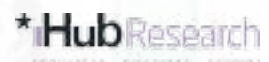
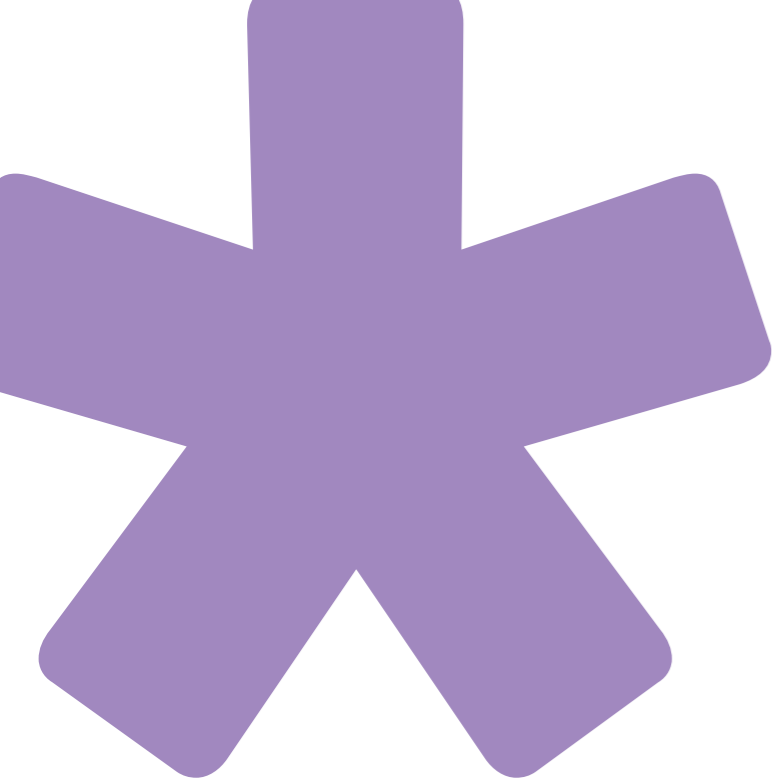




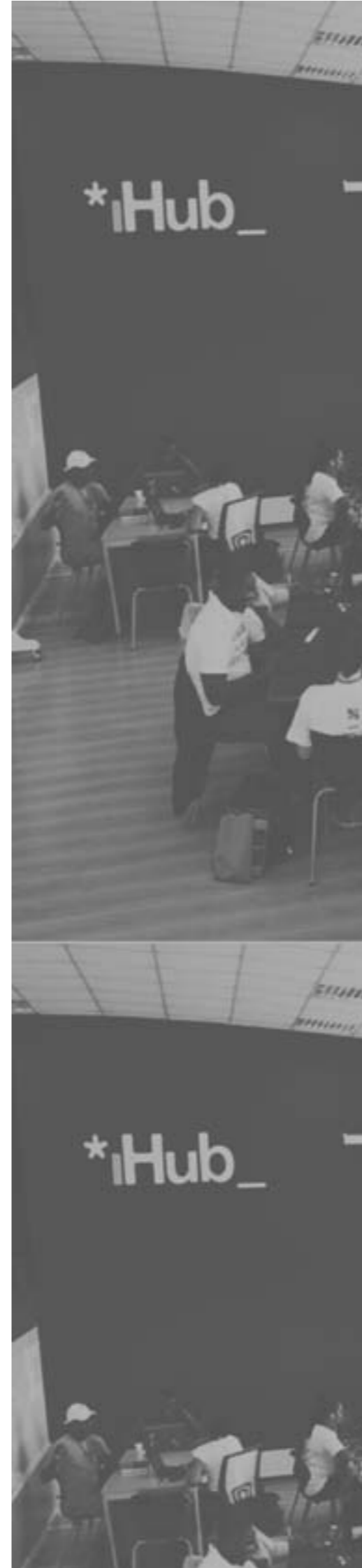
Uchaguzi Kenya 2013 Monitoring & Evaluation

July 2013





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iHub Research © 2013
in conjunction with Hivos



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Executive Summary

George Chamales (May 2013) wrote, “laying the foundation for trust in social media and crowdsourcing is a three-step process. The first step involves understanding the ways in which this technology can be used. The second is to assess the way in which things can go wrong while using them. The third is to develop best practices to prevent those bad things from happening [1].” This report seeks to understand the workings of an ICT-based, election-monitoring platform looking specifically at the Uchaguzi deployment for the Kenyan General Elections in March 2013.

The report covers the inception of the idea in 2010 with the convening of a roundtable and the resulting development of ICT tools - Ushahidi and Uchaguzi. Using a combination of research tools including performance indicators and rapid appraisal methods; metrics were developed to assess the deployment. The metrics looked in-depth at six different categories deemed critical for a successful deployment: partnerships, publicity and outreach, personnel, technology, workflows, and citizen engagement. Each category was evaluated on the basis of how different facets came together, what took place, and the gain and pain points in each category with a set of recommendations for each category based on the observed challenges faced during the Kenyan elections in 2013.

Strengths of the KE 2013 deployment included the physical situation that provided for close collaboration between the local volunteers and partners; the fact that the technology platform ran for the whole deployment without going down; and wide-scale buy-in and participation from partners and volunteers without whom the deployment would have been grounded. A special achievement during this deployment was also that reports were submitted from a wider range of geographic locations around the country. Notably, reports were received from the Northern town of Mandera for the first time ever.

The greatest overarching challenge that affected all aspects of the KE 2013 deployment was time management. Apart from reaching out to key partners, every other key aspect of the deployment was delayed, which inevitably affected the quality of the deployment. A second critical challenge was an inadequate data management strategy - how to clean, use, and store the data, especially after the deployment. The inability to track information sent to response partners also greatly weakened the feedback loop. Other challenges observed included insufficient training of volunteers and disjointed outreach efforts.

Our evaluation reveals that the deployment would have been strengthened with explicit strategies guiding the various areas of the deployment and communicated well to all partners. A partnership strategy would have indicated the roles and responsibilities of partners and made provisions for safeguarding commitments. An overall outreach and publicity strategy would have detailed the activities needed to improve awareness and use of the platform by Kenyan citizens and organizations. For future deployments, considerations should be made around whether deployments will be one-time event based or prolonged over the election cycle. Greater automation of the platform should also be seriously looked at as this will help to reduce the manual processing time.

From this deployment, the proof of concept of Uchaguzi has been clearly made; the fact that users and partners sincerely believed in the utility of the product highlights the value of such an ICT election-watch initiative. Nonetheless, it is highly recommended that Uchaguzi partners apply the identified lessons learned to their operations and future deployments, otherwise, the same recommendations will be repeated each time a deployment is held, as observed when comparing this report to the evaluation of the Uchaguzi 2010 deployment. With proper project, time and resource management; management of citizen expectations; and value creation amongst partners, future deployments will improve in their efficiency and impact.

Introduction

Governance is a process whereby societies or organizations make important decisions about how to rule themselves; determine whom they involve in the process and how they render account [2]. Compared to early definitions of governance, the paradigm has shifted from a sole focus on government to an inclusive one with myriad of actors that include but are not limited to government, civil society, media, private sector, and citizens. Good governance can be explained by the United Nations Development Program (UNDP)'s principles on good governance that have universal recognition. These are: Legitimacy and Voice encompassing participation and consensus orientation; Direction encompassing strategic vision; Performance encompassing responsiveness and effectiveness and efficiency; Accountability encompassing accountability and transparency and Fairness encompassing equity and rule of Law. Governance therefore seems best, when the aforesaid actors can make decisions and collective action hinged on culture, technology, history and traditions.

Technology in Governance

Technology appears to be a strong tool to be used in improving accountability and citizen voice [3]. Magno and Serafica (2001) have identified at least four elements that contribute to the success of technology in improving governance. First is the technology itself. The second element is data and information, which drive the technology. The third element is the processes of purposeful activity (administrative processes followed to carry out a particular activity in the government), while the fourth is the people (the users) who undertake

these processes. These four elements constitute what is known as the 'information system,' which provides support to the government for enhancing its performance.

To ensure technology is appropriately used in the governance context, there should be an enabling policy environment where a clear articulation for utilization of technology as a tool is made; creation of stable institutional frameworks and implementation programs; sufficient source of funding to carry out the programs; access to telecommunication infrastructure and skilled tech human resource [4]. Technology use in promoting active citizen participation for good governance has been epitomized in the use of Uchaguzi during the Kenyan General Elections that were held on March 4th, 2013.

Election Monitoring in Africa
In March 2010, HIVOS held a roundtable on upcoming elections in East Africa with various stakeholders from Kenya, Tanzania, Uganda, and global organizations.

The objective of the roundtable was to mobilize partners and interested parties together around the theme of the upcoming elections in East Africa (Tanzania - 2010, Uganda - 2011, Kenya - 2013) with the aim of mapping out common interests and concerns so as to outline possible interventions and interests/commitments of each stakeholder engaged in the process. Of particular importance to the roundtable was identifying appropriate and innovative ways of using ICTs as tools for effective monitoring and management of elections processes.

This roundtable was a platform where partners working in fields of governance, democracy, human rights and ICT met and exchanged ideas to design intervention strategies specific to each country and common to the region. Out of this roundtable, the concept of Uchaguzi was developed. Uchaguzi is the Swahili word for decision/selection/election.

piloted in Kenya in 2010 during the referendum, and used during Tanzania, Uganda and Zambia national elections in October 2010, February 2011 and September 2011, respectively. Learnings from the various deployments will be incorporated into the ICT Election Watch project of Hivos in supporting building of national partnerships around a long-term and permanent national technology platform for broad-based electoral monitoring. This report is a significant step forward in documenting and learning from the latest Uchaguzi deployment, during the Kenyan general elections in March 2013.

Ushahidi and Uchaguzi

The post election violence of 2007 - 2008 resulted in the development of Ushahidi, a technology platform that was created to map incidents of violence occurring in the country, as shared by citizens via the web and text. The name itself, Ushahidi (Swahili for testimony) illustrates the core role of citizens on the platform. Citizens give 'testimony', informing others on the happenings on the ground, alerting authorities, and enabling faster response. In 2013, Ushahidi came full circle since the 2007 elections with Uchaguzi with Ushahidi and other partners launching Uchaguzi Kenya 2013 whose aim was to help Kenya have a free, fair, peaceful, and credible general election.

The difference between Ushahidi and Uchaguzi is that the first Ushahidi was built in the middle of a crisis - hence chasing after it. Uchaguzi on the other hand was developed to avert crisis by acting as an early warning system or preventing the escalation of identified incidents to crisis proportions. Uchaguzi enabled Kenyans to keep an eye on the vote and provides avenues through which they can report any incidences significant to the election, with any technology available to them thereby facilitating collaboration between wananchi (Swahili for citizens), election observers, humanitarian response agencies, civil society, community-based organizations, and law enforcement agencies to monitor elections.



Uchaguzi Volunteers

Methodology

Monitoring and Evaluation (M&E) of projects provides stakeholders with better means for learning from past experience, improving service delivery, planning and allocating resources, and demonstrating results as part of accountability to key stakeholders [5].

Based on a need expressed by the Uchaguzi project team, iHub Research documented the process of building and running the Uchaguzi Kenya 2013 deployment; critically analyzing the entire process and delivering recommendations to be used for actionable planning.

Specific objectives of Uchaguzi M&E project were to:

1. Document the Uchaguzi process leading up to the Kenya 2013 Elections in order for the technology platform to be replicable in other communities and countries;
2. Use evaluation methods and the documentation to understand how to make the Uchaguzi initiative more sustainable and scalable;
3. Develop a set of metrics to aid in this evaluation and analyze the replicability of the Uchaguzi process so as to provide targeted recommendations for scaling up the initiative;

Research methods and tools included:

Performance Indicators

Performance indicators were used to measure inputs, processes, outputs, outcomes, and impacts of Uchaguzi. The developed indicators used in the research borrowed heavily from earlier evaluation research conducted by the Harvard Humanitarian Institute in 2011 [6]. The Harvard Humanitarian Initiative research team, led by Jennifer Chan and Melissa Tully, conducted an evaluation of Uchaguzi 2010 referendum deployment. The indicators enabled progress to be tracked, results to be demonstrated and corrective measures to be suggested.

Rapid Appraisal Methods

Rapid appraisal methods were used to gather

feedback from Uchaguzi stakeholders on decision-making, qualitative understanding of why changes were made, and provide context for the data collected. Some of the methods used included key informant interviews; one focus group discussion with on-the-ground international election observers from Zimbabwe, Zambia, Uganda and Tanzania and direct observation to record what was seen and heard [7].

Literature Review

The above tools were used in tandem with a comprehensive review of all relevant material, including reports from previous Ushahidi Crowdmapper deployments to determine metrics for success; and attending and documentation of event proceedings and activities related to the process.

Metrics Development

An initial assessment of Uchaguzi using toolkits created by The Harvard Humanitarian Initiative research team was carried out and the resulting gap assessment was aggregated into three critical elements necessary for the success of the Kenya deployment:

1. Crowd - reports, outreach, radio and media;
2. Verification - partners, strategy;
3. Response -International, Grassroots, local.

The identified gaps were expounded into: partnerships; research, analysis and verification; technology; and communication strategy. These categories informed the call for volunteers and formed the first working group meetings that took place on January 16th, 2013.

The above assessment helped to create the categories used to evaluate the 2013 deployment. The categories are: Partnerships, Outreach and Publicity, Personnel, Technology, Workflows, and Citizen Experience. The following is the evaluation of each metric category.



Partnerships

PARTNERSHIPS



- 10. Open and extensive communication with partners (0)
- 9. Securing and documentation of agreements through MoUs (0)
- 8. Project management (0)
- 7. Accomplished deliverables for partners (0)
- 6. Proper training of partners (0.5)
- 5. Partner alignment to goals/objectives and outcomes (0.5)
- 4. Funding for the project (1)
- 3. Partner responsibilities adequately executed (1)
- 2. Securing of necessary partners (crowd, verification, response) (1)
- 1. Partnership formation at least a year in advance (1)

Uchaguzi’s strategy was to contribute to stability in Kenya by increasing transparency and accountability through active citizen participation in the electoral cycle.

Ushahidi developed Uchaguzi and thus brought their core competence of technology. They created the first election-monitoring platform in 2007 after the eruption of the post election violence for citizens to report incidences of violence. CRECO acted as verifiers, both on the ground and in the situation room. The ICT Election Watch Program is a Hivos-funded project. They initiated the partnership and brought together civil society and technology. Additionally, they brought their ability to fundraise and implement large-scale projects. Hivos are also carrying out the monitoring and evaluation of the deployment, through iHub Research (that is evaluating Uchaguzi KE 2013) and an external consultant who is evaluating the greater three-year ICT Election Watch project. Through Hivos’ fundraising competence, CIDA and The Netherlands Embassy came to be part of the project as funders, with The Netherlands Embassy specifically funding the community radio outreach.

Backing CRECO were organizations that came under USAID - Kenya: Mercy Corps and CHF. Through a USAID grant, Mercy Corps has been working in Rift Valley (through the LEAP project), Coast and Nairobi. Mercy Corps also created two hubs in Eldoret and Molo that housed verifiers who sifted through data sent in via their on the ground monitors. 400 monitors and 3,000 youth group members were

trained on the Uchaguzi system and how to report directly to Uchaguzi. CHF came in through a USAID project in informal settlements of Kiambu, Kibera, Mathare, Korogocho, and Babadogo in Nairobi called Kenya Tuna Uwezo, where they are collaborating with PeaceNet and Kituo Cha Sheria. Through Kenya Tuna Uwezo, CHF had 20 cohesion champions on the ground sending information to CHF top management and to Ushahidi. The National Youth Bunge Association (NYBA) was also supported through USAID, where approximately 600 youth were mobilized and trained to be trusted Uchaguzi reporters who sent reports to both UWIANO and Uchaguzi platforms. SODNET provided the SMS short code number of 3002.

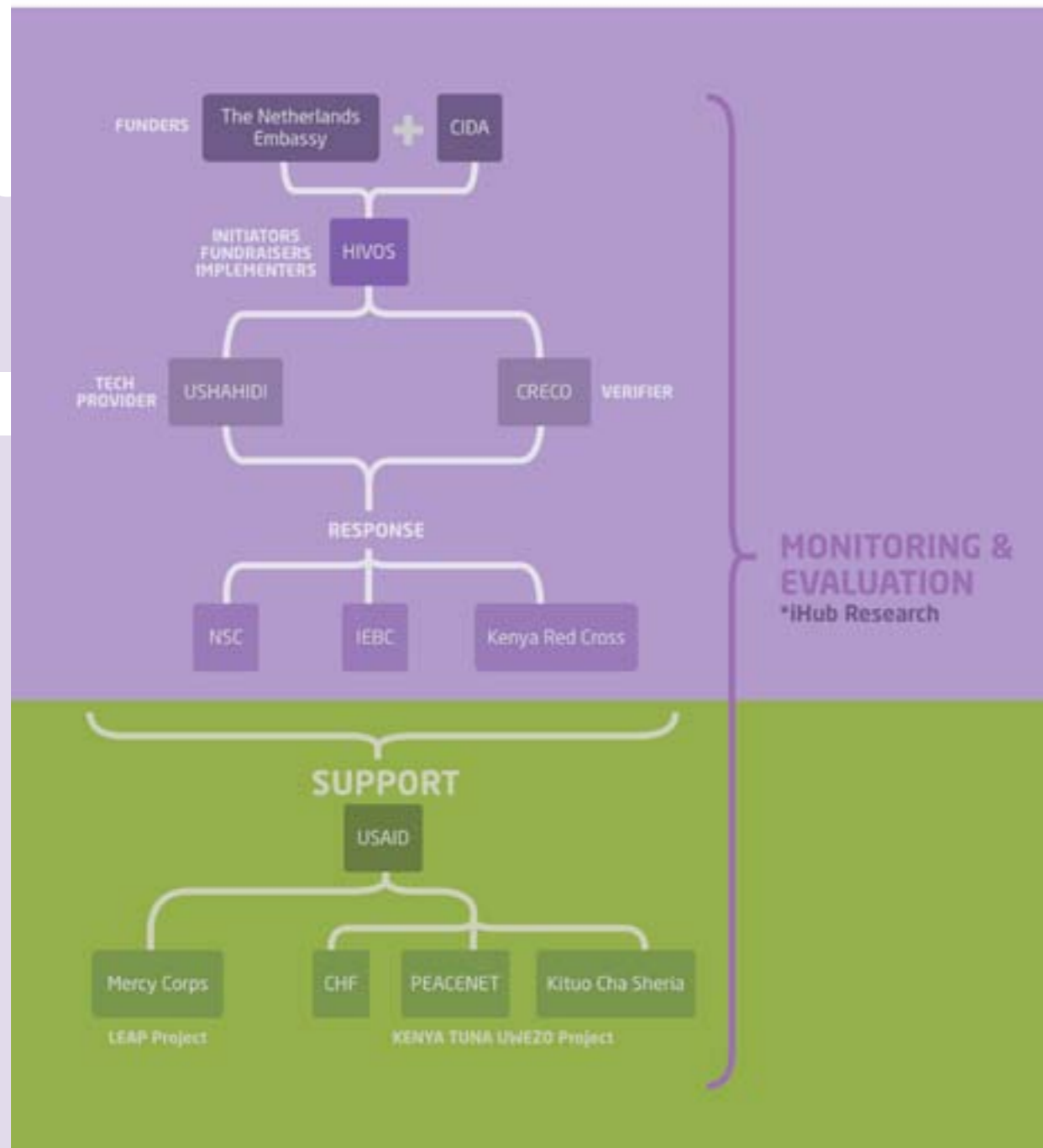
Catholic University of Eastern Africa, through their Center for Social Justice and Ethics, were also part of Uchaguzi. It was their first time to participate in an election watch deployment and they had 33 students participate as election observers (2 in Coast, 1 in Uasin Gishu, 2 in Busia, 1 in Makueni, 1 in Kitui and the rest in Nairobi). They covered 15 constituencies in Nairobi. Out of the 33 students, 13 were foreigners.

“The dilemma for us [during the elections in Kenya] was whether to only observe or to help where possible.”

- Uchaguzi Partner

The next page visualizes the complex ecosystem within which partners worked.

Uchaguzi Partnership Ecosystem



The greatest achievement of this ecosystem is that reaching out to pertinent partners began way in advance, over a year prior to the deployment. This enabled the acquisition all the necessary partners needed for a successful deployment. Funding, a fundamental factor was also secured aiding actualization of the deployment.

Partnership Challenges

- Apart from the brief about the partners on the Uchaguzi wiki, there was no other documentation of all the partners and the numbers of volunteers that they brought and what exactly they did. There is a dearth of documentation when it comes to partnerships.

- None of the partners signed official MoUs, hence there is no official paperwork binding partners to their expected outputs.

- Regular meetings bringing together all partners did not take place, creating a breakdown in communication. Most communicated directly with Ushahidi project lead stretching him thin and further deepening the communication chasm. Additionally, he had to attend to attention that Uchaguzi received from non-partners, e.g. international media.



Uchaguzi Project Lead Daudi Were being interviewed by CNN (Courtesy: Ushahidi)

- Missed opportunities. A PACT-USAID funded project under KECOSCE (Kenya Community Support Center), called SCEWER (Safe Coast Early Warning and Early Response) could have fed Uchaguzi with information from the Coastal region through 93 peace monitors. However, the linkage was never

secured and therefore, SCEWER resorted to having a local situation room, relaying the information they received to directly to IEBC, and NSC for response. The Obama Campaign Chief Technical Officer was another resource available to the Uchaguzi deployment to conduct a stress system on the platform, but he and his team were unable to assist since the technical code was not available in time for testing.

“Uchaguzi should be able to recognize the power of the local response and harmonize the power of the national touch and local response.”
- Potential partner, Uchaguzi

Partnership Recommendations

The bedrock of any deployment is its partnerships. If these are not set well, the potential for failure is high. To aid in cementing and improving relations among partners, the following should be considered:

- There should a clear partnership strategy that shows the kind of partners needed so that once this has been achieved, the focus can move on improving capacity rather than adding more partners.

- Partners should work towards creating ownership of the deployment rather than each looking out for their own interests.

- Comprehensive documentation of partners, their involvement and experiences as this will clarify the scope being covered and help track individual efforts.

- Interoperability of local, related deployments, exemplified by the possibility of linking SCEWER to Uchaguzi so that the local system fits and feeds into the larger national system.

- Lack of evidenced commitments in the form of MoUs created room for misunderstandings about responsibilities or potential for overstepping of mandates. The importance of securing agreements is that each partner will carry out their core competence.

- Each partner should have a project lead, responsible for ensuring partner mandates are carried out. This way stress load is balanced across the board as opposed to having one overall project manager.

Outreach and Publicity

- Partners such as CRECO are involved in governance activities before and beyond elections. Other partners should come in to bolster such efforts, e.g. how can the tech platform continue to be used. Such initiatives would create deeper value between the partners, enabling stronger future engagements.

- Conflict resolution strategies should be developed to safeguard against grounding the project in the event of arising conflicts.

Such election watch projects should not be geared so much towards the technology itself, but rather should explore best practices for building viable partnerships around such technology platforms to amplify citizens' voices in the electoral process in the long term - and thus contribute towards an improved democracy.

"If one partner does not deliver, it [election watch deployment] gets grounded."

- Uchaguzi Partner



OUTREACH AND PUBLICITY

10. Outreach and publicity on social media **(0)**
9. Documentation of outreach and publicity efforts **(0)**
8. Outreach and publicity partners **(0)**
7. Outreach and publicity strategy **(0)**
6. Outreach and publicity conducted at least 6 months in advance **(0)**
5. Pushing out of relevant information from the platform **(0.25)**
4. Outreach and publicity lead **(1)**
3. Execution of adequate outreach and publicity **(0.5)**
2. Adequate marketing materials distributed to relevant people **(0.5)**
1. Launching the platform **(1)**

Efforts towards publicity and outreach were intermittently done by the partners and include:

- Uchaguzi was officially launched on February 11th 2013;
- Hivos used community radio, where Uchaguzi was allocated 3 commercial spots each weekday in Radio Lake Victoria (Nyanza), West FM (Western), Kass FM (Rift Valley), Sauti ya Mwananchi (Rift Valley), Sifa Lodwar (Rift Valley), Baraka FM (Coast), Ghetto FM (Nairobi), Pamoja FM (Nairobi), Syokimau (Eastern), Sifa Garissa (North Eastern), Sifa Marsabit (North Eastern), and Coro FM (Central); between 7.00am - 9.00 am, 10.00am - 1.00pm and 5.00pm - 8.00pm. Media adverts were translated into 12 languages.
- Hivos invested in below the line advocacy material - t-shirts, posters, and fliers and distributed the material through CRECO who also talked about Uchaguzi in their county forums. Mercy Corps also informed all the forum participants that they held in various towns about Uchaguzi.
- A general communications strategy was developed by Ushahidi with communication inputs and outputs identified out of which a media schedule was developed for major media houses and they identified a communications lead.

Publicity and Outreach Challenges

- Publicity and outreach is dependent on many other factors. During elections, dynamics are complicated further by increasing costs of carrying out any activity on mainstream media and political parties taking up prime time slots. For Uchaguzi, media houses were ready to finance the whole deployment if they given full ownership. The short code was not finalized until much later therefore printing merchandise would have proved detrimental if the short code changed.
- The fragmented mode of publicity and outreach made it the weakest link in the deployment. There was no overall guiding strategy hence each partner was left to his or her own approach leaving room for duplication of efforts or missing some activities. There was only one documented strategy, around the community radio outreach.
- As with partnerships, there is no comprehensive documentation of the publicity and outreach efforts.
- Outreach activity on the both the Facebook page and Twitter handle could have been more aggressive. The content being pushed out of the platform through various channels (traditional media, social media) was low compared to the information coming in.

Technology

- There was a twitter handle @uchaguzi and a Facebook page - Uchaguzi Kenya 2013. During the actual deployment, Sitroom and <http://visuals.uchaguzi.co.ke/> were outlets for analyzed information from the platform.

- In addition to printing 300,000 fliers that were distributed in 25 counties, USAID held Tuko Rada roadshows organized by the National Youth Bunge Association that took place from the end of January to mid-February. These roadshows and fliers promoted the short code 3002.

Publicity and Outreach Recommendations

- Development of a publicity and outreach strategy for and by all partners is crucial so that uniform talking points and complementary activities can be accepted, adopted and carried out by all.

- The fragmentation of publicity and outreach efforts was further hampered by the fact that the efforts began too late with barely a month to spare before the elections. Publicity and outreach should begin earlier, prior to an election deployment, to allow citizens to interact with the platform, query, test and understand its workings.

- As with partnerships, it is vital to document the publicity and outreach efforts in order to gauge reach and impact.



TECHNOLOGY



10. Platform ready 6 months in advance (0)
9. Simulations with partners and volunteers (0)
8. Platform usability (0)
7. In-built data analysis/quality assurance tools (0)
6. Multiple functioning methods of reporting (1)
5. Site testing by developers (0.75)
4. Platform security (1)
3. Platform running for the whole deployment (1)
2. Customized platform for elections (1)
1. Visual representation of the data (1)

The Uchaguzi technology platform was an overhaul of the Ushahidi 2.5 platform with all of security patches up to the latest version at the time of the election, Version 2.6.1. It was customized to fit election requirements.

An overview of the customizations include: removal of the bridge between the back-end and front-end, thus making navigation easier and reducing time lapses; addition of a boundaries plugin that allows filtering of reports by county; addition of police station information; addition of a way to view all media, i.e. videos, pictures on one page; change in how additional pages are displayed such that they have all been put in one page; election plugin to add trusted monitors; and improvements in user interface. These customizations for elections were a great gain for the platform.

Previous deployment sites went down because of the amount of traffic and load of need for many administrators on the backend. The Tanzania deployment e.g., was hosted on normal servers, which added to the problem of the site constantly going down. Learning from the Tanzania experience, Ushahidi moved the platform to a rackspace (cloud) to manage the load. This meant that there was another Uchaguzi platform running parallel to the actual site so that in case the actual one failed, the parallel one could be activated. This ensured that the platform was running for the whole deployment, quite a feat considering the tech platform was down for almost 3 hours in Tanzania and 2 hours in Zambia.

To test the features, the developer community was asked to use a test document that has a walkthrough of all of the major Uchaguzi features (both the public facing side and the administration). When the developer community found bugs, they were asked to submit them directly to the Ushahidi code repository. There was also a simulation site. Internally, a quality assurance strategy was developed to define techniques, procedures, and methodologies that were to be used in the development and testing of Uchaguzi. The main objective was to assure timely delivery of the software and that it met specified requirements within project resources.

The public was able to send information to Uchaguzi through numerous ways:

- Sending a text message (SMS) on 3002 (short code) from within Kenya,
- Twitter: @uchaguzi and use #uchaguzi hashtag,
- Posting on the Facebook page: facebook.com/UchaguziKenya2013,
- Emailing reports to uchaguzi@gmail.com,
- Uchaguzi web form.

To secure the platform internally, the code was managed from Github so anyone who changed the code had to send in an approval request before the changes were accepted. From the users' side, to protect people's identities as they reported, there was a plugin that anonymized their numbers so they could not be identified. SODNET provided the Uchaguzi short code 3002 for use for the deployment.

Technology Challenges

- Poor project management led to key milestones not being achieved and thus delaying consequent milestones. Full scoping of technical requirements early on should have led to increased human resource allocation early in the project.

- Bugs affected the platform. The alert system had a bug so that it sent the same message many times. The alert system therefore had to be switched off and no one was able to receive any alerts. A plugin for trusted reporters had been created such that their messages came in and were picked up by the system and automatically verified and mapped. However the plugin did not work and thus their messages came in as numbers. They were clogging the system as the volunteers were told not to process them. There was a time when all messages coming in were reading zero. These were never deciphered.

- Poor time management. Technical work to aid workflows was not requested until the last few weeks. Workflows were therefore not adequately tested. This led to testing by developers being done up to March 1st, too close to the Election Day to make any significant changes. The testing was not done to completion and, as seen on the tracking spreadsheet, much of the backend was not tested.

- Partner challenges. Some partners were promised many tech plugins that were not delivered, e.g. the ability to filter report by location, linking of SKEWER and Umati directly to Uchaguzi. Some were denied access to the platform until the day before the elections (March 3). In some cases, access was downgraded, causing frustrations among partners.

- One of the weakest aspects of the technology is lack of in-built tools - to aid in data analysis and also quality assurance tools. Based on Uchaguzi data, statistics that could be collated include: summaries of unique visitors to the site, category breakdowns, and report statistics. However, to date, categorization of data has been reliant on the volunteer who enters the data; if the volunteer does not enter the proper category of the entry, the data will not be accurately coded. It was noted by volunteers that there are currently not enough consistency checks in the backend.

Technology Recommendations

- Have a team building the platform, as this will reduce the load on one person.

- Begin developing the platform earlier. It should be ready at least 3 months before the deployment to allow for ample simulations.

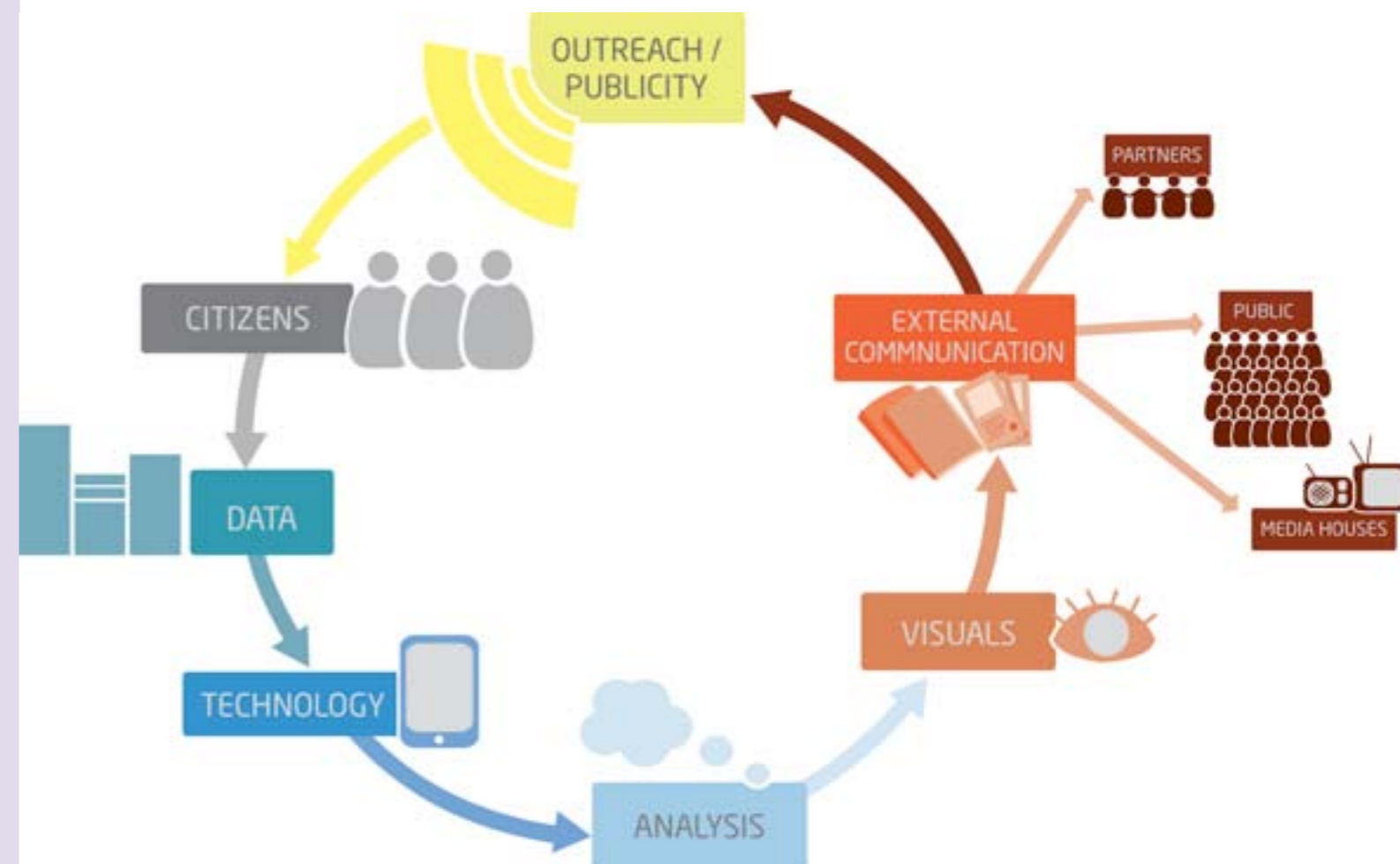
- Get a feature freeze time point after which fixing bugs takes priority over new feature requests. This too should be done early enough. Any customizations should also be completed early.

- A tech member should be present in all partner meetings to advise on whether plug-ins that partners want are feasible. This will ensure that requests that are not possible will not be accepted (thereby leading to mismanaged expectations).

- Involve the community to test the platform early (at least 2 months prior to deployment) to ensure a comprehensive analysis is done so as to identify bugs early enough for rectification.

- The tech team should take user requirements from all partners to avoid instances where access is denied or downgraded.

- If greater automation was integrated, it could also prove easier to run analysis of the data directly on the backend and eliminate errors due to improperly entered data. Additionally, if analysis tools were in-built into the platform, analysis could be made more quickly and more comprehensively. Such tools would enable the feedback loop of response back out to partners, the public and media houses in a timely manner



The envisioned ideal feedback loop where the information sourced from the crowd also goes back to inform the crowd.

Personnel



PERSONNEL

10. Seeking out volunteers at least 6 months in advance (0)
9. Documentation of on the ground volunteer team (0)
8. Actual volunteer participation and retention (0)
7. Appropriate recruitment and orientation of volunteer leads (0)
6. Adequate training for on the ground team (0.25)
5. Recruitment of on the ground volunteer team (0.75)
4. Documentation of personnel and training material for digital team (1)
3. Digital volunteers support system (1)
2. Personnel leads (1)
1. Securing volunteers for the deployment (1)

Volunteers formed the bulk of Uchaguzi personnel. Recruiting the volunteers began with working groups, which were developed to enable the community to give input into shaping Uchaguzi processes and introduce them to the deployment for purposes of having them as active participants during the deployment [8].

The working groups comprised of: Technology, Local Community Outreach and Training, Swahili and Local Language Team, Social media and Communications and Analytics, and Research and Analysis.

These working groups developed into the digital volunteer groups, modeled on Standby Task Force processes and reworked to suit the Kenyan election context. There were trainings for both the local and global teams (virtually) where approximately 240 people were trained. In these trainings, volunteers were taken through all workflows to get them generally acquainted. They would then break into group for particular digital groups to further go through their chosen workflow with the help of the wikis and co-leads (leaders selected to head each digital team).

After being trained, each volunteer was asked to confirm their registration, review the Uchaguzi privacy and security guidelines, sign a code of conduct, review the Uchaguzi Categories definitions for reports, review the Uchaguzi Background, learn more about the Uchaguzi Access Chart - who can see and do what, and create a member account on

uchaguzi.co.ke, before being added into team Skype chats and given login credentials to the software.

Documentation of the digital volunteers was done quite well from signing up of working groups, to registering for digital teams. Volunteers on the ground were from partner organizations, namely, CRECO, Mercy Corps, CHF, USAID, and CUEA. These on-the-ground volunteers were recruited from within. For example, CRECO recruited persons who are members of organizations that are part of CRECO who reside in the locale that they would be monitoring. These volunteers had varied training: Ushahidi staff trained some virtually, others were internally trained by the host organization, while others, e.g. the National Youth Bunge Associations were trained by UWIANO.

One area that greatly boosted the deployment was the Uchaguzi situation room. This was the physical location where the local digital volunteers operated. It was situated at the iHub, in Nairobi. Here, volunteers had access to Internet the whole day and only had to come with their laptops. Additionally, they were supported with meals and Uchaguzi-branded merchandise to boost morale. This created a good working environment and enabled them to focus on tasks at hand. It also eased communication, as members were able to walk over to each other in case of an arising query.

It was noted by the co-leads that the volunteers were amazing; their spirit was always up despite the long hours they had to work. The flexibility of the volunteers to adjust to arising situations was lauded in that they were able to move to other digital teams, learn the workflows and help out where need arose rather than waiting for their scheduled time. It was only befitting that they were appreciated after the deployment. This happened on 9th April when all the volunteers were invited back to the situation room and feted for their participation. This gesture demonstrated to the volunteers that their input was valued and increased their sense of community.

Personnel Challenges

- Recruitment for volunteers began only one month to elections. As a result of the delayed recruitment, training was not adequately done. For most of the volunteers, it was their first time participating in an election watch deployment and as such, most would have benefited from more extensive training involving simulations to enable them to experience the process beforehand. Other than training with the wiki instructions, there were no simulations for volunteers. Simulations relied on the tech being ready, however, it was not ready to be used for simulation.

- Lack of extensive and up to date documentation of on-the-ground volunteers made it hard to grasp the scope of their work with spatial reference.

- There was an assumption that all volunteers were up to par technologically. Yet most of the verification and the translation teams had to be introduced to the basics, e.g. opening a Skype account and how to operate Skype.

- Unfortunately, many of the volunteers felt the working groups did not add value because they happened too close to the elections for most of the suggestions raised during the working groups to actually be taken into consideration and implemented for the deployment.

Personnel Recommendations

- Recruitment should begin earlier before deployment to allow for adequate and extensive training. This allows the recruiters to assess the technological prowess of the volunteers so as to know how best to train them appropriately.

- Volunteers were asked to attend one training out of the many that were being held. However one training was not enough to enable them to understand, internalize and confidently work on the platform. There should be a number of minimum trainings and simulations that a volunteer has to attend in order to be able to participate. More emphasis should be given on the training of co-leads, as they will be handling a large number of volunteers. They should not only be trained on the workflows but also on social aspects e.g. handling different personalities, how to encourage volunteers, etc.

- Just as the digital volunteers were well captured in a database, the on-the-ground volunteers should have also been captured in a central repository. Knowing how many volunteers and where they were would have given a clearer picture on the extent of the deployment in terms of verification.

“This created a digital humanitarian team in Kenya and hopefully this will have a good base to draw from for future deployments.”

- Uchaguzi Partner

Workflows



WORKFLOWS

10. Conflict resolution/feedback mechanisms (0)
9. Tech support for workflows (0)
8. Real time processing of information time (0.25)
7. Quality of outputs at each stage (0.75)
6. Quality of workflows (0.75)
5. Response back to senders (crowd) (0.25)
4. Analysis of data during deployment (0.75)
3. Integration of local and global volunteers (0.75)
2. Open communication on the platform (1)
1. Personnel in charge of workflows (1)

Uchaguzi volunteers began working on the platform on March 2nd in preparation for March 4th, Kenya’s Election Day. Volunteers worked on two platforms, Skype and Uchaguzi. They were given a general Skype workflow and the specific workflow for the digital team to which they had signed up.

“Despite the tough messages coming in, there were also quite a number of encouraging ones.”
- Co-lead, Uchaguzi

The first digital teams to receive this information were media monitoring and SMS teams. Media Monitoring was in charge of monitoring citizen reports via different social media streams, i.e. Twitter, Facebook, blogs and create reports from these social media streams. They were not monitoring mainstream media, as they wanted to amplify the citizens’ voice. Twitter was the main social stream. SMS team turned incoming messages to from citizens (crowd) and trusted reporters through the short code 3002, into report.

“As a rule, the complexity of a role should be inversely proportional to the overall volume of effort. So with SMS/messaging being the “universal inbox” their workload should have been one or two very basic functions” - Co-lead, Uchaguzi

The second tier of teams to process the information were the geolocation and translation teams. The Geolocation team was responsible for finding the grid coordinates for a given report and plotting that location on the report map before being approved for public viewing, collect and keep track of all available maps of the area where the emergency is taking place and keep an up to date of Google Doc of all grid coordinates found by location. The Translation team was to translate reports (including those created out of tweets/SMS) from local languages to English.

The third tier of volunteers were the reports teams and verification teams. The Reports team was the first quality control as they approved reports thereby deciding on which reports would be mapped while the verification team established the veracity of the reports through confirming with on the ground volunteers.

Where urgent messages came in, there was an emergency team that picked and fast tracked them through the processes and verified so that action can be taken. The Technology team and Analysis and Research teams provided support. Technology team was in charge of maintaining the platform during the duration of the deployment while the Analysis and Research team was in charge of analyzing information (sense making) received in the platform, and providing situation room reports in the form of data visualization, pdfs, etc.



Media Monitoring and SMS teams

Workflow Challenges

- Media monitoring team's greatest problem was lack of sufficient volunteers as team members were asked to move to SMS to help clear the backlog. Other digital teams also had a dearth of volunteers despite many more signing up. The result of this was fatigue of the few that were participating. Volunteers would sign up for a particular time slot but not show up. Therefore getting people to own the timesheets was a challenge.

- Information could be lost in translation as it depended on the volunteer to give the report a suitable title. Translated reports were also prone to distortion from the original message.

- The day before elections there was a backlog of 1,500 messages in the system. On the day of elections, most volunteers went to vote and were caught up in queues increasing the backlog. Additionally, processing the information at any point relied on a minimum of 3 windows (Skype, wiki and the platform). This greatly decreased processing speed thus adding to the backlog.

- SMS's main challenge was on numerous messages sent by one person. New messages were hidden in the thread leaving the team to manually search for new messages.



Geolocation Team

- Co-leads had to keep reminding team members on the instructions. This was seen across the board as volunteers did not seem to have grasped the workflows, e.g. volunteers did not understand what to escalate and what not to hence they had a myriad of questions. Output was poor, resulting in the need for a quality assurance team to be set up to clean and rectify the mistakes.

- There were many redundant messages. However, since they could not be processed, such redundant messages stayed in the system, clogging it and diminishing the morale of volunteers who looked as if they were not working fast enough.

- Because of the bottlenecks in the earlier workflows, verified data reached the analysis team late and the format kept changing leaving the analysis team to carry out further data cleaning. Analysis of stale data is irrelevant.

- Most of web reports were impossible to geolocate. Since the point of the platform is to map incoming information, it renders web reports immaterial to collect.

"Claiming that the platform enables real time action can kill people as they wait for action"
- Uchaguzi Partner



Source: iRevolution

Workflow Recommendations

- Extensive training that includes simulations is of necessity if volunteers are to internalize the workflows and be able to execute them confidently. More emphasis on training for the co-leads should be done, as they are the volunteer guides.

- Workflows should be distinct to avoid duplication of roles and reduce bottlenecks. Both media monitoring and SMS teams were geolocating at the beginning of the deployment. Yet there was a team specifically for geolocation.

- On the Election Day, most volunteers went to vote first before coming to work on the platform. This caused a major lag in the processing of information as that was the day most information came in and yet the manpower to process it was held up in queues. For future deployments, personnel management should ensure that most manpower is available on the material day and liaising with the global team to assist until the local teams can return from voting.

- The workflows need to be user tested beforehand to show the gaps needing correction.

- The current setup runs into serious backflow problems when more than 30 people are working. Microtasking needs to be a complete solution in such instances to reduce lag.

- Automation of tasks should be done. For example, there should be a locking mechanism on the platform, as this would greatly reduce the amount of back and forth that has to be done between Skype and the platform and reduce duplication of efforts.

- For a technical workflow as geolocation, it may be necessary to have individual training to be able to gauge the competencies before joining the digital team for quality control.

- All the partners, especially the non-tech ones, should create workflows, as their contribution would enable the outputs to be user-friendly.



Translation and Reports Teams



Verification Team (Courtesy: Ushahidi)

Citizen Experience

CITIZEN EXPERIENCE



10. Documented response by partners based on Uchaguzi information (0)
9. Understanding of Uchaguzi to citizens (0.25)
8. Feedback to citizens from Uchaguzi (0.25)
7. Confidence in Uchaguzi (1)
6. Perceived feedback by citizens (1)
5. Occasions that information was sent (1)
4. Information sent to Uchaguzi (1)
3. Expectations of citizens for Uchaguzi (0.75)
2. Modes of communication to the platform (1)
1. Outreach to citizens (0.5)

“Don’t risk missing the bigger story here: the simple act of residents recording actual ground level events themselves will have a long-term transformative impact on society - nowhere perhaps, as profoundly as in places like informal settlements.”

- Erica Hagen, co-founder of Map Kibera and GroundTruth Initiative

It was imperative to understand Uchaguzi from a citizen’s perspective to get a sense of users’ expectations and experience. The citizen-focused aspect of the research was out of the original scope of the research, but was important enough to warrant at least an initial investigation into the outcomes observed by citizens. This was done through fieldwork in the informal settlements of Kiambiu, Dandora and Mathare to collect feedback from a small sample of citizens who used the Uchaguzi platform. The three locations were chosen because of the amount of information that was received from the locations and the historical context of the locations as perpetual hot spots for violence. Respondents were selected through snowball sampling technique.

A total of 35 citizens were interviewed. 26 were female, 7 were male. Most of the respondents were women because men were unwilling to share

whether they used the 3002 short code. This could be because the men did not want to be seen as informers or that they were the propagators of the issues that arose and thus did not interact with the platform. In cases of violence, men too are known to take defensive or retaliatory mechanisms (act first) while women will probably retreat first hence allowing them the opportunity to report to the platform.

On being asked how they heard about Uchaguzi, respondents of Kiambiu said that they heard about Uchaguzi at home and while working through the media (mostly radio followed by TV) and through friends. Most Dandora and Mathare respondents had heard about Uchaguzi at peace forums, one of which was organized by PeaceNet.

From these sources, respondents were told to send a message to 3002 in case of violence, to promote peace and send peace messages. Respondents stated that they decided to use Uchaguzi because it was secretive, affordable, and respondents were confident that action would be taken. All those interviewed had used SMS to report. Respondents sent in information mostly on threats of violence, tensions and insecurity, election day irregularities (e.g. lateness of IEBC materials, delays in opening polling stations), citizen attitudes to events as they happened, and peace messages.

tensions and insecurity, election day irregularities (e.g. lateness of IEBC materials, delays in opening polling stations), citizen attitudes to events as they happened, and peace messages.

Almost all respondents received an auto response from Uchaguzi thanking them for their message. Most of them also affirmed that they noticed a change after they sent in their report to Uchaguzi, with most stating that they saw security personnel on the ground. This seemed to help the citizens feel their message was valued and acted upon. Being asked for more information also gave citizens more belief in the system. Respondents expected Uchaguzi to help promote peace, and to intervene in bad situations. For the bulk of the 35 respondents interviewed, expectations were met. Those who disagreed said their expectations were not met because the reported situation did not change.

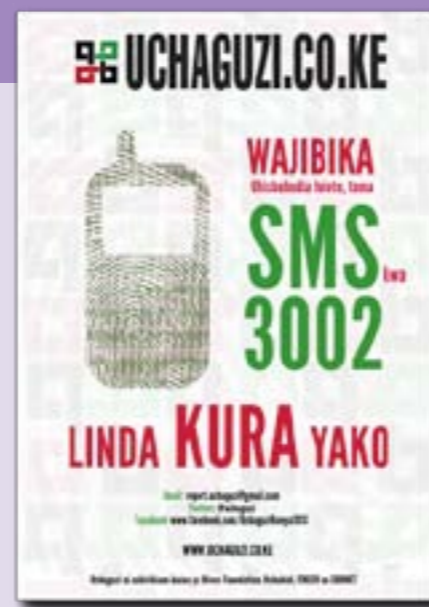
To improve Uchaguzi, citizens recommend Uchaguzi be extended beyond March to continue to promote peace, monitor elections at the county level, help maintain security, engage the community into Uchaguzi, and carry out civic education at the grassroots. None of the respondents wanted the platform to be shut down, for they believe there are many pending security issues that would be easier to identify and address through the Uchaguzi platform.

This initial probe into the perceived outcomes by users revealed that if any action or change was witnessed after someone reported to Uchaguzi, most attributed that change to Uchaguzi. While this worked in the favor of Uchaguzi during these elections in terms of user perceptions, there is no real confirmation available from the Uchaguzi response partners on whether or not any of the reported actions taken were really as a result of Uchaguzi or not. It is unclear if any of the perceived actions taken on the ground were truly a result of Uchaguzi and its partners or otherwise. Therefore, it is extremely important that in future deployments, a strategy be devised to track any and all responses taken based on Uchaguzi reports.

In addition, during future election watch deployments, in-depth impact studies should be conducted to better understand the impact and reach of the Uchaguzi initiative on citizens. A countrywide study specifically focused on the users' perspective could greatly improve our understanding of citizen use and barriers to ICT watch election platforms.

“Police were not being deployed for purpose of beating people, but for their presence to communicate law and order.”

- Uchaguzi Partner



Recommendations



Map showing the expanse of locations where information was received from. Note that this was the first time that an Ushahidi platform has received information from Mandera.

Case studies on earlier deployments of election watch ICT initiatives have given foundational areas for learning.

The Uchaguzi: Case Study by Harvard Humanitarian Initiative and Knight Foundation written in 2010 after the first deployment of Uchaguzi in Kenya and the general election in Tanzania, recommended the following:

- **Plan early.** One resounding challenge was aiming to achieve many objectives in such a short time period. Planning early, from 6-12 months prior to an election/referendum was strongly and widely recommended.
- **Further build effective partnerships.** Defining and agreeing on roles, responsibilities and expectations will help partners implement a successful project.
- **Develop Strategies** (e.g., campaign, feedback to action, security and privacy). Strategies should aim to 1) improve the filtering and verifying large volumes of information; 2) strengthen feedback loops and action by building an urgent response team, and; 3) provide any necessary security & privacy plans for the project and its users.
- **Use simulation.** Simulation exercises can help identify obstacles, test new technology, and improve workflows and communication approaches.

These activities can better prepare people for an upcoming election/referendum day and provide a wealth of community building and learning opportunities.

• **Paper maps.** Uchaguzi-Tanzania participants recommend transforming the web-based map into paper maps. This would help local partners share the information with communities that are unable to access the map in its online format. Sharing maps in a newspaper immediately after the election would also broaden the reach of Uchaguzi efforts.

With the exception of use of paper maps, the above recommendations continue to hold true in this 2013 Uchaguzi deployment evaluation. Had the first set of recommendations been put into effect, it is likely that Uchaguzi Kenya 2013 would have achieved much more than it did. Review of the above and other literature revealed that many of the shortcomings of the Kenya 2013 Election Watch Deployment (Uchaguzi KE), had been identified in earlier work from 2010. Unfortunately, it appears similar issues manifested 3 years after the last deployment of Uchaguzi in Kenya. Therefore, a key recommendation to the management partners is to create an explicit strategy to ensure that the lessons gained from this research and learnings from other countries that have carried out election monitoring deployments are applied to future deployments.

Executing a deployment well takes much time, effort and resources. Proper project management is of essence. There should be a strong project lead with a solid team of project managers under him/her to whom he/she can delegate assignments. The scope of Uchaguzi 2013 deployment grew continuously as new donors and partners joined. It is critical that agile project management is applied to keep the project scope, timelines, and costs in check.

It will also be of benefit if the lead understands the local context and landscape so as to be able to navigate when searching for key partners. For Uchaguzi, it took more than a year of preparation to build trust and consensus and court potential partners and explain the value add of their involvement. There should be a project team member tasked with fundraising for the project, as funding is key to the success of large-scale projects such as deployments. Once funding has been secured, one can leverage on those networks to get pertinent partners on board.

Expectation management is crucial towards those sending messages to the platform. Publicity and outreach efforts have to explain to the citizen what will happen (and what will not happen) with his/her messages. This way, citizens' trust in and use of the platform is assured.

Such a platform employs the use of mobile technology to amplify citizen voices. Beyond elections, citizen voices can still be heard through 'cellular citizenry' [9] - where citizens continue being monitors [10] of the government using ICT platforms to collect information from citizens and document whether the government is fulfilling its promises. Such citizen watchdog activities then promote a responsive and accountable government, which in turn hopefully can lead to better service delivery to the people.

To add value to such deployments, the element of time has to be incorporated so that such election-watch deployments last beyond the election and as such can be modified to fit the long term. Partnerships created should continue to add value to each other, e.g. the technology improving the workings of civil society organizations, enabling them to be more effective when doing programming with citizens. This can also be achieved through aligning with on-going initiatives such as Sisi Ni Amani', Serious Request [11] (where the Kenyan chapter [12] is used to raise awareness around a social issue of

great importance) and PeaceTXT, among others.

One of the greatest lessons has to be resource management. Resources availed for the deployment will determine the scope. During election period, carrying out publicity on mainstream media is a costly affair as costs shoot up. Additionally, political parties monopolize prime time slots rendering it difficult for others without financial muscle to be able to effectively carry out their campaigns. Resources also affect personnel as once volunteers are recruited; each training is costly thus limiting the number of trainings that can be held. Effective resource optimization is of necessity if each section of the deployment is to be carried out effectively.

"Getting the team and carrying out the deployment is a marathon, and not a sprint."

- Uchaguzi Team Member

Conclusion

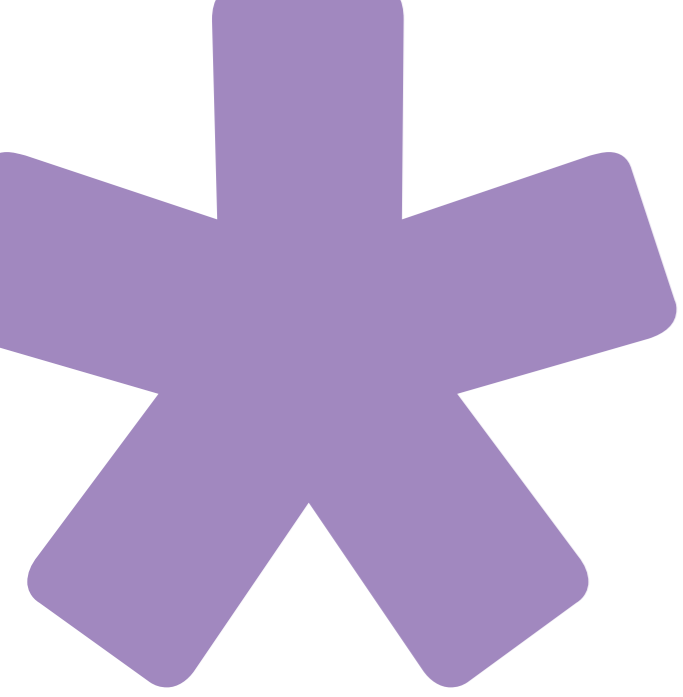
Through this report, we hope it becomes evident how the various aspects of the deployment were executed. For this deployment, metrics were created to measure each aspect of the deployment in the anticipation that this will chart the path towards the definition of a concrete way of gauging the effectiveness of a deployment. Through the categories, it became possible to see which areas were well implemented and which areas require improvement.

For this deployment, having a physical situation room for digital volunteers, having the platform up and running for the whole deployment without going down, citizens across the country reporting to the platform and having a formidable human resource in volunteers and the partners that came together for the deployment; were the greatest assets of the deployment. Volunteers worked tirelessly during the deployment to ensure that citizens' fears were allayed; incidences were escalated to relevant authorities. These volunteers maintained their energy and motivation due to their belief in the initiative and their deep desire to help maintain peace during the elections. On the other hand, lack of a data management strategy, poor time management, disjointed outreach efforts, inadequate training for volunteers and the inability to track feedback from response partners were the greatest challenges.

Through this deployment, the proof of concept of Uchaguzi has been made; the fact that users and partners sincerely believed in the utility of the product highlights the value of such an ICT election-watch initiative. Hence public support was secured.

Special appreciation also goes to specific persons who worked tirelessly for the success of the deployment. From Ushahidi; tech lead, Linda Kamau, who built Uchaguzi KE 2013 platform; Angela Oduor, local outreach lead who recreated the workflows to suit the Kenyan context and reached out to the community to ensure the deployment had volunteers; Heather Leson who contextualized the scope of the deployment and consolidated the global volunteer team; and Daudi Were the project lead who juggled many vital tasks. From the partnership; Gregg Mwendwa of HIVOS who provided overall project management; and Regina Opondo and Kawive Wambua from CRECO who marshaled ground volunteers.

Learning from the deployment must be done. The value of this monitoring and evaluation comes not solely through the fact that it was conducted or from having the information available, but from acting on it. Otherwise, we run the risk of future deployments performing repeating similar mistakes. It is important to amplify what worked and correct that which failed.



[1] 'Towards Trustworthy Social Media and Crowdsourcing' (May 2013).

[2] Graham, J., Amos, B., & Plumptre, T. (2003). Principles for good governance in the 21st century. Policy brief, 15.

[3] Magno, F. A., & Serafica, R. B. (2001). Information technology for good governance (No. 8). Yuchengco Center for East Asia, De La Salle University.

[4] Chaurasia, A. R. (2003). Information technology in governance. Governance, 1.

[5] Clark, M., Sartorius, R., & Bamberger, M. (2004). Monitoring and evaluation: Some tools, methods and approaches. Washington, DC: The World Bank.

[6] Uchaguzi: A Case Study by Harvard Humanitarian Initiative and Knight Foundation

[7] K. Kumar (1993). Rapid Appraisal Methods. The World Bank, Washington, D.C.

[8] Uchaguzi Community Working Groups

[9] Harvard International Review - Cellular Citizenship

[10] Ethan Zuckerman - What comes after election monitoring? Monitoring of Infrastructure

[11] Wikipedia - 3FM Serious Request

[12] Kenyan DJs go six days without food to promote peaceful elections

For more information on this project, contact **iHub Research** - Nairobi, Kenya
www.research.ihub.co.ke | [@iHubResearch](https://twitter.com/iHubResearch)

This project is in conjunction with Hivos.



References

