

## **Seize the Day, Seize the Data: Tech-Enabled Moments of Opportunity in Closed Societies**

Stanford Center on Democracy, Development and Rule of Law (*CDDRL*)

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## **Abstract**

The abrupt fall of an authoritarian regime often surprises the world with apparent suddenness. Given the right moment of opportunity, skillfully applied pressure can prove a thuggish regime surprisingly brittle. However, these moments are prepared through a long struggle for democratic rights within a closed society. Technology can help create these openings, organize activists, document abuses and share information in the moment that the eyes of the world are watching.

Being prepared to seize the day requires more than tech, though: activists and citizens are most effective in political groups, using good organizing approaches. International development organizations, funders, academics, tech companies and others can help, but must consider the entire terrain – political, human, social and technical – in their efforts because liberation technology can land people in jail - or worse. Savvy authoritarians have inherent advantages in this “cat-and-mouse” game.

This talk addresses the role of technology in fragile democracies and closed societies from NDI’s perspective as implementers of democracy strengthening programs.

## **Introduction and About NDI**

Good afternoon. I'd like to start by thanking Larry Diamond and the Center for Democracy, Development and Rule of Law for the opportunity to share some of NDI's thoughts and experiences on the role of technology on democratic development, and to address some of the challenges of working in closed societies and fragile democracies.

Since Larry and I met in Krakow at the Community of Democracies meeting back in July, and even in the time since we wrote the abstract for this talk, a lot has changed in the very dynamic area of technology in closed societies.

Some notable developments include: the collapse of Haystack, in which your own Evgeny Morozov played an important role; last week’s Google Internet Freedom conference Budapest; the release of the “Blogs and Bullets” report from the US Institute for Peace; President Obama’s UN General Assembly speech reaffirming the Internet Freedom initiative, and the recent New York Times report on administration efforts to build ‘backdoors’ into encrypted communications platforms, such as Skype.

I speak to you here today as a technologist working in the field of democratic development. I’m not a cryptologist or network security engineer - although I did start my career down the road at Oracle. I have spent the last 15 years planning and implementing the tech components of democratization programs in countries around the world.

It is this perspective that informs the approaches that we have refined over the years. It is mine and NDI's hope that this experience will help inform the work of the Liberation Technology program, and possibly identify synergies between your work and ours.

Today I'll be discussing **how technology can best be used in the context of advancing democracy in closed societies; how technology can help create and seize moments of opportunity; and how technology can expand political space and work for peaceful reform, in both authoritarian states and fragile democracies.**

**To get started let me share a little bit of information about the National Democratic Institute and the role technology plays in our programs.**

The National Democratic Institute is an international organization based in Washington, DC.

NDI works with political parties, civic groups, parliaments and other organizations and individuals in more than 70 countries to strengthen democratic institutions, safeguard elections, advance citizen engagement, and promote open and accountable government. Our staff represents nearly 90 nationalities and speaks about 100 languages.

The Institute receives financial support from the United States Congress, the U.S. State Department and the U.S. Agency for International Development (USAID) as well as from approximately 35 other countries, multilateral institutions and foundations.

The majority of our work is in established democracies in varying stages of maturity. Working in closed societies is a small percentage of NDI's programming.

In the early 1990s, NDI began to recognize the important role technology plays in politics and democratic development. We've since developed creative ways to integrate technology tools and approaches into many of our democracy support programs, including governance work, election monitoring, political party support, and women's political participation.

The rise of the Internet and the proliferation of mobile phones have provided tremendous opportunities. However, they have also introduced new and enduring challenges for the establishment and consolidation of democracy around the world.

I suspect that the study of some of these same dynamics were also the behind the development of the Liberation Technology program.

## **Rights-based Approach**

It's probably useful to explain that NDI works with a wide variety of civic groups in these environments. These might include human rights groups, election monitoring groups, youth groups, groups focused on corruption, women's rights, or worker's rights organizations, for example. NDI does not take positions on their issues, but instead support them in their efforts in advocating for their causes.

In order to increase political space – the term used by democracy advocates to describe their ability to engage in pro-democracy work in closed societies - reform-minded groups and parties should approach their work from a “rights-based” perspective.

This means establishing a strategy with the goal of changing the legal frameworks in their countries to institutionalize respect for human and political rights. This approach can gradually increase political space and improve human rights in a process of peaceful political reform.

The goal is to over time transform a regime so that it is legal to communicate and organize freely and openly.

Activists and civic groups need to have long-term plans, be pragmatic and look for moments of opportunity to advance their goals in larger steps. Although change is most often gradual, proper preparation can allow these partners can take advantage of moments of opportunity to advance their work. This is often with the support of groups such as yourselves or NDI.

For example, let's say we have a set of partners who are working under a repressive regime. Their goal is to bring about political rights and democracy, and they are committed to the long term effort this may require.

However, an upcoming political event - such as an election, holiday, or anniversary of a past political event, - is expected to provide an opportunity.

For the brief moment when the world's attention - by which we mean CNN and BBC - will shift to their country, there will be domestic and international pressure on the regime to loosen their restrictions on political rights.

The organizations plan to document abuses experienced by their activists and citizens in the time between today and this event. When international attention is upon them, they will then share the information they are collecting, to expose the regime's abuses both inside and outside the country. This is their possible moment of opportunity.

In the business we call this “**political process monitoring**” and there are basically three steps:

1. Collecting, compiling and analyzing information;
2. Developing and disseminating findings; and
3. Using the findings to raise public awareness and government responsiveness.

Technology can play a key role in each of those stages.

In this situation, the NDI team would typically provide support to the activists in **the form of a data audit**. This includes identifying which kinds of political processes to monitor to support their goals, what type of evidence they should gather, and how to incorporate established organizing methods or practices.

This allows groups to best organize themselves to gather the evidence, analyze it, and then communicate it effectively.

After this assessment, planning for the tech challenges begins. In the **first stage, data gathering**, the data being collected can range from basic, paper-based information collection to sophisticated rich

media. Paper reporting is often sufficient in traditional election monitoring, while photo or video evidence may be necessary to document human rights or other kinds of abuses.

In repressive regimes, the unique political and security environments always require careful planning when designing appropriate procedures and technology solutions. Beyond simply collecting the data, moving and storing data often presents additional challenges and complexities.

There is no single approach, tool or technology that can be used – each specific environment requires a customized approach.

Once a group has sorted out how to collect and move the data, the **analysis stage** begins. Typically, groups set up databases to crunch the numbers. These databases may provide reports, graphs, or other tools to interpret the data and produce findings.

When rich media, such as video, is involved, work becomes more complicated. Very often this involves more advanced technical skills, such as editing and cataloging, in order to find and highlight the most compelling content. Building these kinds of tools often requires technical skills and financial resources that are out of the reach of activist groups.

Finally, there is the **third stage**: the sharing of collected data. This requires a holistic communications strategy that employs both offline and online techniques, using traditional and new media as appropriate.

Technology components might include a web platform as the repository to house the content, and appropriate online outreach tools such as email campaigns and social media. New and more affordable visualization and data mining tools are also making communicating increasingly effective. These tools are used in addition to offline activities such as press conferences.

A “rights-based” approach that uses political process monitoring is already challenging. But in repressive regimes, it needs to happen in a restrictive and dangerous political environment, making it even more difficult - more on that in a few minutes.

## **NDI’s Approach to Tech-Enabling Programs**

First I need to step back slightly and talk about technology approaches more generally. We used the term “tech-enabled” in the title for this talk and I wanted to talk about what we mean by this term.

At NDI, we usually use the term in contrast to what we sometimes see as “tech-driven” approaches.

A tech-enabled program uses technology as an enabler. It is combined with effective traditional program strategies to create a multiplier effect on program impact. The technology tool is introduced into a specific environment designed to improve impact; in the absence of the technology the approach still works - but to lesser effect.

A “tech-driven” approach refers to identifying a promising technology tool that you then try and work into programs - thereby either changing the program to accommodate the technology. This might work but is usually suboptimal. It often results in not delivering the full impact of the technology because the

tool does not fit the need very well.

To tie that idea to the earlier conversation about rights-based approaches, it's important to recognize that **building circumvention tools and playing the “cat and mouse” game with technologically savvy authoritarian regimes is NOT a democratic transition strategy.**

While these tools are useful and frequently necessary, they are also very risky, and must be placed in the context of the broader democratic development process. Circumvention, mobile, and other technologies are used by activists and citizens in all kinds of innovative ways. However, providing access to these tools is not the goal of NDI.

**To be most effective in bringing about political reform, tools should be used to support well-organized political activities by strong organizations – such as civic groups or political parties. These should include long-term plans for peaceful change that involves a gradual opening of political space.**

The NDI approach to tech-enabled programs is to marry appropriate technologies and approaches to specific organizing methods. This is designed to increase the impact of a well-organized political organization's activities.

**Our experience suggests that three factors need to be in place to succeed: good technologies, strong organizations and well-established and or well-executed political activities.**

The introduction of these tools in the absence of good civic or political organization will not result in the desired outcomes. The right tools placed in the hands of well-organized partners can help seize these moments of opportunity.

By the way, if anyone would like to subject our anecdotal experience to an academic review we'd very much appreciate it!

**An example from a recent NDI program helps illustrate how a moment of opportunity can be seized using the combination of those three components:**

You may recall the 2008 Zimbabwe presidential and parliamentary election. After a first round of voting and 5 weeks of stalling, the ruling ZANU-PF regime announced that Morgan Tsvangirai, leader of the opposition Movement for Democratic Change party, had won the most votes, but not a majority.

They then declared that a run-off election would be held. The ruling regime then proceeded to terrorize MDC party members across the country, causing Tsvangirai to pull out of the election. This resulted in President Mugabe being sworn in to another presidential term shortly thereafter.

However, negotiations mediated by Thabo Mbeki of South Africa helped create a Government of National Unity with representatives from both parties. Tsvangirai is now Prime Minister and the MDC holds several cabinet ministries.

**The backstory on how that unfolded is this (all this is also documented on our blog – I'll have a link at the end of my presentation):**

NDI supported a non-partisan election monitoring group, the Zimbabwe Election Support Network, known as ZESN, in an election monitoring effort. ZESN was able to effectively combine existing capacity

and approaches with technology, in order to create a moment of opportunity for a political breakthrough.

ZESN used a [well-established election monitoring methodology](#) called Parallel Vote Tabulation (PVT), designed to use statistical sampling to project election results. They combined this approach with a set of mobile communication and database technologies that enabled observers to quickly report polling station results to the capital city, Harare.

ZESN staff were able to crunch the numbers and project an accurate election result based on a national statistical random sample of polling stations. Their findings were that the opposition Movement for Democratic Change leader Morgan Tsvangirai had won the election.

Courageously, ZESN announced their result publicly in the days following the election. This disrupted the government's attempt to falsify the results and steal the election as they had traditionally done.

This confusion resulted in the 5-week delay in acknowledging the result - ultimately enabling the MDC boycott and ensuing negotiations.

Because the MDC was a well-organized party the groundwork was in place for fruitful negotiations, and MDC was in a position to make political gains.

Because the Zimbabwean regime didn't have the technological sophistication or political insight to impede the election monitoring efforts, civic groups were able to create a moment of opportunity to make significant gains.

Of course, the regime will learn from their mistakes and different approaches may be needed to hold them accountable in future elections. Civil society groups will likely need to evolve their methods in the ongoing struggle. This is what we often hear described as the "cat and mouse" approach.

**To summarize**, tech-enabled programs are preferable to 'sexy' tech-driven approaches. The most successful way to tech-enable our programs involves combining technology with strong organizations and good methods and activities. This is the key to successfully 'tech-enabling' a political process monitoring program.

## **Our Approach to Program Planning as it relates to Security**

Now I'd like to move to thoughts about NDI's work in closed societies from the security perspective.

NDI believes that activists and citizens who use new technologies for political work in closed societies can contribute to the struggle for democratic rights, but this can come at great risk to the citizens of those countries. Therefore, it places a great responsibility on organizations involved, and should not be taken lightly.

The political and technology environments in authoritarian states vary greatly. They may be highly sophisticated states that use the latest technologies to support their repressive policies.

They also include less technologically advanced countries like Zimbabwe which rely on a wide range of more direct measures to monitor citizens, control information and suppress human rights.

**In strong and sophisticated authoritarian states, the state will usually have the technological advantage over citizens.** This is because there is really no such thing as fully secure communications – which are critical for effective political organizing.

These regimes can easily control and monitor the Internet as well as both mobile and fixed-line phone networks. This can allow them to block access or conduct surveillance at their leisure.

Many have “outsourced” these activities to private or state-owned companies, typically mobile and Internet service providers, by using the principle of ‘intermediary liability’ to hold them responsible for the implementation of the state’s repressive policies.

Satellite communications provide some opportunity for unfettered communications, but they are often cumbersome and difficult to conceal, expensive, and frequently illegal.

In addition, sophisticated states like China and Iran, among others, have increasingly clever ways to gain access to individual computers. This access may be either physical or remote, and may include monitoring the location of phones so that an individual's security and communications cannot be guaranteed.

This can occur even when using sophisticated encryption, proxy/routing or satellite technologies.

Apart from the technology edge they may have, authoritarian regimes also have access to the oldest tricks in the book - physical threats, legal coercion, bribery, and the like. These traditional tactics can make a mockery of the most sophisticated encryption scheme.

For these reasons, NDI takes a very tempered and cautious approach to introducing technologies in these environments and works under the following guidelines:

- Any organization supporting development or introduction of communications tools in these environments must **fully assess and understand the risks** to avoid putting partners or citizens at risk. Engaging IT communications security professionals in technical and non-technical program design is essential.
- **The best knowledge of the risk usually lies within the countries involved**, given the differing techniques and technologies used by different regimes. Risk can be assessed only by examining both the general vulnerabilities of the technologies combined with local knowledge from partners and like-minded IT security experts in the country involved.
- Secure communication, within a country or across borders, can only be maximized by using a **combination of technology solutions and strict procedures**. There is no single solution or tool to ensure secure communication; every environment, set of communications needs and risk situation is different. **You must always tailor a secure communications plan to your specific needs and environment.**

- NGO program strategies must include sharing information on technology risks and approaches with partners who must make the decisions about how or if the technologies will be used.

## **Protecting Citizens**

Another important part of the equation is the **risk to untrained citizens who use technologies in these environments**.

Risks for activists can at best be minimized; this requires a complex set of technologies and procedures that must be artfully designed for the specific political environment –and diligently adhered to. Many activists are fully aware of and willing to take the risks required.

However, there are significant risks for average, untrained citizens involved in political movements. Many often use technology tools much less sophisticated than those used by activists, such as mobile phones, digital cameras and social network platforms.

Oftentimes it is the **manner in which** these tools are used that poses the greatest threat. All of these day-to-day technologies may unknowingly put the user at risk.

Organizations inside and outside these countries must consider these risks and work to educate the public on these risks as much as possible. It is irresponsible to put technology in people’s hands when it may make it more likely they will be thrown into prison, beaten or killed.

A recent example of this occurred in Iran. The regime used pictures of crowds posted online and social network content to identify and arrest people who participated in the 2009 protests.

This is an example of police state thuggery using the same tools and approaches – such as crowdsourcing – as those trying to advance democracy.

In summary, in closed societies the state has significant advantages over citizens, even when citizens know these risks and embrace these guidelines.

While political or civic organizations can often find “moments of opportunity” to use technologies in new ways, enabling them make gains, they often do so at great risk. This should be encouraged, but approached cautiously. The security of the activists and citizens should be the highest priority.

## **Fragile Democracies are Important, Too**

**Despite these cautions, technologies are very important for democratic development – not only because they can help citizens in non-democratic societies as we just discussed, but because of the important role they can play in consolidating democracy in fragile and transitional democratic states.**



Fragile and transitional democratic states are environments where space for civic and political engagement exists, but where democracy hasn't fully taken root. These states risk backsliding toward authoritarianism if nascent democratic institutions are not strengthened.

In these environments, creative uses of technology can help make these institutions more efficient, accessible and transparent. They can help citizens and civic groups communicate, organize, and hold governments and elected officials more accountable.

In this way, they can try to strengthen young democratic institutions before they backslide, and before a regime emerges which would seek to curtail civil liberties, making society more closed.

One of the advantages of fragile democracies is that there is more openness and space for political activists to operate. This can also be seen as a "window of opportunity". As a result, the political reform process in these countries can be supported more effectively than in non-democratic societies, where specific "moments" need to be skillfully identified and leveraged.

As you know, the numbers are grim: according to Freedom House's Nations in Transit survey, 14 of 29 post-Soviet countries became more repressive in 2009, and Russia has seen the biggest decline of any nation since Freedom House began their monitoring. ([link](#)).

NDI has worked extensively in fragile democracies, and has developed some specific methods that are particularly effective in this space. And again, the introduction of technology is intended to enable, rather than supplant, traditional programming.

### **Example**

In the aftermath of last summer's flawed Afghan presidential election, we created a tool for analyzing election data in Afghanistan. This tool enables us to map, visualize, and add context to the raw data.

NDI recently re-released this tool, and we are prepared to include the results from this month's Afghan parliamentary elections as soon as they are available. The 2009 data was intended to help pinpoint fraud, and in the new release we have expanded the tool to include election results from the 2004 and 2005 elections for comparative purposes.

The intent of this project was to provide tools that make it easy to illustrate the widespread fraud using advanced visualization data filtering, and mapping tools. By making this information public, it can be used to compel the regime to hold a better parliamentary election this year. The jury is still out on the most recent election, but as you may know, it doesn't look that different from the last one.

This historical data and information was also used to assist political parties and election monitoring groups in their preparation to oversee the most recent election process.

This work was made possible because of the increase in visualization tools, such as maps, that are cheaper and easier to use than in the past. These tools help make large data sets easier to comprehend, especially when layered with other, contextual data.

This technology approach in this instance is closely tied to the "open data" movement. Open data is a push to encourage governments and other organizations to make their data not only available – as the

Afghan election commission did in a **2,500 page PDF document** – but accessible, so that anyone, including civil society groups pushing for more transparent and accountable government, can use the data for their own analysis.

### **Closing**

In closing, I hope that getting the perspective of a practitioner who deals with implementing technology in the field has been useful. I think these views and approaches very much reflect a moment in time.

We're constantly evolving and improving our approaches in this very dynamic and increasingly challenging environment.

I also think we all recognize that technology is not enough: we need to get the right tools in the hands of the right partner organizations.

These organizations can create and seize moments of opportunity to expand political space, and they can work for peaceful political reform in authoritarian states and fragile democracies.

We must be very careful in this space, as there are lives at stake. Technology is only a part of deliberate efforts towards a long-term goal - to transform countries and the lives of their citizens into democratic, free societies.

Thank you – I welcome your thoughts, comments and questions.

Go to our website, check out our blog, follow us on Twitter, become a fan on Facebook.