

Open Development, Open Cambodia

*Sithi.org, real-time
democracy, and experiments
in Civil Society 2.0*



W TECHNOLOGY & SOCIAL CHANGE GROUP

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Information School

TECHNOLOGY & SOCIAL CHANGE GROUP (TASCHA)

The Technology & Social Change Group (TASCHA) at the University of Washington Information School explores the design, use, and effects of information and communication technologies in communities facing social and economic challenges. With experience in 50 countries, TASCHA brings together a multidisciplinary network of social scientists, engineers, and development practitioners to conduct research, advance knowledge, create public resources, and improve policy and program design. Our purpose? To spark innovation and opportunities for those who need it most.

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ABSTRACT

The world is witnessing widespread participatory movement toward transparency, democratization, and responsive governance. Pressing social need and enabling technologies have allowed innovative strategies for social change to take hold. Cambodia also is witnessing local expressions of these forces; civil society is mobilizing and applying the tools of the information age to advance transparent, responsive governance. This report describes two cases of this development model, of *open development*. It documents *Open Cambodia 2011*, an open source un-conference designed to support collaboration between civil society and technologists. It also makes strategic recommendations for Sithi.org, the award-winning human rights portal, to move closer to its goal of becoming a real-time human rights report on conditions in Cambodia.

140-CHARACTER SUMMARY

This report documents two 2011 Civil Society 2.0 efforts: *Open Cambodia*, an open source un-conference; Sithi.org, a human rights portal.

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1. Executive Summary

The East-West Management Institute, EWMI, under a United States Agency for International Development (USAID) Project on Rights and Justice (PRAJ) grant, convened Open Cambodia 2011 on September 16 and 17, 2011. This workshop, designed to promote civil society collaboration outside of the human rights silo in Cambodia, brought together leading Cambodian technologists and international experts, specifically Allen Gunn, who is affiliated with Aspiration Tech and the Mozilla Foundation, and Joe Sullivan, of the Technology & Social Change Group at the University of Washington.

Project Goals: Inform Sithi.org + Mobilize Civil Society 2.0

The work of the Technology and Social Change group in Open Cambodia 2011 served two purposes: to support Sithi.org, an EWMI governance project and serve the interests of the conference: to mobilize collaboration around civil society technology projects generally. This report documents the conference work and assembles specific recommendations for Civil Society 2.0 projects, based on lessons drawn from the Sithi.org case.

Recommendations for Sithi.org (and Civil Society 2.0 projects generally)

Through workshop activities and interviews outside of the workshop, a series of recommendations emerged for advancing these two goals. The recommendations describe particular strategies for leveraging social technologies that are grouped in three themes:

- **Security Auditing** — “Modeling for success” is a conceptual compass that guides technology planning so that early choices will accommodate future success. Can a civil society website handle a large amount of future traffic? Does it protect the identity of users if a hostile government should come calling? As Sithi.org becomes more successful and eventually increases pressure on powerful actors due to heightened human rights scrutiny, it will be essential to protect the integrity of Sithi.org data, communication channels, and user privacy. A security audit, which assesses threats and vulnerabilities, should be conducted to assess the risk going forward.
- **Information architecture: Issue, place, and organization** — Sithi.org, as currently deployed, shares a large amount of useful data that is not organized in an accessible way for the primary audience: researchers and journalists. Data should be tagged according to three themes: issue,

place, and organization. These tags should be created using “folk” language—the words and categories used by “typical” users during “typical” conversations. Once the data (reports, photos, statistics, organizations, etc.) are tagged, the site’s navigation (navigation bars + search tools) should be built around these vocabularies.

- **Social media and outreach** — CCHR has articulated a two-phase strategy for Sithi.org growth. Phase one increases the site’s popularity among international actors. Phase two leverages that popularity to encourage wider participation among local organizations: shared data, community blogging on Sithi.org, etc. To succeed during phase one, CCHR needs to demonstrate the utility and reach of Sithi.org via social media. *Aggregation* is the recommended strategy. An organization, CCHR for example, produces content (blogs, photos, social media, etc.) on its own site. Sithi.org then aggregates this content. Organizations have incentive to participate because they receive credit for creating the content; they receive a boost from Sithi.org when this content is aggregated and publicized across Sithi.org’s social media landscape (Facebook, Twitter, etc.) to audiences that Cambodian NGO’s want to reach. This strategy is simple because it can be automated (for example, a post on a CCHR blog is automatically re-posted on Sithi.org). It lets organizations have credit for content they produce; Sithi.org adds value by extending their reach, not taking credit for their content.

Mobilizing Civil Society 2.0

In addition to providing specific recommendations for the Cambodian Center for Human Rights (CCHR) to advance Sithi.org, the workshop and the varied dialog surrounding it (interviews, press coverage, strengthened social networks, explicit plans for collaboration, etc.) increased the capacity of CCHR and all participants. These activities strengthened social capacity across the eco-system of civil society and technologists. We can expect the technological skills of participants to amplify their social work. We also expect more diverse and more frequent examples of experimentation across these sectors in the future.

A Note of Caution: Aspiration, Myth, and Technology

Technology is often seen as magic bullet. The so-called “twitter” revolutions we have seen around the world have had technology components, but have been ultimately successful because human beings have connected with other human beings. Relationships and hard work have been amplified by technology. CCHR developed Sithi.org, which aspires to be the Cambodian human rights portal, a platform for crowd-sourced information sharing by non-governmental organizations (NGOs) and eventually citizens. Ideally, it represents a path toward real time government reporting and transparency. Smart tactics drive this vision.

CCHR recognizes that other actors need incentive to make this collaborative vision a reality. Data is power, particularly in development settings where donors and practitioners have incentive to tout their impact. CCHR's strategy is to increase the visibility, popularity, and utility of Sithi.org among journalists, researchers, and international actors in order to spark participation by locals—as the site attracts international attention and participation, locals will see value in participating. This attention to motive and capacity is fundamental to Civil Society 2.0 design.

Open Cambodia 2011 was a technology conference that was similarly about technology, but based in fundamental human concerns: building relationships, structuring conversations to benefit the less powerful, etc. The architecture of the event embodied and expressed democratic values. People first, technology second.

Image 1. Participants at Open Cambodia in a breakout session to discuss connections between the "open web" and "open societies." (Photo credit: EWMI)



2. Background: ICTD, open development, and 21st century statecraft

Increasingly, social networks and technology are recognized as key (possibly indispensable) ingredients for large-scale social change. From the events unfolding in the Middle East and North Africa to the ubiquity of mobile phones, actors working across domains for the purpose of social, political, and economic development are looking at innovative ways to leverage these resources. It is worth noting that social networks are NOT technological. Social networks are webs of human relationships; they are not the technological platforms, such as Facebook, which make use of actual networks of people.

Information Technologies for International Development (ICTD)

While technologies are always grounded in social settings and experience, it's worth distinguishing between the content (the communication, products, and work of formal and informal organizations) and the technology (the tools they use to accomplish and share this work). Under more rigorous theoretical treatment this distinction between the content and the technological delivery system may dissolve into a McLuhan-esque "media is the message" discussion, but for these purposes the distinction illustrates an important lesson that has emerged from the field of information and communication technologies for development (ICTD): technology offers no panacea. Years of "just add technology" solutions have demonstrated that technology is not the catalytic agent. Researchers and cutting-edge practitioners conceptualize ICTs as tools that boost *existing* capacities.¹ The field largely agrees that technology can *amplify* capacity, but that careful attention must be paid to appropriation dynamics and indigenous capacity.² Development organizations will always make their own sense (and devise their own practices) with technology. The greater their capacity for supporting, sustaining, and adapting tools for indigenous purposes, the greater their long-term outcomes and impacts will be.

¹ Toyama, K. (2011). Twitter: It Won't Start a Revolution, but It Can Feed One. *TheAtlantic.com*. January 31, 2011.

² Galperin, H. (2010). Goodbye Digital Divide, Hello Digital Confusion? A Critical Embrace of the Emerging ICT4D Consensus. *Information Technologies & International Development*, 6(SE), 53–55.

Open Development

Development agencies are also embracing the “technology as amplifier” approach. Canada’s International Development Research Centre (IDRC) is advocating policies around “open development.” They argue that “openness” plays a part in some of the most successful development interventions.³ The pattern of openness can be found in a number of successful projects that share: transparency, accountability, and decentralized and less hierarchical collaboration networks. “Openness” tends to be a critical success factor in these interventions, though “openness” across the board plainly does not advance development as a rule. Openness has a dark side that also must be taken into account. For example, completely unfettered markets and transparent TCP/IP logs both demonstrate how “openness” can be problematic for development and should be considered on a case-by-case basis.⁴ The concept of open development has special resonance in the ICTD field, however the principles are evident in other sectors as well.

Civil Society 2.0

In the United States Department of State’s 2011 Quadrennial Diplomacy and Development Review, the importance of ICTs for “21st century statecraft” and “civil society 2.0” acknowledged the participatory contribution of technologies that enable many-to-many communication, particularly in settings where human rights are threatened.⁵ The review also emphasized for the contribution of ICTs for reaching wide audiences and strengthening networks of actors who may not have yet coalesced as a formal institution. (Think Egypt and the so-called Arab Spring. It is still not yet clear what “organizations” should be supported.) Past models of support often materialized as cash transfers from governments to nonprofits. Unless these were military contracts in Iraq or Afghanistan, this probably required formal bank accounts and legal charters. Technology interventions, on the other hand, sometimes create opportunities to support “movements” as opposed to “organizations,” as individuals and associations can reap the benefits across the network, without cash transfers and formal arrangements.⁶

³ Smith, M. L., Elder, L., & Emdon, H. (2011). Open Development: A New Theory for ICT4D. *Information Technologies & International Development*, 7(1), iii–ix.

⁴ Smith, M. L., & Elder, L. (2010). Open ICT ecosystems transforming the developing world. *Information Technologies & International Development*, 6(1), 65–71.

⁵ United States Department of State. (2010) *Leading Through Civilian Power: The First Quadrennial Diplomacy and Development Review*. Downloaded Nov. 12, 2011. <http://www.state.gov/documents/organization/153139.pdf>.

⁶ Based on conversations with U.S. embassy officials that expressed frustration with supporting institutional actors, but lacking other alternatives.

ICTs, when deployed in the right way in the right contexts, have the potential to increase the effectiveness and scale of progressive civil society. ICTs are increasingly seen as a mechanism for strengthening the capacity of local actors to leverage local networks and devise indigenous development solutions. The cost and scale of ICTs can unlock important efficiencies. Especially in the 21st century when key actors (such as the Middle East/North Africa social movements) are decentralized associations of people, ICT interventions, which are not necessarily linked to specific hierarchical organizations, offer unique value as policy instruments. Though ICT's as protest tools may differ substantially from tools of statecraft.⁷

Grant making, which supports networks of change makers, can demonstrate impact beyond one organization. It can support many and can gain momentum as "network effects" accumulate.

Cambodia and the role of the Technology & Social Change Group (TASCHA)

EWMI is interested in exploring ICTD in the context of governance and justice. They wanted to advance justice and governance projects through sustainable applications of technology. The contract with TASCHA, and subsequent conversations, clarified the specifics of this exploration. This paper will address them in two parts:

- Participation in Open Cambodia
- Recommendations for Sithi.org

⁷ Ross, A. (2011). Digital Diplomacy and US Foreign Policy. *The Hague Journal of Diplomacy*, 6(3,4), 451-455.

3. Open Cambodia 2011

Open Cambodia 2011 was a workshop funded by the United States Agency for International Development (USAID) and convened on September 16-17 by the East-West Management Institute's Project on Rights and Justice (PRAJ). The workshop brought together leading Cambodian technologists and international experts for the purpose of forging connections and strengthening collaboration between civil society and technologists. A key goal was to expand human rights work beyond the "human rights community" in order to generate new ideas and awareness about the project, especially among "maker/does," who tend to be connected and activist members of Cambodian society.

Image 2. The conference brought human rights activists and technologists together.



Participating Organizations

Many people from a variety of organizations participated. We did not gather permission from individual participants to use their names in this report, however a number of prominent groups were publicly represented. Participating organization's included:

- Aspiration Tech
- Building Community Voice
- Cambodia Center for Human Rights

- Cambodian Ministry of Education
- Cambodian Ministry of Justice
- East/West Management Institute
- LICADHO, Cambodian League for the Promotion and Defense of Human Rights
- Mozilla Foundation
- Open Development Cambodia
- Open Institute, Phnom Penh
- Phnom Penh Post
- Private sector businesses
- University of Washington Technology & Social Change Group
- Universities
- USAID

Conference Format and Discussion Topics

The event was a two day “un-conference,” designed to maximize participant-driven dialog by avoiding many traditional conference staples: hierarchal agenda setting, keynotes, one-to-many lectures that make the dominant visual takeaway “the back of the head of the person sitting in front of you.” The goal was to move the best parts of traditional conferences, such as personal conversations and friendraising, which typically occur in the hallways, during happy hour, and between sessions at other conferences into the heart of Open Cambodia’s agenda and sessions. There was also an explicit emphasis on making friends, forming alliances, and working together in the future: “Talk. Tell people what you’re doing. Ask about their projects. Make friends. Collaborate,” conference organizers declared. PowerPoint slides were disallowed.

An important goal was for every person to speak. The facilitator, Allen Gunn, trained a group of 12 “champions” prior to the conference. This group modeled the first round of breakout sessions under the mantra: “We are in service to the least knowledgeable.” This is an important concept in technical conversations, because dialog can become inaccessible and overly technical in a way that alienates those with less expertise. This approach was particularly helpful with this audience that was attempting to bridge geek and non-geek communities. Gunn instructed facilitators (and participants alike) on keeping comments short, asking questions, interrupting monologues, and encouraging participation by all.

While many of his techniques provided solid guidance, Gunn’s personal contribution should not be understated. “Gunner,” the name he routinely goes by, is energetic, hardcore, and funny; these traits put people at ease and created a positive, supportive, and creative atmosphere. Mark West’s personal warmth and inclusiveness also contributed. When designing future events of this sort, planners should seriously consider working with Gunn and West.

Both days of the event began with icebreaker exercises to get people physically moving and talking. The “opinion spectrum” had participants stand on a spectrum that ran the length of the conference hall, where one end represented “strongly

agree” and the other “strongly disagree.” This exercise got people moving, talking. It also created an opportunity to model “changing one’s mind,” a key element of dialog and collaboration.

The agenda was created on Friday morning by brainstorming topics as a large group, writing them on “sticky notes” then organizing them into themes on a board in the front. For information design professionals, the categorization was not particularly successful, however as an exercise to narrow down session topics, whose internal agendas were highly fluid anyway, the exercise yielded a useful set of topics to start the conference. As new issues surfaced over the course of the conference, they were added to the list and incorporated into the agenda.

The session titles were starting points, which led (sometimes serendipitously) to rich, deep discussions as well as wide ranging and tangential (from a certain perspective) conversations. Sessions included:

- Blogging
- GIS, mapping
- Online human rights advocacy strategies
- History of Open Source
- Internet security
- Khmer OS
- Khmer localization
- MySQL
- Open Data
- PHP
- Privacy online
- SMS and texting
- Speed geeks on participant projects
- Technology & civil society
- Wordpress

Image 3. A representative from a local NGO explains how rural youth use cameras, phones, and blogs to tell digital stories of Cambodia. (Photo credit: Faine Greenwood)



Conference Outcomes

Two goals were relevant for the conference: to forge closer ties between civil society and technologists and the explicit instructions to: “Talk. Tell people what you’re doing. Ask about their projects. Make friends. Collaborate.”

While the role of the Technology & Social Change Group was not to evaluate the conference, it is worth noting that organizers and participants alike remarked how much they learned, how they talked to many new people, and how much more aware they were of the social and political dimensions related to openness. It would be worth systematically documenting some of the ways in which collaboration and shared learning were occurring at the conference, as well as after the conference. Organizers should consider a follow up survey at a minimum to begin detailing some of the dimensions of collaboration, which may be tied to the event. These indicators will be useful for future events, especially if the (many) calls for “Open Cambodia 2012” are to materialize.

Formal collaboration is happening. At the end of the end of the conference a series of affinity groups were formed to stay in touch and continue the dialog after the conference. They all scheduled specific times and places to meet. These groups included: Khmer localization (OS, script, GPS), mapping, blogging, small business, community video.

4. Recommendations for Sithi.org

Good design is user-centered. How can an organization organize its story and information in a way that considers and serves the user? In the case of Sithi.org, what are CCHR's strategic goals and priorities for reaching, interacting with, and satisfying users? The Technology & Social Change Group (TASHCA) at the University of Washington recommends an approach for answering these questions, and grounding subsequent design, that begins with an analysis of CCHR users and goals.

Methodology and the Sithi.org Theory of Change

Sithi.org aspires to be the Cambodian human rights portal—a platform for crowd-sourced information sharing by non-governmental organizations (NGOs) and citizens. In its ideal form, CCHR president Ou Virak envisions it as a “Wikipedia-style, real-time report” on human rights violations in Cambodia. In the nearer term it represents a path toward government reporting and transparency.

A primary challenge is to stimulate participation by other organizations that have little incentive to contribute their data to Sithi.org in the status quo. Data is power, particularly in development settings where donors and practitioners have incentives to tout their impact. In order to overcome this barrier and demonstrate the value of Sithi.org to other organizations, CCHR wants to increase the visibility, popularity, and utility of Sithi.org by journalists, researchers, and international actors. If these actors use the site, CCHR believes Cambodian human rights organizations will be more likely to participate.

After an exercise on users and scenarios for use, Ou Virak identified practical scenarios for primary audience. He wants international actors to be able to find local (sub-national) experts on given issues.

“I get phone calls every day from reporters or researchers who want to know about a certain event that happened in a particular place. I am the contact for the whole country. I want them to be able to go to the website and find the organizations that are the experts on certain issues in certain areas. I don't want them to have to call me.”

Good website design will only be able to accomplish so much in this regard; reporters call Virak because he gives good quotes and they know he is knowledgeable. It is the difference between a personal referral and an anonymous directory listing. Still, the quote provides useful direction because it identifies the primary audience and a specific scenario for use. The scenario is also valuable for design because it clearly identifies the user's goals and a pain point for CCHR.

Done well, the site could save time for all parties. This represents success in its own right, however it also represents key progress in CCHR's theory of change. If it is successful in attracting reporters and researchers, it also increases the likelihood that other Cambodian organizations will contribute to Sithi.org. The goal is to initiate a virtuous cycle: utility leads to popularity, which leads to better utility and to more popularity, which ultimately results in participation and data contributions.

Image 4. A Sithi.org staff member demonstrates how to use the site to share and retrieve human rights information. (Photo credit: Zuzanna West)



Recommendation one: Security audit and web hosting

In preparation for the workshop, Mark West, Allen Gunn, and I met with the CCHR web team that is implementing Sithi.org. We also met with the designers of Open Development Cambodia,⁸ an “open data” mapping project that is also sponsored by EWMI, which is attempting to make land concessions transparent. The project has important human rights dimensions, though the rhetoric of the site speaks clearly to business and policy audiences. The meetings were productive. Some of the most productive conversations centered on security. Progressive organizations should carefully consider the security implications of their work. It is important that sites not be manipulated by the state or other bad actors.

⁸ Open Development Cambodia. <http://www.opendevdevelopmentcambodia.net/>.

According to Gunner, who has expertise with technology and protest demonstrations in the United States, China, and elsewhere:

“You need to ask yourself if your site is going to get someone killed.”

While this security discussion is not my area of expertise, as an active participant in the discussions, I am willing to document my understanding the issues. This list should be seen as a starting point for more developed security strategies. Gunner offered a number of recommendations. It was more like a fireworks show than an orderly list, but between the “oooh’s” and “aaah’s,” I noted several action items.

1. CONSTRUCT A THREAT MATRIX AND CONDUCT A SECURITY AUDIT (LITE).

Progressive sites should construct a threat matrix to systematically assess the risks of “bad actors” that could undermine the organization’s work or use their infrastructure against them. This matrix should also prioritize the responses, identify the actors, and assess vulnerability.

On one axis, the organization should identify the actors that represent threats, such as the police, multinational corporations, and other actors with as much specificity as possible. Across another axis, the organization should identify the ways they might threaten them, such as track our users, hack our data, confiscate our server, etc.

Security audits can range from minimalist to extensive. At early stages of development, a “lite” version is probably most useful, simply to start thinking about security issues. Organizations should find a consultant with experience in human rights technology, privacy, and security. In early stages many progressive sites are still relatively unknown, many of the threats are still hypothetical; however modeling for a successful future can ensure that planning accounts for these threats proactively.

2. SEPARATE DOMAIN REGISTRATION FROM HOSTING.

Separating domain registration from hosting increases the autonomy of the site owner—if a site runs registration and hosting through one company then it’s difficult to change providers.

3. HOST IN A COUNTRY WITH STRONG PRIVACY LAWS.

In the wake of the USA Patriot Act, the technology community has realized that the security of data stored on servers depends on legal jurisdiction. Because the server physically must reside some place, the notion of “security” must be tempered by the reality that most website owners who contract with companies for webhosting have no real idea where their servers are physically located. This means they are not secure.

Still, there is a big difference between the idea that your data is insecure because someone might physically break into a server room to steal your data and the idea

that your data is insecure because a legal authority may compel your hosting company to give it up.

Gunner advises selecting a host located the U.S. over China and located in Australia over the U.S. He recommends Iceland as having uniquely robust legal protection in this regard. Look for a hosting company in Iceland.

4. EXPUNGE USER LOGS REGULARLY.

Many sites retain user logs in order to learn more about the characteristics and behavior of their users. Some sites never use this information, but store it in case they may need it one day. For many sites, authorities who do not share the organization's agenda may be interested in learning more about their users. The organization and its users are protected when user logs are expunged. Even if a government compelled an organization to share information or if clandestine hackers broke into the server, the user identities are safe, because the site never recorded whom the users were.

5. FORCE ENCRYPTION.

A large amount of user information can be extracted through packet sniffing and other relatively low-tech surveillance techniques, particularly given the settings and ways that users access the Internet, such as through public access computers and Wi-Fi networks. It is possible to configure the server to force communication between the computer and the server to be encrypted. This is not a default setting and needs to be configured on the server.

While this setting does not necessarily protect the server, it is absolutely a protective measure for users and the larger community.

Image 5. Breakout sessions on how to surf the web anonymously were among the most popular sessions at the event. . (Photo credit: Faine Greenwood)



6. PROMOTE AWARENESS AND EDUCATIONAL RESOURCES: TOR.

Another security measure which will indirectly protect progressive organizations is to provide education materials, or public service announcements, in strategic places on the site. The purpose is to make users more conscious of the risks and options around anonymous online communication. For example, a website footer might include a message like:

“Your information is not secure. To learn more about how to increase the security of your actions and communication on the Internet, please consider a service such as TOR. <https://www.torproject.org/>”

There is a fine line between educating the public and interfering with a site’s usability. Still, for progressive long-term goals to be achieved, especially if the charge to “model for success” is taken seriously, then increasing the sophistication of users around secure web communication is relevant.

7. FRAMEWORKS VS. RAW PHP

It is a great temptation for computer programmers to invent solutions. “The code will be cleaner if I build it from scratch,” they sometimes say. The problem from a security standpoint is that one mind is not more effective than a community of minds. One person cannot anticipate exploits or test the solution like a community can. This relationship is sometimes operationalized as “frameworks” vs. “raw” PHP. Frameworks are platforms designed and then expanded by a PHP user community; raw PHP is typically one person coding from scratch.

Working with a framework, which has been tested and adapted vigorously by a community of developers, is more secure and more rigorous than a raw solution.

SECURITY AUDIT SUMMARY

The security concerns addressed here should be tempered with two pieces of information. First, security is always relative. A dedicated adversary cannot be absolutely prevented from accessing digital data. Therefore, security precautions should not make users or administrators complacent—in a fundamental way, web communication is the same as public communication. Second, Allen Gunn provided the security advice described in this section. As this is not my domain of expertise, I offer it as a reminder to ask Allen more questions. It should not be seen as a comprehensive checklist of practices, though I believe I have accurately represented these issues and that each seems to offer some value.

Recommendation two: Information architecture

Sithi.org, as currently deployed, shares a large amount of useful data that is not organized in an accessible way for the primary audience: researchers and journalists. Data should be tagged according to three themes: issue, place, and organization. These tags should be created using “folk” language—the words used by “typical” users during “typical” conversations. Once the data (reports, photos,

statistics, organizations, etc.) are tagged, the site's navigation (navigation bars + search tools) should be built around these vocabularies.

"ISSUE" ORIENTATION

Sithi.org needs to develop categories and vocabularies so that users can find the information they want on the site. Target users who visit Sithi.org tend to have a particular purpose. They may be researching land concessions or women's rights. Many sites struggle over how to create the categories to help users meet their needs and locate the desired data—obviously Sithi.org has put significant time and energy into creating categories that correspond to international law. The categories may work for a particular kind of user, but unfortunately do not serve most users. According to Ou Virak, the users that call him have two needs: to investigate a human rights issue and to contact an expert. This section focuses on the issue.

While it's a burden for Ou to be the gatekeeper for this information, it is also an asset to the web team to have a resource with such an extensive understanding of the issues. The primary audience uses Ou as the navigation system. An hour with Ou to identify the keywords that journalists and researchers use would be an hour well spent on usability.

Ou is not the only resource. The development domains in Cambodia are well defined due to the pervasive work by international development agencies. The media also frames these issues. The journalists and researchers will orient themselves on Sithi.org using the categories that others use.

"PLACE" ORIENTATION

Ou identified geography as an important element of the information requests he receives. ("They want to know about land concessions in Prey Long.") The geographic connection is important because the place links the different kinds of information on Sithi.org. Connecting information by place allows a user to see that in a particular setting, for example, the issues of land concessions, gender inequality, and corruption may be closely linked. It also allows the user to find organizations that are active and expert in a certain province, region, or village.

"ORGANIZATION" ORIENTATION

Sithi.org already has extensive information on organizations working on human rights and development. Tagging also elevates the importance of particular organizations because it gives them publicity on the website. Tagging information by organization can provide information that Ou wants to communicate to the users and also increases the visibility of organizations—which may be a way to encourage participation for phase two of Sithi.org growth.

There is some risk involved in elevating certain organizations on the website, as elevating one organization may alienate a competing organization. This challenge is inevitable in the context of creating a collaborative data-sharing environment.

One solution may be to be conscious of these rivalries and attempt to balance them by creating content about an organization that isn't contributing content themselves. There is fundamental tension here however, because the desire to receive attention is the engine that drives participation. If CCHR were "give away" the attention by posting content about other organizations, they might reduce the other organization's incentive to do it themselves.

TAGGING IMPLEMENTATION STRATEGIES

The beauty of tagging is that tags are not mutually exclusive. When Sithi.org staff, bloggers, content producers, etc. are tagging content they are not required to choose between categories. (Should I put this information into this bucket or that bucket? Is this story about land concessions or Prey Long?) Tagging allows information to be assigned to multiple buckets. (Prey Long and land concessions.) This allows users to more effectively search by finding more precise information.

The challenge is that while the technology does not impose a choice (this or that) if choices are not made, users suffer. The technology does not limit the number of tags that might be applied, however a best practice might be to limit tagging to the "main" ideas—probably three or four tags. Maybe one to two geography tags, and no more than two to three issue tags.

NAVIGATION

Sithi.org's navigation system is the way that users make sense of the site; it should be devised in a way that makes it easy for the user to find useful, relevant information. There are some things that Sithi.org is doing well now, which are worth noting:

- Phone number. The phone number and email subscription box in the upper left of the home page makes it very easy to see and to act.
- Maps. The maps are visually interesting and engaging.
- Multi-media. The videos and photographs are powerful and interesting. For someone browsing the site, there is a lot of material to pique his or her interest.
- Quantity of information. The site contains so much information that it conveys a sense of comprehensiveness and authority: links, reports, factsheets, multimedia, etc.

The challenge however is that the site does not convey a simple story. It is difficult to "scan," which is how the Internet is read. For an informative site that appeals to journalists and researchers, users need to be able to scan the page, get a sense for their options, and then be able to dive into specific information.

There are several ways this could be accomplished on Sithi.org. One approach would be to revise the navigation bar in the header of each page. As a general rule, these bars should have 5-7 items. More detail can become visible if the user

“mouses over” an item in the navigation bar. (Sithi.org uses this strategy currently.) The problem is that there are still 13 items in the bar. The proposed solution has six items.

Table 1. Comparison of existing and proposed navigation for Sithi.org.

Current Sithi.org Navigation		Proposed Sithi.org Navigation	
Primary Navigation Item	“Mouse over” sub-item	Primary navigation Item	“Mouse over” sub-item
Home	About Manual Disclaimer	Home	
Violations	Violations Journalists killed Reported Rape Cases Reported Land Cases	About	Manual Disclaimer
Media	Human Rights in the news Press Releases	Issues (<i>formerly Violations</i>)	Human Rights Violations Journalists killed Reported Rape Cases Reported Land Cases
Gallery	Photo Album Videos	Actors	NGOs CBOs Government (MPs, Senate) Funding Agencies
Civil Society Actors	NGOs CBOs	Information Resources	Reports Press Releases News media Newsletters Factsheets Education & Training Materials Tracking Development Laws (National, Regional, International) Civil Society Initiatives
Education & Training	Education materials Training materials	Blog	
Funding Agencies			
Initiatives			

Current Sithi.org Navigation		Proposed Sithi.org Navigation	
State Actors	MPs		
	Senate		
Publications	Reports		
	Newsletters		
	Factsheets		
Tracking Development	Master plan of Phnom Penh		
	Economic Land Concessions		
	Oil and Gas Block		
	Hydropower Dams		
	Mineral Concessions		
	Special Economic Zones		
	Map Overlays		
Laws	National		
	Regional		
	International		
Blog			

Recommendation three: Social media outreach

CCHR has articulated a two-phase strategy for Sithi.org growth. Phase one increases the site's popularity among international actors. Phase two leverages that popularity to encourage wider participation among local organizations: shared data, community blogging on Sithi.org, etc. To succeed during phase one, CCHR needs to demonstrate the utility and reach of Sithi.org via social media. This report recommends thinking about achieving this in two ways: outreach and aggregation. In all phases, social media plays a prominent role in promoting the reach of Sithi.org among strategic audiences.

OUTREACH

To reach Sithi.org's strategic audiences, Sithi.org must produce content that is easy to find, easy to forward, and easy use. By tuning content production strategies to the various places on the Internet that your audiences are already using, it is possible to turn your users into your advocates. Participating in social media in the most popular venues is recommended. (Sithi.org and CCHR are already doing many of these things.)

WEBSITE

The website is the digital home base. All content should be stored on the website; social media should link back to the website. For example, instead of uploading photographs to Facebook, upload the photos to cchr.org or Sithi.org and then

upload links to Facebook. This is a good practice because “ownership” remains clear (Facebook claims ownership of content loaded on its servers). It also increases your “Google Juice”—as people click the links and visit your site, Google sees your site as being more relevant. This in turn increases the likelihood that cchr.org or Sithi.org will rise up the ladder of Google search results.

BLOGGING

We frequently discussed blogging strategies during Open Cambodia. There are many ways to approach this issue. I will identify two, which differ, but were both advocated for Sithi.org during my time in Cambodia. Neither approach is “correct.” They also do not compete with each other. Approaches that lead to more content and a satisfied user base should be privileged.

- **Color Commentary.** This approach assumes that blogging has a certain tone. Some bloggers are funny or snarky. This approach assumes that blogging with personality makes it easier to get a following. This approach encourages bloggers to let their personality shine and to let readers know about the person behind the text.
- **Chronology + Syndication.** This approach assumes that the key characteristics of a blog are chronological publication and RSS (really simple syndication). It says color commentary is fine, if that is your style, but a blogger’s personality might not be “colorful.” That doesn’t mean they are not a blogger.

In my experience, the key bottleneck in most blogging initiatives is producing content. Persuasive, colorful content is fantastic! However simply providing relevant, predictable posts is far more important. If the people who are writing the blog posts are intimidated by needing to write in a more “colorful voice,” then they may write less. My recommendation is to start with regular posting and then add color. Keep the barriers to participation as low as possible.

In addition to lowering barriers to participation, several other “best practices” are worth noting.

- **Snappy headlines.** People scan the Internet. It is about conveying ideas in succinct, memorable ways. The headline is often the piece of a blog post that receives the most attention.
- **A few short, well-crafted paragraphs.** Boil down your ideas. Get to the point. People scan. If it’s extremely compelling material or if you have a large enough audience that you can afford to lose the attention of readers, then feel free to write more. The longer it is, the less likely people are to read it. (Of course there are good reasons to write longer pieces, but keep it tight. The screen is not conducive to long documents.)

- **Visuals.** A picture is worth 1000 words. The brain can process images, infographics, color, and other visual elements much more easily than text. Recommendation: Include one graphic in every blog post.
- **Links.** Blogging is a conversation. Readers want to see that your ideas are connected to other people, conversations, ideas, etc. It's very easy to embed links in a blog post. Plus, by embedding links in your post, you signal to Google that your site should be taken more seriously. In exchange, you get more Google juice. Recommendation: Include three links per blog post.
- **Blogging is only half writing.** The other half is reading other blogs and surfing the web to find relevant, timely content to help frame and orient your posts. Blogging is a conversation. Spend some time surfing and reading before you write.
- **Reference others.** Again, blogging is a conversation. It is difficult to write when you don't know who your audience is. Therefore, define your audience. Write a response to someone else. As you reference their work, you will find that they will do the same for you. Recommendation: Reference others, especially those who reference you.
- **Comment on other blogs.** There are several ways to participate in the conversation: within your blog post and on someone else's. Commenting on blogs, especially on those that do not have many comments, is a good way to get the attention of other bloggers. If someone comments on your blog, return the favor.

TWITTER

Twitter, also called microblogging, takes the principles of blogging as conversation to the next level by imposing strict discipline in post length (140 characters). Get to the point and connect your ideas to others or you will fail at developing an audience and communicating successfully in the medium:

- **Embed links.** There is not enough space to develop full ideas, so blog about your full ideas or reference the work of others, and embed links that point to the more fully developed content. Web tools like <http://bit.ly> or <http://tinyURL.com> can be installed in your browser shorten URLs for Twitter.
- **Reference others.** By naming others in your tweets (the shorthand name for twitter posts) you encourage dialog on key issues. They also are more likely to answer you. This sort of behavior builds an audience and makes it easier to tweet because you know that you have an audience. (Like blogging generally, the technology is not the barrier; the human practice of regularly tweeting is the key barrier.) When referencing others add the @ sign to the beginning of their username (e.g. @cchrcambodia). This will send the tweet across your network and directly to their Twitter account.

- **Use tags to connect ideas.** Twitter allows you to subscribe to the tweets of specific people. It also allows you to search by particular themes via tags. In twitter tags are created by adding a # sign to the front of a word, e.g. #Cambodia. They should be used sparingly, as they consume characters from your 140-character limit. They also need to be precise enough to reach your intended audience out of the universe of Twitter users (estimates range between 50 million and 175 million). Tags have been particularly powerful in the context of mass events, such as the Arab Spring and the so-called “Twitter Revolution” in Iran and with #occupywallstreet, #occupy, and #ows in the United States.

FACEBOOK

Facebook is where the people are. Like Twitter, Facebook should be seen as an avenue for publicizing your organization, the reports you produce, the videos you like, etc. However, Facebook is also a commercial vampire. Facebook is not concerned with social causes or values, such as privacy. The company uses data and information that is uploaded to Facebook as it pleases. The concerns enumerated in Recommendation One of this paper regarding website security settings are ignored by Facebook. Privacy advocates eschew the company. However, Facebook has achieved critical mass and for organizations that want to reach a mass audience the tool is indispensable. Again, that is where the people are. There are many places to find information on activist uses for Facebook. The key takeaway for our purposes is to use Facebook to publicize information that you post to your website—upload content to your website, use Facebook to link to that content, and inform your networks that your website has new content.

FLICKR

CCHR already uses Flickr, the site where users can upload photos in order to back-up their own content and share it with others. The site became popular among photographers but has become especially important among NGOs. There are three aspects of Flickr that CCHR may be able to make better use of:

- **Tagging.** Similar to Twitter, tagging photos is useful for helping others find your content. Spending time looking around Flickr for other photographers and content is a good way to find new ways to think about tagging strategies—for describing CCHR’s content as well as linking CCHR content with allied organizations and causes.
- **Creative Commons Licensing.** CCHR should consider loosening the copyright restrictions on the photos it submits. Many users search Flickr in order to find photos to support a cause or publicize an issue. By making CCHR photos available to this pool of users, you can publicize CCHR. There are a variety of creative commons licensing levels to consider. I would recommend attribution at a minimum and possibly non-commercial and share-alike. For more information:
<http://www.flickr.com/creativecommons/>
<http://creativecommons.org/>

- **Flickr Groups.** A Flickr group may be a good way to coordinate Sithi.org collaboration with photographs. A group can be constructed by inviting participants (such as human rights organizations in Cambodia) or around particular themes. A group expresses a common identity. It also serves a useful function by creating a common space for the group to share photos.

YOUTUBE AND VIMEO.

CCHR has been experimenting with video. Services like these are useful because they can provide the technical infrastructure for hosting video and sharing these videos across the web.

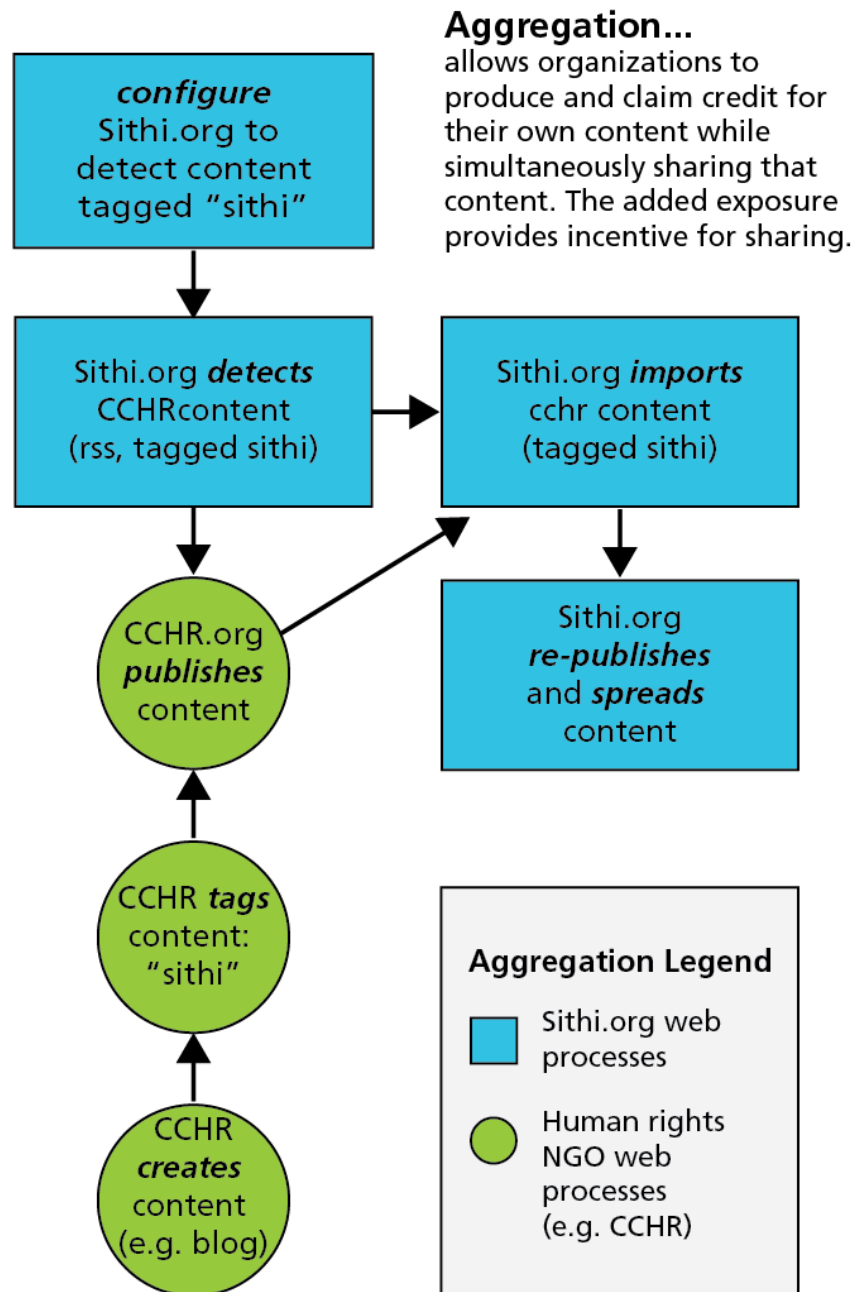
Aggregation

The previous section described a number of basic approaches to social media to spread information and messages. In some ways, Sithi.org should be seen as another venue (like Facebook, Twitter, etc.) where organizations post content for sharing and publicity. The trick is to make this as simple as possible. The goal should be for Sithi.org to automatically pull content from a partner NGO website whenever it is created. This strategy lets the producer have credit, but also makes publicizing that content fast and easy. We are calling this strategy aggregation—Sithi.org aggregates content from across the network of partners.

Aggregation is the recommended strategy for populating Sithi.org with content produced by a number of human rights organizations. The Sithi.org server can be preconfigured using RSS to pull content that is tagged a certain way from a pre-defined list of websites, such as CCHR. Then CCHR produces content (blogs, photos, social media, etc.) on its own site and applies an agreed upon tag (e.g. Sithi). The tag signals the Sithi.org server to pull this content into the site where it will appear on Sithi.org.

Organizations have incentive to participate because they receive credit for creating the content; they receive a boost from Sithi.org when this content is aggregated and publicized across Sithi.org's social media landscape (Facebook, Twitter, etc.) to an audience that Cambodian NGO's want to reach. This strategy is simple because it can be automated (for example, a post on a CCHR blog is automatically re-posted on Sithi.org). It lets organizations have credit for content they produce; Sithi.org adds value by extending their reach, not taking credit for their content.

Image 6. Illustration of aggregation web processes, using content produced by CCHR as an example.



5. Conclusion

Human networks that apply information and communication technologies to their work have the potential to make an important impact on governance, transparency, and democratic accountability. The relations between citizens, governments, and formal and informal associations that make up civil society are in flux. It seems that people everywhere are experimenting with the tools and expectations of openness.

In Cambodia, the community of human rights practitioners, technologists, and professional development workers that gathered to participate in Open Cambodia 2011 was creative and enthusiastic. There was a palpable sense of optimism and possibility that leads me to believe that concrete efforts at collaboration and partnership will come out of the meeting. Investments in these sorts of collaboration, which bring together people with social vision and those with a commitment to a doer/maker ethic, are well founded. Hopefully this document does justice to the accomplishments of Open Cambodia as well as the hard work of CCHR and Sithi.org.