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Election Violence Monitoring and the Use of New Communication Technologies

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Election violence monitoring has long been a key tool of civil society for violence prevention and mitigation. As recent experiences in Iran, Kenya, and Moldova have shown, new media technologies such as Twitter, short message system (SMS) messaging and YouTube, and adapted tools such as Ushahidi, have created a new horizon of possibilities for monitoring, harnessing election violence by documenting it in real time, and creating new access channels for citizens to hold their governments accountable.

The effectiveness of election violence monitoring relies on three main factors: cost, accuracy and richness of data, and time of data capture. The opportunities presented by new social media technologies have revolutionized the cost and speed of violence monitoring, yet to date no analysis has been conducted of the accuracy of data generated through crowd sourcing nor of the lessons the traditional and new approaches can gain from each other. This paper will evaluate new media solutions to assess their respective benefits and limitations notably in the area of data accuracy. Building on the assessment, the paper will suggest common points for mutual reinforcement.

Emerging Technology and Election-Related Violence

The introduction of new information communication technology (ICT) is radically transforming political landscapes around the world by creating unprecedented opportunities for civic engagement and connecting citizens, politicians, security responders, international and domestic observers, warlords, militia and political financiers with lightening speed. The populations of the world's poorest and most politically turbulent countries now largely have widespread access to nationwide cellular network coverage and SMS messaging at a minimum, as well as remote computing, Twitter, Facebook, podcasting, blogging, RSS feeds (Really Simple Syndication) and peer-to-peer networks in more sophisticated environments. The introduction of these ICTs to the issues of election-related violence has had far-reaching impacts for organized election and violence monitoring programs. In addition, ICTs have introduced a new generation of violence data collection and crisis mapping by generating a meaningful, spontaneous participation of everyday citizens armed with cell phones and laptops.

Firstly, the use of ICTs in election monitoring has been pioneered by several organizations in the past few years to enhance observation in a variety of ways. A diverse series of examples of the use of SMS technology in domestic election monitoring comes from the National Democratic Institute (NDI), which

introduced SMS technology as a reporting tool for election observation in two pilot projects in Indonesia (2005) and Palestine (2006) and has continued to integrate SMS into subsequent observation missions including Bahrain (2006), Albania (2007), Sierra Leone (2007), and Lebanon (2009).¹ NDI's experience has illustrated some of the numerous ways in which SMS messaging can facilitate the transmission of observation data. In Indonesia, NDI used SMS to overcome long wait times and coordination issues at observation data collection call centers, by creating a call-queue. The Palestine case was also notable in that SMS was combined with GIS digital mapping software to automate the process of tracking observer teams.²

The implications of these test cases for election violence monitoring are substantial. The speed and reduced costs are clear advantages, as is the ability to reduce human error or fraud in data management by moving data directly from the observer to a database. The Sierra Leonean example is particularly encouraging for the use of SMS messaging to provide textured data on the quality of an election and on incidents of violence and intimidation. The case is all the more significant given its application in a country with one of the world's poorest infrastructures. The adaption of SMS election observation methods to election-related violence monitoring is clearly a next step to enhancing the efficiency and sustainability of violence monitoring programs.

The most radical changes in the field may be taking place 'outside the box' of institutional programs. New media technology such as Twitter, SMS and YouTube, and adapted tools such as Ushahidi have created a new horizon of possibilities for harnessing election violence by documenting it in real time via crowd-sourcing³ and creating new access channels for citizens to hold their governments accountable – or to flame the fans of building violence. Ushahidi, or "testimony" in Swahili, is an Internet platform that was initially developed to map reports of violence in Kenya after the post-election fallout at the beginning of 2008. Adapted for use worldwide since its introduction less than two years ago, the application collects basic information about incidents of violence and peaceful political events via SMS, email, and Twitter (crowd-sourcing) and maps the data using publically available mapping programs, such as Google Earth.

¹ Lisa Kammerud. "Managing Election Violence: The IFES EVER Program." IFES White Paper. Washington D.C. 2009.

² Ian Schuler. "National Democratic Institute: SMS as a Tool in Election Observation." *Innovations: Technology, Governance, Globalization* 2008. 147

³ Crowd-sourcing is a method that facilitates the rapid collection of large quantities of information which in turn facilitates triangulation. Patrick Meier. "Crowdsourcing: A More Critical Reflection." Mar 31, 2009. iRevolution.

Ushahidi is already being extensively refined and supported by complementary software programs. The upcoming development of the Swift River project is an advanced application of the crowd-sourcing principle. The project aggregates data from tools such as Twitter, Ushahidi, Flickr, YouTube, local mobile and web social networks, and allows users to rate the information as it arrives. By “crowd-sourcing the filter” the probability of finding accurate information is increased, as information with greater veracity rating moves to the top of the information flow and is sorted by proximity, severity and category of an incident.

New Media and Election Violence Monitoring – Analysis

Election violence monitoring is at an important crossroads and practitioners must reflect carefully on how to capitalize on the opportunities offered by ICT solutions without compromising existing standards, which may endanger lives. Three key elements necessary to an effective election violence monitoring initiative including the speed of data collection, transmission, processing and publication; the accuracy and richness of data to ensure accountability; and the ability to achieve these criteria at a reasonable and sustainable cost. The following analysis will hold social media applications up to these requirements to assess the opportunities and risks of integrating ICTs into traditional violence monitoring work.

Cost

The cost benefit of applying SMS technology to facilitate the transmission of data has already been proven. Similarly, the cost of data collection and transmission via citizen reporting and crowd-sourcing shifts the cost burden away from training, deploying and securing monitors and moves it towards public awareness and (to a limited extent) towards the purchase of SMS credit and bandwidth.

There are two essential lessons to draw from the technical and methodological impact of these considerations. Firstly, crowd-sourcing data should not be regarded as a controlled research methodology but as supplementary source for information for monitoring research. Therefore, an effective election-violence monitoring program that incorporates social media techniques must use a combined approach to ensure representativeness and bear the subsequent cost burdens of those additional resources. The second lesson concerns the appropriateness of technology solutions in impoverished countries.

While the cost inputs may be significantly lower through social media, costs related to analysis and dissemination must be considered. The cost of educating the public to use a cell phone short code system or other targeted program requires public outreach and possibly security costs for the organizing institution in places where this may put them at risk. Also, since the purpose of social media reporting is to generate more data than would otherwise be available, more data analysts, interpreters and investigators may be needed to follow up and research incoming reports. Solutions such as Swift River are providing better management of large quantities of data, however the need for human interface remains. Equally, the dissemination of results under an effective elections-violence monitoring program must be reported and diffused well beyond the confines of the Internet. Press conferences and other public pressure techniques to encourage political leaders to respect their codes of conduct require separate budget lines. These considerations are not meant to suggest that social media techniques are not cost effective – they are – but there are additional costs to consider in pairing ICT use with traditional monitoring standards.

Finally, sustainability of a medium must be included as a long-term financial consideration for any violence monitoring program. Certainly the online engines of Ushahidi and Swift River offer an ongoing, low-cost solution after their initial set-up costs that may reasonably be maintained after elections-focused donor funds are withdrawn. I would also suggest that the sustainability of social media approaches lies in the empowerment they provide their constituents. These strengths, coupled with the institutional capacity support could provide a powerful tool for sustainable democratic development.

Richness and Accuracy of Data

As the NDI and Swift River examples illustrate, SMS and Internet technologies are being used to gather and filter increasingly rich data via ICTs. But because effective election-violence monitoring requires both incident reporting and situational reporting, further adaptation is needed. Furthermore, violence monitoring also demands the identification of a perpetrator, which is essential for filling the accountability gap and effectively using data to warn and prevent against further violence.⁴ Crowd-sourcing programs such as Ushahidi do not take this into account thus far. While the software can be modified to include this information, it is highly sensitive and often difficult for an untrained, independent observer to identify,

⁴ Kammerud

especially in the heat of a moment or in the frequent cases where a perpetrator is difficult to identify.

The interpretation of data is equally critical in this perspective. Election violence monitoring programs must offer a capacity to distinguish incidents of minor political importance from those that may foreshadow risks of escalating violence or political breakdown. Without this depth of analysis, election violence monitoring risks losing its application for broader risk assessment and early warning based on broad trends. The absence of this type of differentiation may also create additional risks by placing undue importance on small disputes or ignoring the broader impact of other incidents.

The question of data accuracy is critical to practitioners from all fields who are considering applying the technology. New advances in ICT applications offer some possible additional reassurances. Firstly, integrating social media data sources into monitoring data sets increases the amount of available information, which can help in verification and crosschecking information. Programs like Swift River are further refining the triangulation of crowd-sourced information by applying the same principle as data crowd-sourcing to the sourcing of the filters. The accuracy of these tools will need to be tested as they develop, however they already offer encouraging prospects for moving the accuracy of citizen journalism closer to professional verification standards.

Secondly, the technique of “bounded crowd-sourcing” enhances the quality of data by introducing password protection and limiting the set of users. Al-Jazeera took this in Gaza in 2009, which limited contributions Ushahidi to its journalists.⁵ Different mutations of bounded sourcing may prove useful in various contexts where more sophisticated or highly sensitive data is being collected. Presumably a hybrid program could be developed that allows both bounded and unbounded sourcing to take place with a single project, thereby realizing the benefits of both approaches. While “human-to-human” verification of information may continue to be the ‘gold-standard’ (by default), the adaptability of available software offer helpful solutions, especially if employed in a hybrid program utilizing both electronic and human data verification approaches.

Timeliness

⁵ “War on Gaza: Experimental Beta.” *Al Jazeera*.

Undoubtedly the strongest argument put forward in favor of ICT use for monitoring is that of timeliness. However, as illustrated in the analyses above, the timeliness of social media sources may come at the expense of accuracy and data richness.

The straightforward calculation of time over accuracy is not as clear-cut outside the context of immediate crisis. In certain circumstances, the accuracy of information becomes equally, if not more important in relation to timeliness of reporting, especially when the incidents are characterized by shades of gray. Accuracy in these contexts is required to correctly identify incidents and perpetrators as well as adequately understand the cause and implicit impact of a given event, thereby providing security providers and electoral planners with more pertinent information and allowing civil activists to make strong and supported cases against violence.

The Threats of ICTs and Election Violence – Abuse and Misuse

While the spectrum of opportunities and benefits of ICTs may inspire democracy and freedom activists around the world, they offer equal opportunities in repressing political freedoms. Authoritarian governments are developing sophisticated tools to control Internet freedom and use social media to promote their own propaganda. The use of images and Tweets, blog reports, and emails to identify and prosecute monitors or protesters, as seen in Iran, seriously threatens the security of citizen journalists. The use of these “open” and nominally unverified sources of data may also create challenges for international organizations working under state-issued permits and registration documents. Likewise, just as “old” media has been used to foment violence, such as the case of the Radio Mille Collines in Rwanda, which transmitted racist propaganda to encourage the genocide, “new” media is equally potent. For example, in Kenya, where many used social media to comment and monitor the conflict, over 1,000 mass text messages were traced that advocated ethnic violence against one or the other side in the post-election disputes.⁶

Conclusion

The power of information continues to drive the electoral observation movement today, as it did over 100 years ago. New technology allows information to be collected and shared at an increasingly fast pace. The

⁶ Kammerud.

essential principle to take away from this discussion is that no single tool is a substitute for a complete system. ICTs are instruments to facilitate a growing body of data related to election violence and which can complement violence monitoring programs, not supplant them. As Patrick Meier argues, “we need to think less in linear terms and more in terms of information ecosystems with various ecologies of information sources.”⁷ Effective application of social media and ICT technology to election violence monitoring will require a hybrid approach, tailored to the political environment and technological infrastructure and culture of the country.

Social media tools such as Ushahidi will undoubtedly continue to adjust and diversify to adapt to the needs of violence monitoring initiatives as well as other specific situations, from health to corruption to politics. While urgent crises may demand immediate information over of verified data, most election-related violence monitoring takes place in low- or medium- intensity conflict contexts and will require systems that balance speed, accuracy, data richness and analysis and program costs. Combining the high standards of election violence monitoring with the resources of new media and ICTs provides an exciting horizon for improving the prevention and resolution of election-related violence and empowering generations of citizens to engage constructively with their governments.

⁷ Meier “Crowdsourcing: A More Critical Reflection.”