



The Changing Landscape of Social Media Monitoring Tools

Social media platforms have grown exponentially in the last decade, reshaping how information circulates and public opinions are formed.¹ Platforms such as Facebook, Instagram, Line, Odnoklassniki, Telegram, TikTok, VK, WeChat, WhatsApp, X (formerly known as Twitter), and YouTube, dominate social engagement around election and political processes. Digital platforms play particularly profound roles in closing spaces, allowing for information exchange when traditional media is often captured or state-sponsored. Unfortunately, these platforms can also be weaponized as instruments of propaganda, censorship, surveillance, and control.²

Sufficient analysis of the impact of the information environment around elections and other political discourse relies on data access and transparency. However, platform policies including those governing electoral integrity oversight, parameters regarding the amount and types of data available, and access to APIs³ change frequently and may be applied inconsistently across countries. For years, CrowdTangle served as a reliable, free, and safe tool for civil society to conduct social media monitoring for Facebook. Meta's announcement of [CrowdTangle's sunset](#) raises questions regarding the transparency of the platform moving forward. Meanwhile, X/Twitter and Reddit have begun charging high fees for access to their once-free APIs.

These changes add additional complexity to an already competitive, fluid and costly market of third-party applications that surround the world of digital platforms. Identifying and using the most appropriate social media monitoring tool to promote democratic transparency and accountability can be challenging for civil society organizations due to the unpredictable and evolving protocols, priorities, and frameworks of digital platforms. These changing dynamics can disproportionately impact groups operating in closed or closing spaces, which often face funding limitations and barriers to technical support and open data.

There are many social media monitoring tool options for civil society organizations to undertake data collection, data analysis and data visualization. However, there are limitations to their use and vulnerabilities that civil society should consider.

¹ [The Power of Social Media: Shaping Political Discourse in the Digital Age - Modern Diplomacy](#)

² [Tracking Hong Kong Public Opinion Across Social Media in Closing Democratic Spaces](#)

³ A set of rules of communicating between two programs/software to access data from one program to another.

To better understand the opportunities and gaps for nonpartisan civic partners interested in monitoring information integrity around elections and other democratic moments, NDI evaluated over 100 established and emerging vendors, services and tools across the social media monitoring landscape, examining their costs, technological specs, usability, source type, supported platforms, global application, and specific operational considerations for closed and closing spaces. These tools broadly fall under four categories:

- **Social listening tools:** Typically out-of-the-box software paid by a subscription, with interfaces or dashboards that allow users to collect information on accounts or keywords; they may come with some built-in or proprietary analysis.
- **Open-Source Intelligence (OSINT) tools:** This is a broad set of strategies for collecting open information online. Some may not have direct access to a platform's API, and thus may require expertise in programming languages like R or Python for scraping in order to customize data collection and analysis. There are a number of OSINT tools that can also be used for more investigative research in the online space.
- **Data analytics firms:** These firms - which rely on inhouse data scientists and experts - typically conduct all data collection and analysis for their clients and provide a clear end-product or output, such as a network map or report.
- **Data visualization tools:** These are tools that enable users to produce graphics to tell a story based on collected data. While these tools can be helpful for exploratory analysis and public outreach, they do not address the many hurdles to initial data collection.

Civil society can use these tools as one component of their efforts to to promote resilience, accountability and transparency through the collection and analysis of social media data such as:

- Discourse surrounding an election,
- the reach of politicians, governments, and citizens, and
- the spread of informational challenges such as hate speech, information disorders, and propaganda.

However, no tool or software is perfect, and the current market of social media research presents obstacles that can hinder citizens' ability to freely, efficiently and comprehensively monitor the information space and electoral integrity online. These challenges include, but are not limited to, applicability and customization constraints, cost barriers, technical capacity limitations, the focus on mainstream social platforms, difficulties in accessing data, and challenges to real-time support.

Strengths and weaknesses of tools were typically mixed. For instance, more costly proprietary tools were often more user-friendly, while cheaper open-source tools may require specialized knowledge to use. While open-source tools provide better access to data, awareness around the need to implement a digital security strategy to protect the individuals using those open-source tools is lacking. Social media monitoring tools are crucial for monitoring and

analyzing data, but an informed risk assessment is essential to truly utilize the benefits of social media monitoring in challenging environments.

For civil society organizations exploring the use of social media monitoring tools, below are some key tradeoffs and considerations when selecting which tool to use for specific program goals.

Applicability and Customization Constraints

Most of the social listening tools are primarily built for brand representation, management, and/or protection, and not for the purposes of tracking and mitigating hate speech, identifying malign influence operations, safeguarding electoral integrity or other objectives democratic and human rights groups may have. This requires civil society to learn the tool's original intended use fluently enough to then adapt it to their monitoring approach, accounting for their different needs for citizen election observation. This can also create limitations on the monitoring scope and analysis itself as brand management tools often come with their own structured features (for instance, sentiment analysis, suggested sources and accounts, pre-determined analytical frameworks) around which groups will have to determine if and how to integrate their particular methodology.

Cost Barriers

Pricing is a barrier for use across social media monitoring tools. Social listening tools largely rely on subscription plans, with data limitations often associated with different pricing tiers, ranging anywhere from a few hundred USD a month to a few thousand USD. Basic access plans may be the only affordable option for civil society actors, who are often working on limited funding, significantly limiting their scope. Meanwhile, more specialized data analytics firms are even more expensive, charging tens of thousands of dollars for one-off projects. While some tools and services offer discounts for non-profit entities, they are costly regardless. Free or low-cost data collection and analysis tools were typically Open-Source Intelligence (OSINT), which tend to focus on more investigative techniques or require more technical skills to manage large datasets. There are also free or low-cost tools for data visualization tools and other kinds of exploratory analysis, but they do not provide a means for collecting the data.

Technical Capacity Barriers

Some available tools and methodologies for social media monitoring require specialized skills that not all civic groups have in-house. Tools that are implemented via Python or another programming language to interact with a platform's API require some advanced technical and technological understanding of programming and data science that could limit civil society actors from taking full advantage of them. This high learning curve can drive civic groups toward more expensive and less customizable tools because they are often more convenient and user friendly.

Limitations Regarding Platforms

Most social media monitoring tools are primarily focused on the most widespread platforms

used globally (Facebook, X/Twitter, TikTok, YouTube, Reddit). Because of such limitations, platforms with more regional or intermittent popularity like WeChat, VK, Telegram, or Odnoklassniki are often overlooked in the design of social media monitoring tools. This may leave gaps in monitoring widely used platforms in different contexts. To monitor these additional, smaller or more regional platforms, open-source intelligence techniques, scraping tools or custom-developed applications may be an alternative. However, as noted above, the use of OSINT, scraping tools or bespoke applications may require civil society organizations to dedicate additional resources, time, or technical capacities to be able to monitor a wider variety of platforms.

Data Access

Access to data continues to play a limiting role in social media monitoring. The data accessible through third-party vendors differs among various platforms and tools, which is often determined by undisclosed contracts with social media platforms, and places a greater burden on customers to research the specific data collection restrictions for service providers. It is sometimes unclear to what extent sufficiently granular, complete, or analyzable data is available to users and whether there may be restrictions on which or on how many accounts a tool may collect data. In particular, civil society groups monitoring social media may be interested in historical data or other metrics, such as user comments or accounts with smaller followers or less reach, which may not be available for data collection, depending on a tool's limitations. A particular difficulty for social media monitors is the issue of archiving. When content is deleted from a platform, it is also deleted from its API, and may no longer be part of the data collected for analysis, which can significantly undermine the ability of groups to identify malicious networks and behavior. In addition, vendors often make differing levels of data, keywords, and historical data access available to users based on how much they pay; free or low-cost levels of payment may offer less comprehensive data.

Researcher Only Privileges

Direct access to platform APIs or specific levels and types of data are sometimes restricted to formal research or academics, in some cases requiring direct university affiliations and/or Institutional Review Board⁴ approval. This approach excludes traditional civil society organizations and significantly limits how data is analyzed and used. Focusing specifically on academic research can inhibit timely analysis and meaningful crisis intervention. Civic groups that work on projects such as mitigating hate speech and violence or monitoring elections require fast and frequent findings in order to have an impact on accountability and electoral integrity, while academics - with different objectives and more lengthy analysis - often do not publish reports until well after an election or other critical moments. Additionally, CSOs also have local knowledge to contextualize information being shared on social media, which academics might be lacking. While platforms may argue that these restrictions stem from the

⁴ Institutional review boards are groups that review ethical and safety considerations for research involving human subjects at universities and other research institutions. They typically only review applications for researchers formally affiliated with their institution.

need to protect personally identifiable information, this does not preclude a solution for civil society to be able to access the same kind of information in a granular and analyzable format.

Usability & Regional Support

Social media monitoring tools may require training to use them effectively. Fortunately, many of the social media monitoring vendors have training teams, regional support staff, and offices across the globe. While regional support does exist, it is important to have customer service available to users in regional languages. Not all tools have the ability to provide real-time support to civil society organizations in their working languages. This is a problem particularly in the context of emerging security issues and elections, when civil society needs to conduct timely monitoring and when troubleshooting is most urgent. Vendors build out their internal language capacities, or forge partnerships with those who can.

Special Considerations for CSOs in Closing Spaces

The majority of tools that would be useful in challenging spaces are open-source tools that utilize open-source intelligence techniques. OSINT tools address some of the shortcomings described above. However, they also come with risks, including potential surveillance by adversaries or data misuse. Open-source tools may not be as regularly maintained or tested by security teams and can be vulnerable to malware, viruses or other cybersecurity issues. These vulnerabilities can become cybersecurity issues for users as well, potentially exposing civil society groups in closing spaces to surveillance or tracking. Using a trusted VPN, multi-factor authentication, strengthening password protection policies, or implementing physical and cyber security awareness training are ways to mitigate this concern.

If using a more commercial tool, groups undertaking social media monitoring in closed or closing spaces should also evaluate the data analysis tool's registration, privacy and data collection policies. In addition, groups should consider how to design a workflow that minimizes the risk of data leaks and restricts data access to only appropriate users as needed. Working in a closed or closing space requires integrating security into the operating structure to ensure trust in data collection and analysis. In higher-risk situations, consider anonymizing data and identifying additional factors (e.g., who is conducting the research, what is the content of the research) that could potentially harm vulnerable or affected individuals and communities. This includes data, posts or accounts that may be presented in publications.

Conclusion

The changing landscape of social media monitoring tools complicates civil society actors' ability to monitor these platforms. Platforms and vendors should strive to meet the needs of non-profit and civil society organizations and not just academics or corporations. Platforms play a critical role in information spaces, especially around elections and other democratic events, and it is important that they sufficiently meet standards for transparency. Effective election monitoring by nonpartisan civic groups requires timely, durable, and sufficient data access. Civil society actors are on the front lines and in many ways companies, governments and society rely on their work to safeguard the electoral process and expose abusive behavior online.