024) addressing the dimension of content provenance and, subsequently, harms and societal threats

8 See also "AI Watch: Global Regulatory Tracker," White & Case, 2024, https://www.whitecase.com/insight-our-thinking/ai-watch-global-regulatory-tracker.

9 Sanam Hooshidary and Adam Kuckuk, 'AI in Elections: A Look at the Federal and State Legislative Landscape', NCLS, September 2024, https://www.ncsl.org/elections-and-campaigns/ai-in-elections-a-look-at-the-federal-and-state-legislative-landscape

10 Ibid.

11 'FCC Makes AI-Generated Voices in Robocalls Illegal,' Federal Communications Commission, February 2024, https://www.fcc.gov/document/fcc-makes-ai-generated-voices-robocalls-illegal.

12 Note that this law was passed after we concluded our online sessions with experts.

13 "2022 Strengthened Code of Practice on Disinformation," Shaping Europe's Digital Future, June 16, 2022, https://digital-strategy.ec.europa.eu/en/library/2022-strengthened-code-practice-disinformation.

like undermining the integrity of elections.[14] It focuses on digital watermarking and cryptographic provenance. The US Cybersecurity and Infrastructure Security Agency published a report on 'Generative AI and the 2024 Elections Cycle'.[15] The United Arab Emirates published a non-binding national guideline on deep fakes (2021), which is mostly informative and does not address genAI and/or elections but is an example of a government source of information on one of the dangers that can arise, inter alia in the run-up to elections.

In terms of **self-regulation**, the Tech Accord to Combat Deceptive Use of AI in 2024 Elections addresses the matter very specifically and involves 25 leading technology companies.[16] The Partnership on AI published its Responsible Practices for Synthetic Media in 2023, developed with more than 50 organizations from the tech industry, news organizations, and academia. Similarly, the industry-led Coalition for Content Provenance and Authenticity (C2PA) aims at providing technical standards for certifying the source and history (or provenance) of media content.[17]

When taking a closer look at the abovementioned, the DSA does not directly address genAI. Instead, it targets unlawful content and, in specific cases, systemic risks that can both be produced with AI systems. The provisions apply to AI-generated content that can be found on (very large) online platforms. However, there is a focus on risk mitigation related to disinformation. Indeed, Art. 35 of the DSA requires very large online platforms to prepare risk-mitigating measures, particularly concerning political ads (e.g., labeling requirements). Note that most election laws in democratic countries already include transparency provisions regarding campaign financing as well as against foreign interference (longtime before digital technologies). The case of the 2024 elections in Romania shows that the annulment was based on many more grounds than only on the use of TikTok to spread manipulated content.[18] It also proves the point that the DSA regulates the liability of online services, but cannot and should not be the assessment standard with regard to such far-reaching decisions as the annulment of elections.

In contrast, the Tech Accord to Combat Deceptive Use of AI in 2024 Elections includes very specific commitments by the industry in order to protect users, prove goodwill, and potentially stave off stricter government regulation. The signatories committed to risk-mitigation of deceptive AI content during elections as well as ensuring transparency, engaging with civil society, and fostering media literacy. Self-regulatory technical safeguards according to the Tech Accord include watermarking, red teaming, labeling, and prohibition of certain content types deemed harmful. Watermarking is a

14 IMDA, 'Model AI Governance Framework for Generative AI', May 2024, https://aiverifyfoundation.sg/wp-content/uploads/2024/06/Model-AI-Governance-Framework-for-Generative-AI-19-June-2024.pdf

15 "Risk in Focus: Generative A.I. and the 2024 Election Cycle | CISA," Cybersecurity and Infrastructure Security Agency CISA, 2024, https://www.cisa.gov/resources-tools/resources/risk-focus-generative-ai-and-2024-election-cycle.

16 "AI Elections Accord – Munich Security Conference," Munich Security Conference, February 2024, https://securityconference.org/en/aielectionsaccord/

17 "Overview – C2PA," Coalition for Content Provenance and Authenticity, 2024, https://c2pa.org/.

18 See Alina Carrozzini, "Shooting Democracy in the Foot? The Romanian Constitutional Court's Annulment of Presidential Elections" (Verfassungsblog, December 13, 2024), https://doi.org/10.59704/fe29eb5ae260901f.

controversial means to combat the deceptive use of genAI, as a report shows.[19] On the one hand, human-facing disclosure helps inform the recipient. On the other hand, it can lead to information overload and is vulnerable to manipulations. Instead, machine-readable methods can be effective when combined with robust detection mechanisms.

Another example of regulation targeting the deceptive use of AI is the FCC ruling on robocalls. According to the FCC, it had already started working on this issue in 2023. In January 2024, phone messages simulating then-President Joe Biden's voice were sent to thousands of New Hampshire voters, trying to discourage them from voting in the state's presidential primary. This attempt to influence the primaries in New Hampshire with genAI appears to have been unsuccessful.

Other countries, like Brazil, have already experienced high-impact online campaigns before genAI emerged. After the 2018 presidential elections in Brazil were overshadowed by disinformation campaigns (at the time via the messaging service WhatsApp), there was a relatively strong wish to take legislative action against online manipulation attempts during elections. In February 2024, Brazil's Superior Electoral Court approved a resolution on the use of genAI in electoral campaigns. One report found that the most common form of deep fakes in Brazil involved the publication of allegations of misconduct to undermine the credibility of a candidate.[20] It also noticed that images were called 'deep fakes' although they were simple montages, illustrating the misunderstanding of the definition of deep fakes but a lack of clarity in electoral regulations regarding the classification of synthetic content. Recently, the Indonesian Constitutional Court issued a similar decision prohibiting the use of AI by political candidates in the election, especially to design their campaign's portrait.[21]

What is (so far) not regulated is an obligation for genAI tools, such as chatbots, to answer truthfully.[22] It is indeed well-known that genAI chatbots provide an answer to almost every question—even if that means that the answer is false or made-up. The phenomenon of so-called hallucination has led to unfortunate situations for those who did not verify the answer given and used it in a professional context. In the context of elections, this phenomenon can have serious consequences if chatbots are used and perceived as a source of presumably reliable information.[23]

Subsequently, we need to ask ourselves what is actually an adequate and efficient framework. Oftentimes, the regulation in place does not address genAI specifically but can still target the

---

19 Ramak Molavi Vasse'i and Gabriel Udoh, "In Transparency We Trust?: Evaluating the Effectiveness of Watermarking and Labeling AI-Generated Content," Mozilla Foundation, February 26, 2024, https://foundation.mozilla.org/en/research/library/in-transparency-we-trust/research-report/.

20 Beatriz Farrugia, 'Brazil's Electoral Deepfake Law Tested as AI-generated Content Targeted Local Elections – DFRLab,' DFRLab, November 2024, https://dfrlab.org/2024/11/26/brazil-election-ai-deepfakes/.

21 Satrio, Abdurrachman. 'Banning AI for Political Campaigns: The Cultural Traces in the Indonesian Constitutional Court Decisions', VerfBlog, January 2025, DOI: 10.59704/4814e56f847f921c.

22 See Sandra Wachter, Brent Mittelstadt, and Chris Russell, 'Do Large Language Models Have a Legal Duty to Tell the Truth?,' Royal Society Open Science 11 (8), August 2024, https://doi.org/10.1098/rsos.240197.

23 Julia Angwin, Alondra Nelson, and Rina Palta, 'Seeking Reliable Election Information? Don't Trust AI,' The AI Democracy Projects, February 2024, https://www.ias.edu/sites/default/files/AIDP_SeekingReliableElectionInformation-DontTrustAI_2024.pdf.

technology or the content layer. For instance, the UK Elections Act 2022 includes a provision on digital imprints in response to the lack of transparency in data driven campaigning. The changes to the UK electoral law were based on a recommendation of the UK Electoral Commission.[24] The legislation came into force in November 2023 and was applicable during the last UK General Election in 2024. It is expected to expose actors who wish to influence public opinion during an election—regardless of being registered as campaigners or not.[25]

Our main takeaways regarding the second dimension are that while supporters view self-regulation as a proactive approach to establishing industry norms, critics argue that it often serves as a way for platforms to evade more stringent and meaningful regulation. Regarding the impact of existing regulations, the DSA seems to already be influencing platforms by raising the bar on compliance and risk aversion. Yet, the level of actual compliance varies across different platforms. While beneficial, self-regulation alone may be limited without statutory pressure, highlighting the need to balance voluntary actions with mandatory oversight. On the political front, voluntary pledges see politicians committing to avoid the use of deceptive AI in campaigns, promoting ethical standards and potentially boosting voter trust. However, these pledges raise similar concerns as self-regulation efforts.

24 Andrew Barclay, Rachel Gibson, and Katherine Dommett, 'The Regulatory Ecosystem of Data Driven Campaigning in the UK,' Frontiers in Political Science, September 2023, https://doi.org/10.3389/fpos.2023.1146470.

25 Hazel Gordon, 'Digital Imprints: What Are They and Why Are They Useful?,' Electoral Reform Society, June 2024, https://www.electoral-reform.org.uk/digital-imprints-what-are-they-and-why-are-they-useful/.

Tools and Strategies

The third dimension of this project consists of identifying and/or developing tools and strategies needed to fill previously identified gaps—be it against certain risks or in favor of potential opportunities. Building on the previous two dimensions, the third one answers the questions: what works and what is (still) needed? It is more focussed on potential practical interventions both in policy and tech. Among the ideas that emerged from the initial assessment in early 2024, we thought for example of ethical guidelines for using AI in critical areas like voters' information; a public disclosure of information about vulnerabilities in AI products regarding electoral information; positive ways to collaborate with AI influencers and/or use AI agents to promote elections; or watermarking of synthetic media content (such as labelling obligations by online platforms potentially leading to the demonetization of synthetic content).

Over the course of 2024, it became clearer that the impact of genAI on elections predicted in late 2023/early 2024 was overestimated.[26] This was particularly the case with the elections to the EU Parliament in June 2024, which many expected to be disrupted by the massive use of genAI. The same was also observed in other parts of the world, such as South Africa, also in June 2024.[27] Overall, there were no irregularities identified during this election that could be attributed to genAI only. This does not mean that AI was not used in the election campaigns and by actors who intended to disrupt the democratic process (beyond the political parties), but the negative impact of its use on this election was deemed negligible. Researchers found that mostly right-wing parties used AI generated images in the EU elections and very rarely labelled them as AI-generated.[28]

Similarly, experts expected the 2024 US presidential elections to be disrupted by the use of genAI to influence the elections' outcome. Apart from the mentioned case of robocalls during the Democrat's primaries, a deep fake image of Donald Trump hugging the former chief medical advisor to the president, Anthony Fauci, created some controversy on social media (due to Fauci's role during the Covid-19 pandemic and the Republican's disapproval of his person).[29] However, in this case as well, people did not believe the image was real. These instances showed that maybe voters are not well-equipped to identify fake and AI-generated content, but still aware of circumstances and not overcredulous. Despite credible threats on voting information, experts came to the conclusion that the risks expected in the US presidential elections did not materialize.[30] However, it became clearer that genAI still had an impact on the trust in online content. Voters did not only not trust what they

---

26 Randolf Carr and Paula Köhler, 'AI-pocalypse Now? Disinformation, AI, and the Super Election Year', Munich Security Conference, October 2024, https://securityconference.org/en/publications/analyses/ai-pocalypse-disinformation-super-election-year.

27 Phumzile Van Damme et al., "Generative AI and Its Influence on South Africa's 2024 Elections," Friedrich Naumann Stiftung and German Council on Foreign Relations, December 4, 2024, https://shop.freiheit.org/#!/Publikation/1822.

28 Kofi Annan Foundation in collaboration with Democracy Reporting International, "The GenAI Factor at the Ballot Box: A review of Generative AI Use in the 2024 European Parliament Elections," January 3, 2025, https://www.kofiannanfoundation.org/publication/a-review-of-generative-ai-use-in-the-2024-european-parliament-elections/.

29 Shannon Bond, "DeSantis Campaign Shares Apparent AI-generated Fake Images of Trump and Fauci," NPR, June 8, 2023, https://www.npr.org/2023/06/08/1181097435/desantis-campaign-shares-apparent-ai-generated-fake-images-of-trump-and-fauci.

30 Isabelle Frances-Wright, Ellen Jacobs, and Ella Meyer, "Disconnected from reality: American voters grapple with AI and flawed OSINT strategies," Institute for Strategic Dialogue, November 7, 2024, https://www.isdglobal.org/digital_dispatches/disconnected-from-reality-american-voters-grapple-with-ai-and-flawed-osint-strategies/.

were seeing online, but they also presumed content by presidential candidates was AI-generated even when there were no indications of the use of genAI.[31]

The US elections showed that people generally had a harder time trusting information online, worsened by the lack of consistent policies or strategies across platforms (like watermarking for example). This led to the conclusion that there is a need for mechanisms to access information across platforms about synthetic content as well as consistent (platform) policies about the use of genAI in election processes. Circling back to the second dimension, such questions of platform governance could be the subject of an industry-wide initiative.

Another input demonstrated that political parties, mostly small parties, tend to use deepfakes to underline specific narratives, to mobilize communities and attract attention. GenAI is generally not used to deceive but to "poke", raise attention, provoke. It is also used because it is resource-efficient and cost-effective, i.e. to create memes and evidently fake campaigning material that can be used to make a point and is easily shareable among a community. But genAI is more generally speaking a means to save resources for groups which are smaller and less well funded than state-wide and larger scale political groups. This is why it has become an inherent part of the toolbox of data-driven campaigning. It opens a window of opportunity to reimagine campaigning through experimentation, innovation, and new approaches via technology.

Subsequently, actionable tools and strategies could for instance inform voters and assist them when navigating the vast field of political information. For example, voters in Germany often use a tool called 'Wahl-O-Mat' (provided by the Federal Agency for Civic Education) which helps them identify the closest intersections with political parties based on their election program. Such tools could be developed further and also mobilize voters according to their results. Moreover, one could imagine tools for campaigners to understand what are the most pressing needs of their voters and to assess if the election program actually contains answers to these questions asked by voters. Besides informing voters, their general trust in the online information environment should be strengthened, e.g. by introducing content credentials on genAI.

31 Ibid.

As genAI reshapes elections worldwide, democracies must balance its immense potential for voter engagement with robust safeguards against its risks. There is a need for innovation in this space and thought-leading civic tech use cases that could counteract declining trust in the information landscape and, subsequently, elections. Practical responses to short-term issues could be addressed by industry partnerships and standards. Moderation models need to become better at preventing deceptive use of AI while allowing a broad political discourse.[32] Otherwise, people will perceive systems and applications based on these models as biased. Moreover, social media platforms could align their policies around the use of genAI for political campaigning and install a rapid-response mechanism for AI incidents during elections, complementary to their existing trust and safety measures.

32 See e.g. "Upgrading the Moderation API with our new multimodal moderation model," OpenAI, September 26, 2024, https://openai.com/index/upgrading-the-moderation-api-with-our-new-multimodal-moderation-model/.

3 What is next?

Upcoming elections and the need for more cooperation between stakeholders

As with any type of misinformation, achieving a balance between protecting fundamental rights such as freedom of expression and the integrity of the information environment is a delicate act.

— Svea Windwehr

While the use of genAI in the 2024 elections might not have had the disruptive effects some predicted in early 2024, chances are quite high that it will increase over time. One could think of 2024 as a trial or a sandbox year. At the end of our final online call, all participants admitted they initially expected genAI to play a bigger role in the election year 2024. At the same time, all believed genAI will still be a challenge for the information space two years from now. Nonetheless, a majority approved of political actors (candidates, parties) to make more use of genAI.

With the upcoming German elections in February 2025, it remains to be seen if both the deceptive use and the opportunities of genAI remain as neglected as they have been in most elections around the world in 2024. Regarding the malicious use of genAI, rogue actors might be caught off guard to some extent by the rather short notice of the German general elections. Unfortunately, the same might be right when it comes to innovation in voter engagement and participation.

On the positive side, it means that there are still lots of opportunities to work on identifying and defending against the risks of genAI to democracy as well as on 'AI for good' solutions. In this project, we were only able to cover a fraction of what is out there and could be explored in greater depth. Hence, it is our wish to explore future avenues for collaborations in research and alongside civil society with stakeholders who have graciously agreed to collaborate on this project and those who wish to join the journey in the future.

FURTHER READINGS

PERSPECTIVES FROM DIFFERENT PARTS OF THE WORLD

Van Damme, Phumzile, Kyle Findlay, and Aldu Cornelissen. "Generative AI and Its Influence on South Africa's 2024 Elections." German Council on Foreign Relations, November 5, 2024. https://dgap.org/en/research/publications/generative-ai-and-its-influence-south-africas-2024-elections.

Frances-Wright, Isabelle, Ellen Jacobs, and Ella Meyer. "Disconnected from reality: American voters grapple with AI and flawed OSINT strategies." Institute for Strategic Dialogue, November 7, 2024. https://www.isdglobal.org/digital_dispatches/disconnected-from-reality-american-voters-grapple-with-ai-and-flawed-osint-strategies/.

Muñoz, Katja, and Emma Laumann. "KI und Wahlen: Neue Dynamiken der digitalen Demokratie in Deutschland." Konrad Adenauer Stiftung, 2024. https://www.kas.de/documents/d/guest/ki-und-wahlen-1.

Dhanuraj, D, Sreelakshmi Harilal, and Nissy Solomon. "GENERATIVE AI AND ITS INFLUENCE ON INDIA'S 2024 ELECTIONS: Prospects and challenges in the democratic process." Friedrich Naumann Foundation for Freedom, 2024.

Robin Mansell, Flavia Durach, Matthias Kettemann, Théophile Lenoir, Rob Procter, Mansell, Gyan Tripathi, Emily Tucker, Forum on Information and Democracy, Camille Grenier, and Iris Boyer. "INFORMATION ECOSYSTEMS AND TROUBLED DEMOCRACY," 2025. https://observatory.informationdemocracy.org/wp-content/uploads/2024/12/rapport_forum_information_democracy_2025.pdf.

BROADER REGULATORY PERSPECTIVES

Partnership on AI – Synthetic Media. "PAI's Responsible Practices For Synthetic Media," November 27, 2024. https://syntheticmedia.partnershiponai.org/#read_the_framework.

Ho, Vanessa. "Fighting Deepfakes With More Transparency About AI." Microsoft, October 3, 2024. https://news.microsoft.com/source/features/ai/fighting-deepfakes-with-more-transparency-about-ai/.

REVIEWING THE 'SUPER ELECTION YEAR' 2024

Carr, Randolf, and Köhler, Paula. "AI-pocalypse Now? Disinformation, AI, and the Super Election Year – Munich Security Conference," October 4, 2024. https://securityconference.org/en/publications/analyses/ai-pocalypse-disinformation-super-election-year.

Ueberschlag, Leila. "The impact of AI on elections and public perception." Center for Digital Trust Observer, November 2024. https://drive.switch.ch/index.php/s/bRNNuW52DArD7hd

Kapoor, Sayash and Narayanan, Arvind. "We Looked at 78 Election Deepfakes. Political Misinformation Is Not an AI Problem." December 13, 2024. https://knightcolumbia.org/blog/we-looked-at-78-election-deepfakes-political-misinformation-is-not-an-ai-problem

LOOKING AHEAD

Stockwell, Sam, Megan Hughes, Phil Swatton, Albert Zhang, Jonathan Hall KC, and Kieran. "AI-Enabled Influence Operations: Safeguarding Future Elections." Center for Emerging Technology and Security, November 13, 2024. https://cetas.turing.ac.uk/sites/default/files/2024-11/cetas_research_report_-_ai-enabled_influence_operations_-_safeguarding_future_elections.pdf.

Muñoz, Katja. "Influencers and Their Ability to Engineer Collective Online Behavior: A Boon and a Challenge for Politics." DGAP, February 7, 2024. https://dgap.org/en/research/publications/influencers-and-their-ability-engineer-collective-online-behavior.

EXPERTS AND INPUT-GIVERS

This project would not have been possible without the engagement and the support of the experts who joined our three online calls and shared their expertise on this topic. They provided valuable insights from their area of expertise and their region and contributed to a unique exchange that was extremely fruitful. We therefore like to thank all participants!

We especially like to thank those who provided input from their research or practical work at the beginning of the three online calls:

Dalia Ali, doctoral candidate and Research Associate at the TUM School of Technology and Social Science, working within the Professorship of Societal Computing

Dr Daryna Dementieva, postdoctoral researcher at the TUM School of Computation, Information and Technology focusing on different aspects of NLP for Social Good (NLP4SG)

Ellen Jacobs, Senior Digital Policy Manager at the Institute for Strategic Dialogue (US)

Paula Köhler, Policy Advisor for Technology and Defense Topics at the Munich Security Conference

Dr Katja Muñoz, Research Fellow at the German Council on Foreign Relations (DGAP)

Hendrik Nahr, Head of European Affairs at Make.org

Mykolai Protsenko, postdoctoral researcher at Fraunhofer Institute for Applied and Integrated Security

Isabelle Sonnenfeld, former Head of News Lab for EMEA at Google, a tech advisor and currently focusing on how the transformative power of AI could provide an upgrade for democracies

Svea Windwehr, Electronic Frontier Foundation's assistant Director of EU Policy

ABOUT

The TUM Think Tank at the Munich School of Politics and Public Policy facilitates societal and political change by bridging theory and practice, thinking and doing, insight and action. Leveraging the technological and scientific advancements at the Technical University of Munich (TUM), it serves as a learning platform to develop actionable ideas and build bridges between social sciences and technical disciplines.

The Fellows of Practice at the TUM Think Tank create such a bridge by establishing a nexus between science and practice through their projects and the TUM Think Tank labs. As Fellow of Practice, the author has collaborated with the Civic Machines Lab led by Orestis Papkyriakopoulos, the Content Moderation Lab led by Yannis Theocharis, and various members of the genAI Task Force, to delve into the impacts of genAI on elections.

The author would like to thank Markus Siewert and Fernanda Sauca for their outstanding support in carrying out this project and compiling this report. She would also like to thank Paula Köhler and Moritz Hennemann for helpful comments on an earlier draft. Any errors are attributable to the author alone.

A report by the TUM Think Tank

CONTACT EMAIL

tumthinktank@hfp.tum.de

PUBLISHER

Munich School of Politics and Public Policy
Technical University of Munich
Richard-Wagner-Str. 1
80333, Munich, Germany

DESIGN & LAYOUT

Larissa Wunderlich

FUNDING & SUPPORT

This publication was funded by the Munich School of Politics and Public Policy at the Technical University of Munich.