

Visualizing Information for Advocacy

An Introduction to Information Design

This manual offers an introduction to information design. It is intended to provide NGOs with a useful and powerful tool for advocacy and research.

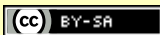
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It was coordinated and produced by the Tactical Technology Collective. <http://tacticaltech.org>

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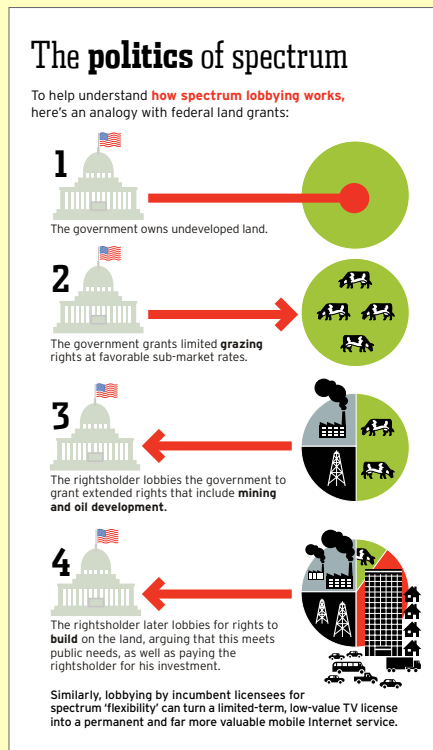
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>> On the cover: Illustrations designed by Nigel Holmes for the *Citizens Guide to the Airwaves* use different types of land use as a metaphor for how the U.S. government mismanages licensing of the public radiofrequency spectrum to private corporations. See pages 36 and 37 inside for more on this example.



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Middle East Crisis: Who backs an immediate cease-fire?

Yes

Kofi Annan, speaking for the United Nations, said yesterday, "The collective punishment of the Lebanese people must stop. What is urgently needed is the immediate cessation of hostilities."

Afghanistan Albania Algeria Andorra Angola Antigua & Bar. Argentina Armenia Australia Austria Azerbaijan Bahamas
Bahrain Bangladesh Barbados Belarus Belgium Belize Benin Bhutan Bolivia Bosnia & Herz. Botswana Brazil
Brunei Dar. Bulgaria Burkina Faso Burundi Cambodia Cameroon Canada Cape Verde Cent. Afr. Rep. Chad Chile China
Colombia Comoros Congo (Rep.) Costa Rica Côte d'Ivoire Croatia Cuba Cyprus Czech Rep. D. P. R. Korea D.R. Congo Denmark
Djibouti Dominica Dominican R. Ecuador Egypt El Salvador Equ. Guinea Eritrea Estonia Ethiopia Fiji Finland
France Gabon Gambia Georgia Germany Ghana Greece Grenada Guatemala Guinea Guinea-Bissau Guyana
Haiti Honduras Hungary Iceland India Indonesia Iran Iraq Ireland Italy Jamaica
Japan Jordan Kazakhstan Kenya Kiribati Kuwait Kyrgyzstan Laos Latvia Lebanon Lesotho Liberia
Libya Liechtenstein Lithuania Luxembourg Madagascar Malawi Malaysia Maldives Mali Malta Marshall Is. Mauritania
Mauritius Mexico Micronesia Moldova Mongolia Montenegro Morocco Mozambique Myanmar Namibia Nauru Nepal
Netherlands New Zealand Nicaragua Niger Nigeria Norway Oman Pakistan Palau Panama Papua N. G. Paraguay
Peru Philippines Poland Portugal Qatar Rep. of Korea Rep. Moldova Romania Russia Rwanda St. K. & Nevis Saint Lucia
St. Vincent & G. Samoa San Marino Sao Tome & P. Saudi Arabia Senegal Serbia Seychelles Sierra Leone Singapore Slovakia Slovenia
Solomon Is. Somalia South Africa Spain Sri Lanka Sudan Suriname Swaziland Sweden Switzerland Syria Tajikistan
Thailand TFR Macedonia Timor-Leste Togo Tonga Trin. & Tobago Tunisia Turkey Turkmenistan Tuvalu Uganda Ukraine
U.A.E. U.R. Tanzania Uruguay Uzbekistan Vanuatu Venezuela Vietnam Yemen Zambia Zimbabwe

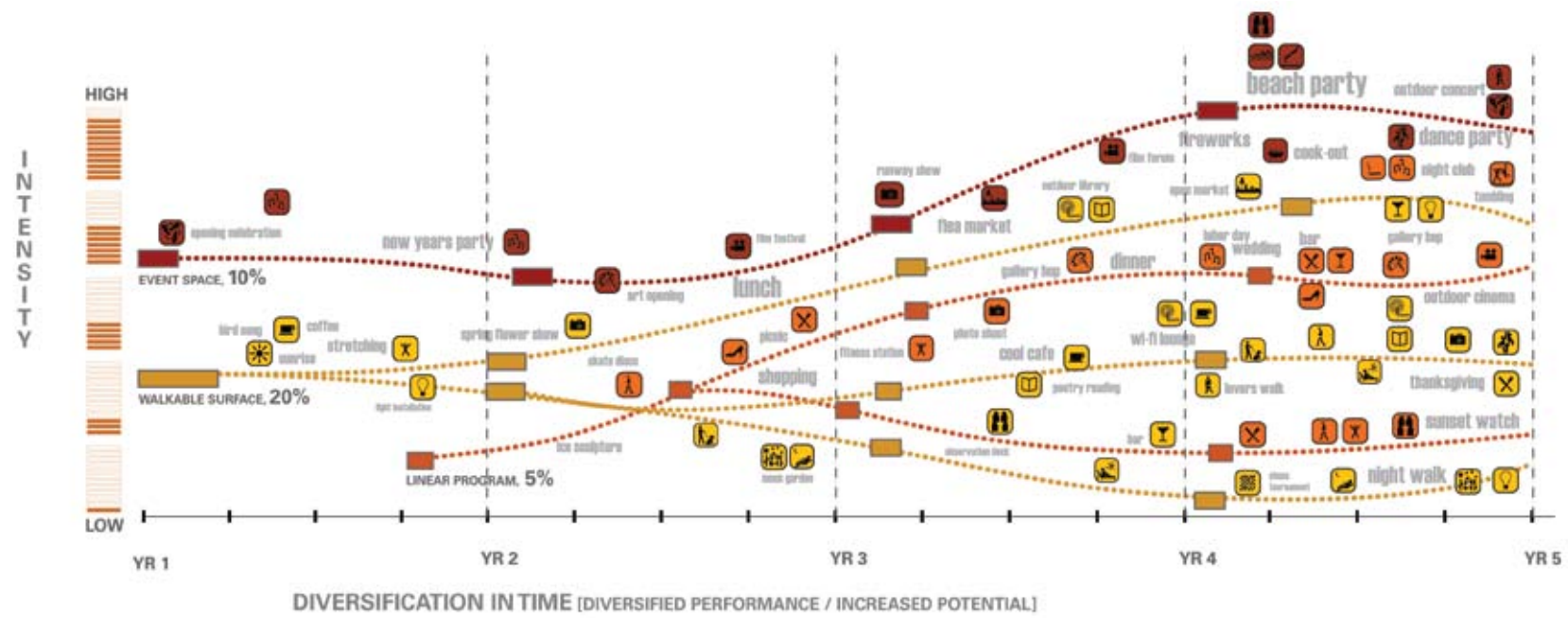
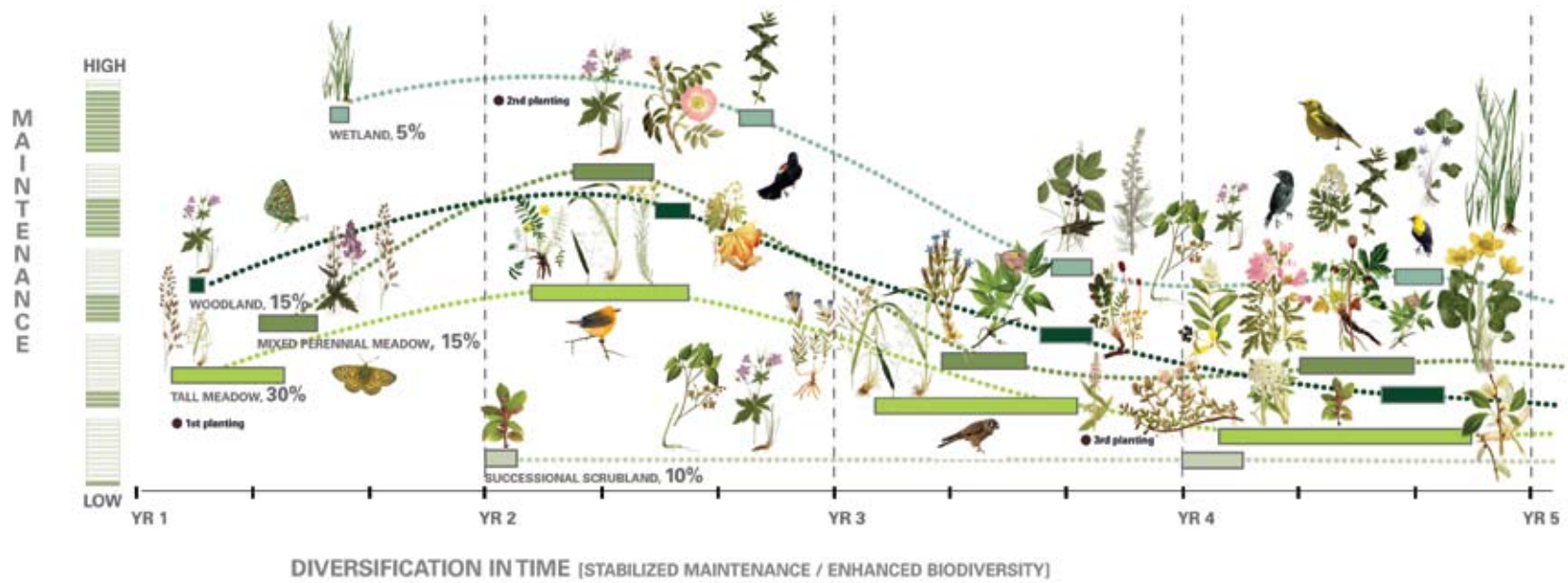
No

Margaret Beckett, Foreign Secretary, addressing the Cabinet yesterday, said: "What people are really saying is they want a ceasefire with rockets still going into Israel."

Israel
U.K.
U.S.

This editorial information graphic ran on the cover of the *Belfast Telegraph* in July 2006. It dramatically illustrates the world reaction to the Israeli bombing of Lebanon.

At a glance, it effectively shows the stark contrast between the majority and the minority — and invites examination of the relationships between the countries in the minority.



The Highline is an abandoned elevated-train railway which runs along the edge of New York City. The railway was neglected for decades and was slated for demolition when a coalition formed a campaign to save the unique structure and convert it into an innovative, elevated public park.

As part of its strategy, the coalition to save the Highline held a series of open meetings where they used a wide variety of photos, illustrations and diagrams to present the audience, the media and public officials with a vision of how the park could be revitalized and developed.

The two timeline graphics shown here were a part of these presentations. Designed by the landscape architecture firm Field Operations, the graphics artfully evoke the evolution of flora and fauna, and public usage, over the course of four years.

After years of campaigning, the coalition has successfully won the legislative and financial support needed to save the Line and start converting it into 1.5 miles of new public space.

Images © 2004. Field Operations with Diller Scofidio + Renfro. Courtesy the City of New York.

How Can You Use Information Design?

Here are just a few ways you can use information design:

Tell Your Story

- To your constituencies
- To funders
- To government officials
- To the media
- To other organizations
- To the general public

Analyze Your Data

- Discover hidden patterns
- Find trends in changing systems

Make a Plan

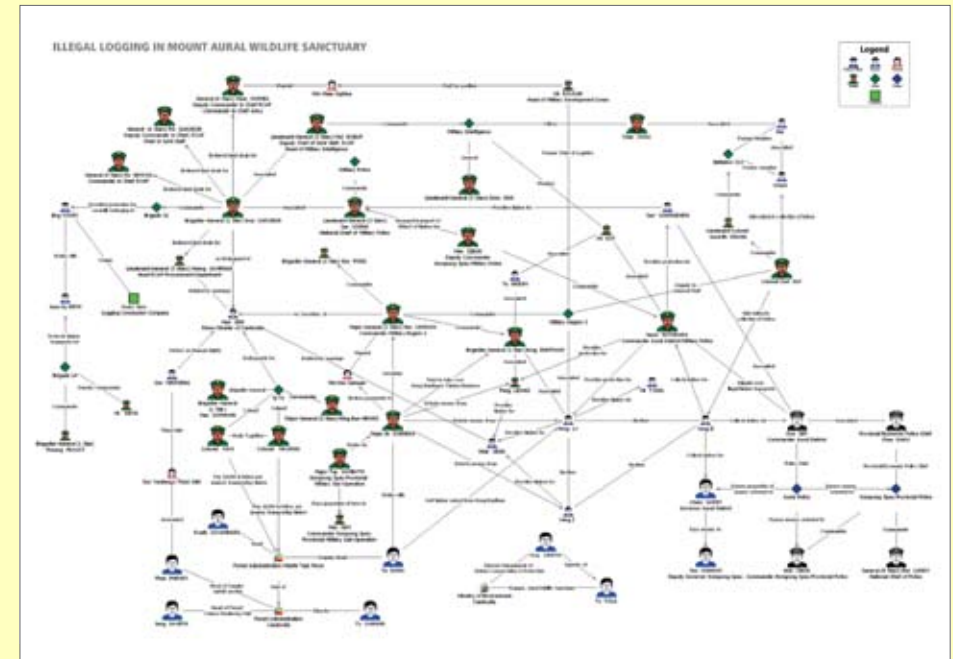
- Analyze relationships of power
- Illustrate social networks
- Find out where your issue has the most impact
- Project future trends

Make Information Visible

- Show influence and causality
- Illustrate the consequences of specific choices
- Compare and contrast

Simplify and Clarify

- Illustrate analysis of an abstract idea
- Show the flow of a process or changing system
- Make your conclusions visible and easy to navigate
- Show structure and order in apparently chaotic data



The 2004 Global Witness report on corruption and extortion affecting Cambodia's forest sector, entitled *Taking a Cut*, uses two different types of graphics to provide an overview of individuals with command responsibility and personal relationships with illegal logging syndicates. **^** The chart above illustrates specific relationships between individuals. **>>** The list view presents the officials in order by rank from the National Government to the Military to the local police and local Government. Six months after being implicated in the report, the World Bank announced an investigation of its Forest Concession Management and Control Pilot Project in Cambodia.

Download the complete report at <http://globalwitness.org>

Images © Global Witness, *Taking a Cut*, 2004

| 2 FOREST CRIMES IN AURAL WILDLIFE SANCTUARY BY INSTITUTION: | | | |
|--|--|--|--|
| Royal Government of Cambodia | | | |
| Hun Sen, Prime Minister of Cambodia | | | |
| Ministry of Defense and Royal National Guard | | | |
| General Soa Buth, Co-Minister of Defense | | | |
| General Nhek Bun Chhin, Co-Minister of Defense | | | |
| General Ke Kimon, Commander in Chief, RCAF | | | |
| General Pol Serey, Deputy Commander in Chief, RCAF | | | |
| General Man Saphon, Deputy Commander in Chief, RCAF, Commander, Army | | | |
| Military Region 9 Personnel | | | |
| Major General Keo Sanna, Commander, MR9 | | | |
| Brigadier General Ison Serey | | | |
| Brigadier General Bony Sathon | | | |
| Major Te Sathor | | | |
| Colonel Son Sey | | | |
| Major Tep Senthon | | | |
| RCAF Military Intelligence Division | | | |
| Lieutenant General Mal Bony, National Commander | | | |
| Lieutenant General Dany Huk | | | |
| Chief of the Military Intelligence Unit (operational in Aural) | | | |
| Hun Sen's Bodyguard Unit # 18 | | | |
| Major General Hing Ban Heng, Commander | | | |
| Brigadier General Man Saphon | | | |
| Colonel Man and Colonel Sreng | | | |
| Military Police | | | |
| Lieutenant General Noy Sakha, National Commander | | | |
| Major Khon, Deputy Commander, Kampong Spea Province | | | |
| Sorn Polvin, Commander, Aural District | | | |
| Ministry of Agriculture, Forestry and Fisheries (MAFF) | | | |
| Chief Sorn, Minister, MAFF | | | |
| Forest Administration | | | |
| Te Sathon, Director | | | |
| Long Sath, Head of Forest Crime Monitoring | | | |
| Roath Serey, Head of Mobile Task Force | | | |
| Te Seng, Deputy Head of Mobile Task Force | | | |
| Phon Sreng, Head, Single Search Team | | | |
| Ministry of Environment | | | |
| Mok Hanch, Minister of Environment | | | |
| Chor Sathol, Director, Dept. Nature Conservation & Protection | | | |
| Te Sath, Deputy, Aural Wildlife Sanctuary | | | |
| Ministry of Interior | | | |
| Soi Kheng, Co-Minister of Interior | | | |
| Priny Nareson Sreng, Co-Minister of Interior | | | |
| Police | | | |
| General Huk Sath, National Director General | | | |
| Thak Chha, Commander, Kampong Spea Province | | | |
| Chor Sath, Commander, Aural District | | | |
| Chor Sath, Commander, Kampong Spea Province | | | |
| Chor Sath, Commander, Aural District | | | |
| Local Government | | | |
| Chh Bin, Governor, Kampong Spea Province | | | |
| Yan Sakthun, Deputy Governor, Kampong Spea Province | | | |
| Chor Sorn, Governor, Aural District | | | |

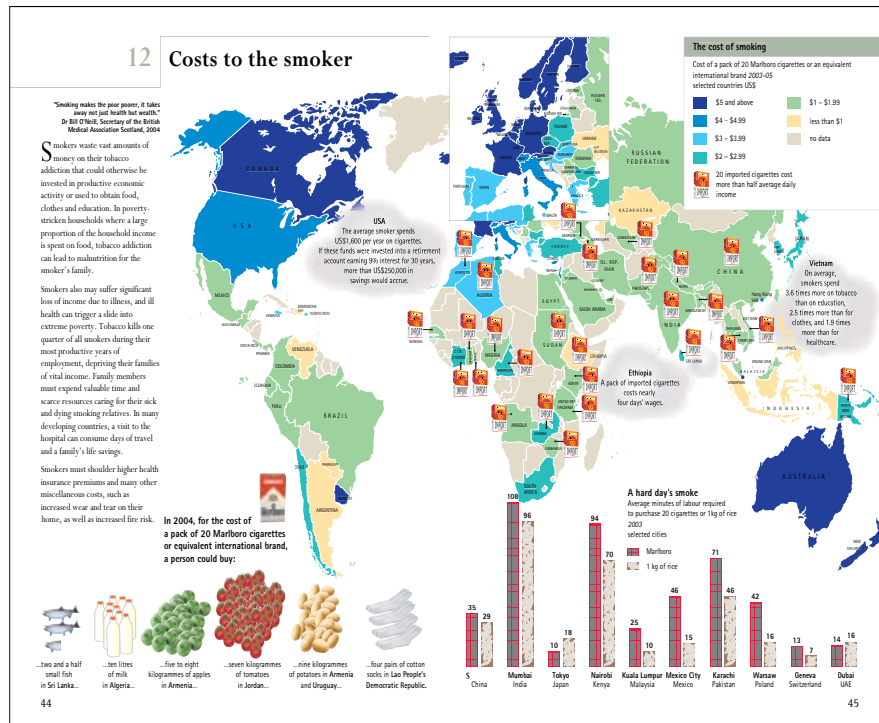
Key: **□** = Command responsibility for subordinate involved in forest crime, **△** = Relative proximity level through connection, **▶▶** = Possible armed protection in timber trade, **▶** = Participate directly in illegal timber trade

Information Design for Advocacy

In a campaigning context, information design can transform raw data into a powerful advocacy tool to motivate an outcome.

Graphics can tell your story in a compelling, immediate and powerful way to move your intended audience. Information design can simplify and summarize a complex story — and add impact.

Information design should be considered within your overall strategy for achieving policy change or increasing awareness. When and how you use information design will depend on the information you want to convey and the context in which you work.



The Tobacco Atlas is a publication of the World Health Organization designed to influence national policy. The map contextualizes data to give it more impact. It shows places in the world where the cost of 20 cigarettes is higher than half an average days income and compares the cost of a packet of cigarettes to locally available produce. See http://who.int/tobacco/statistics/tobacco_atlas/en/

Information Design for Analysis

Information design can be integrated into the research process by illuminating data visually, or providing a neutral platform with which to identify trends or targets.

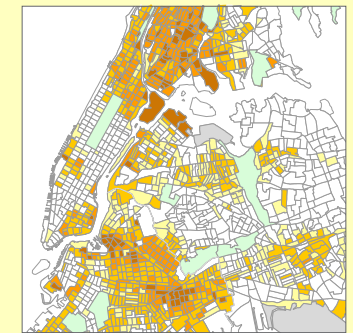
Translating data into a visual format may help reveal patterns that might not otherwise be apparent. Representing data visually on a chart or graph can reveal wider trends and unexpected clusters around specific demographics, geographies or time-periods.

Using information design to examine larger networks and systems can complement and provide context to individual case studies and testimonies.

Mapping Poverty in New York City

From a case study produced by the Community Mapping Assistance Project (CMAP):

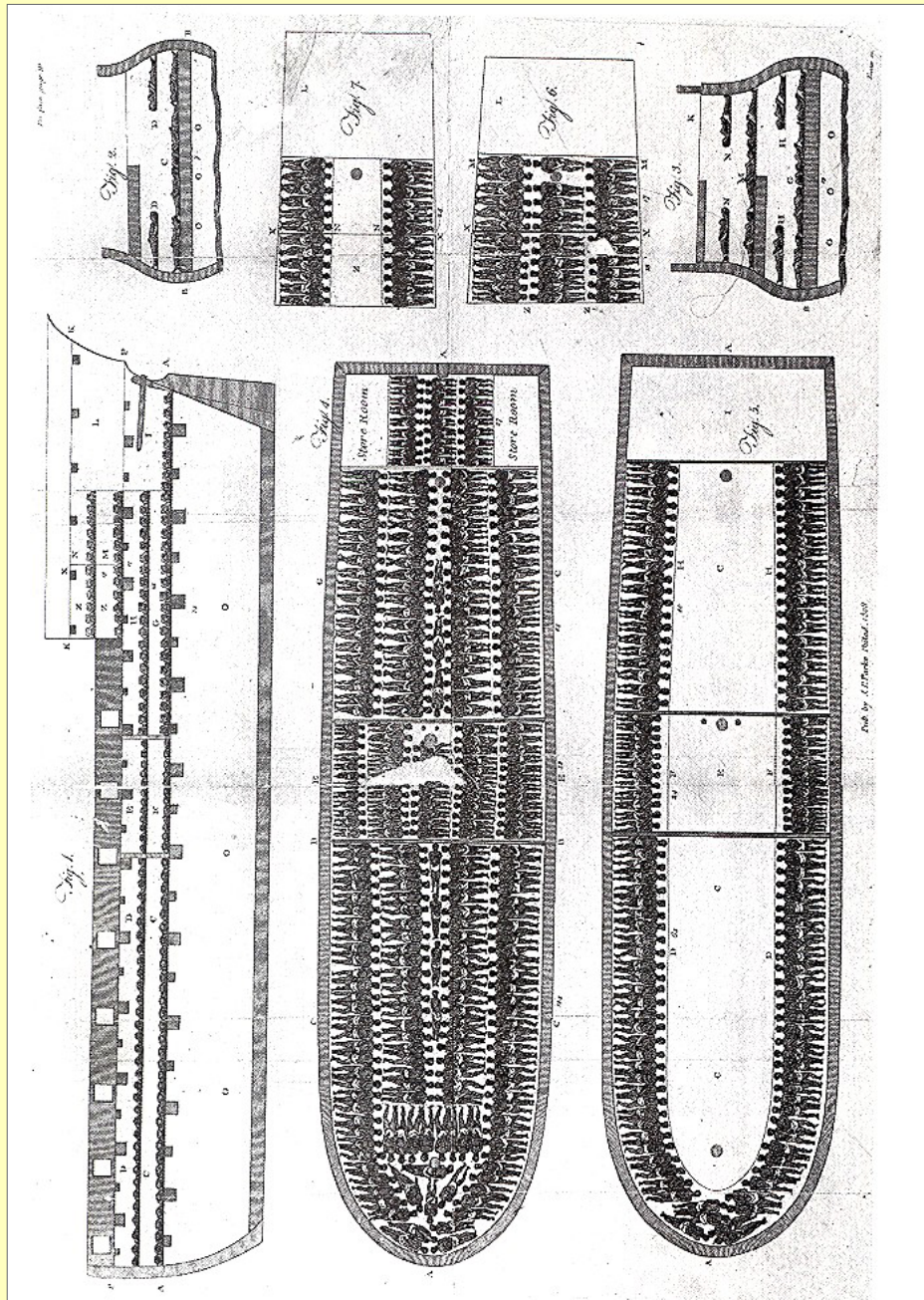
"[The Robin Hood Foundation] used CMAP's expertise with Census data to identify which of many possible measures of poverty would best reveal the answers they needed. Next, CMAP staff organized the data in the ways most relevant to the foundation's planning process, including breakdowns by age, race, ethnicity and single parent household. Finally, CMAP produced a series of maps and display that illustrated the geographic relationship between the foundation's current funding sites and current patterns of poverty.



What the maps revealed was striking, prompting Robin Hood to initiate a major redirection of resources. The maps enabled the board to visualize the complexity of focusing Robin Hood's grants where in the city they can do the most good. In addition to their use in planning, the maps have become a vital tool for orienting staff and donors. They visually convey complex information to all kinds of people, making the point forcefully and immediately. As a result, Michael Weinstein says, program officers 'don't even talk to me about a new project unless it starts with Bed-Stuy, or one of the other high poverty areas where we need to increase our impact.'"

Source: http://www.cmap.nypirg.org/case_studies/CS2/robin_hood_case_study.pdf

Historical Examples of Information Design and Advocacy



Information design is not a new communication technique. These historic examples, from campaigns for social change, show information design applied to analysis and advocacy respectively. In both cases, information design was used to tell a powerful, persuasive story on behalf of a cause.

⬆ In 1859, physician John Snow mapped deaths from a devastating cholera outbreak in London to determine its cause. Snow gathered data by talking to local residents. His map revealed a pattern of infections around the Broad Street water pump. Despite skepticism, he collected enough evidence to prompt officials to shut down the pump, after which the epidemic quickly ended. Snow's work promoting the idea that the disease was spread through contaminated water became a major turning point in the history of public health.

⬅ Thomas Clarkson's 1786 "Essay on the Slavery and Commerce of Human Species" influenced the abolition movement in England. This diagram shows how hundreds of enslaved Africans were crammed into ships. The image and accompanying description of the conditions shocked and appalled readers. The slave trade was abolished in British empire by the Slave Trade Act in 1807.

The images clarify key concepts in an experiential, and in the case of the slave ship image, highly emotional way. These two examples show how vital information can be presented powerfully and accessibly. They also remind us that strong design does not require high technology or expensive computer software.

Information Design for Consumer Education

Information design acts as a force for change when making information visible at the point of action.

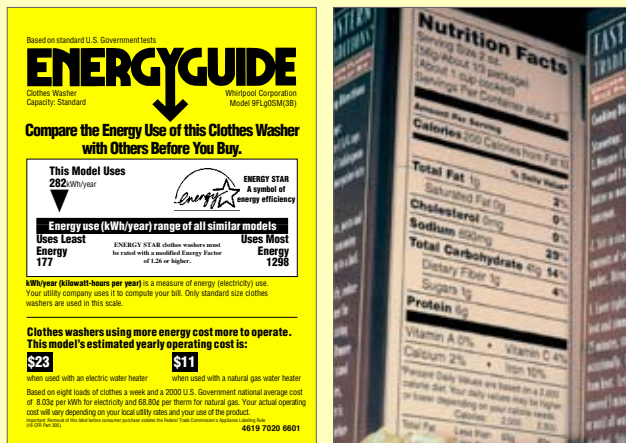
For example, consumers change their purchasing decisions when presented with informational graphics about a product's health impact, energy efficiency or other long-term costs.

>> The food pyramid is a classic information graphic promoting public health. The graphic makes it easy to understand the relative quantities of food types required for a healthy diet. Shown here, a painted mural at a school yard in Hue, Viet Nam.



>>> The Hannaford Brothers chain of markets in the U.S. rate the health benefits of the foods on their shelves with a system called Guiding Stars.

>> Labels designed by Burkey Belsler for U.S. government agencies inform consumers at the point of purchase about energy efficiency and nutrition.

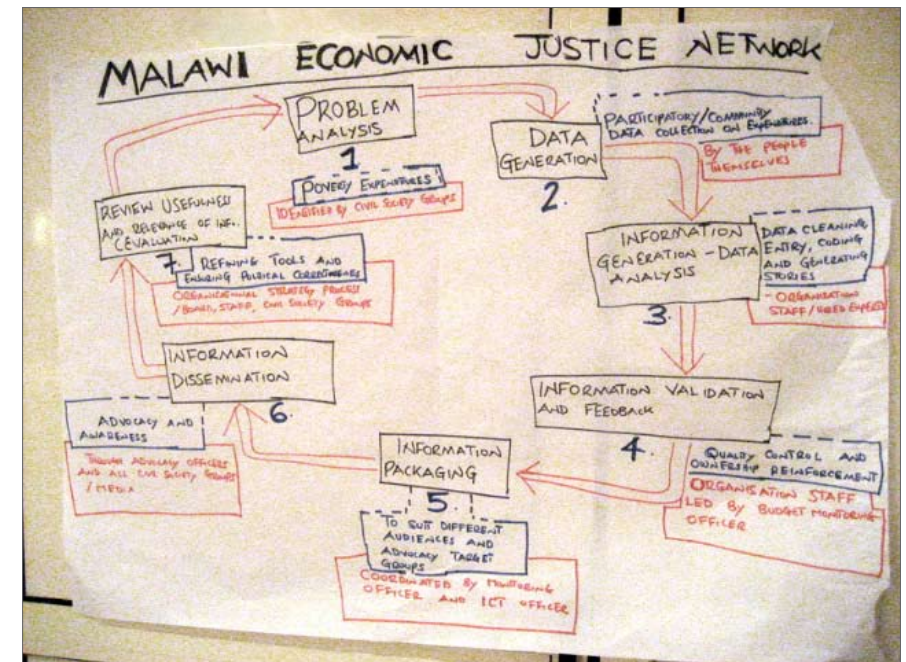


Information Design for Strategy

NGOs can also use information design *internally* to help with their planning and self-assessment.

For instance:

- Mapping places and issues of significance can help groups to pinpoint where and how they should focus their efforts.
- Creating diagrams of advocacy targets and constituencies, and of their relationships, can help to illuminate strengths and weaknesses and thus how best to organize supporters or apply political pressure.
- Charting the flow of information within an organization can reveal bottlenecks and opportunities.



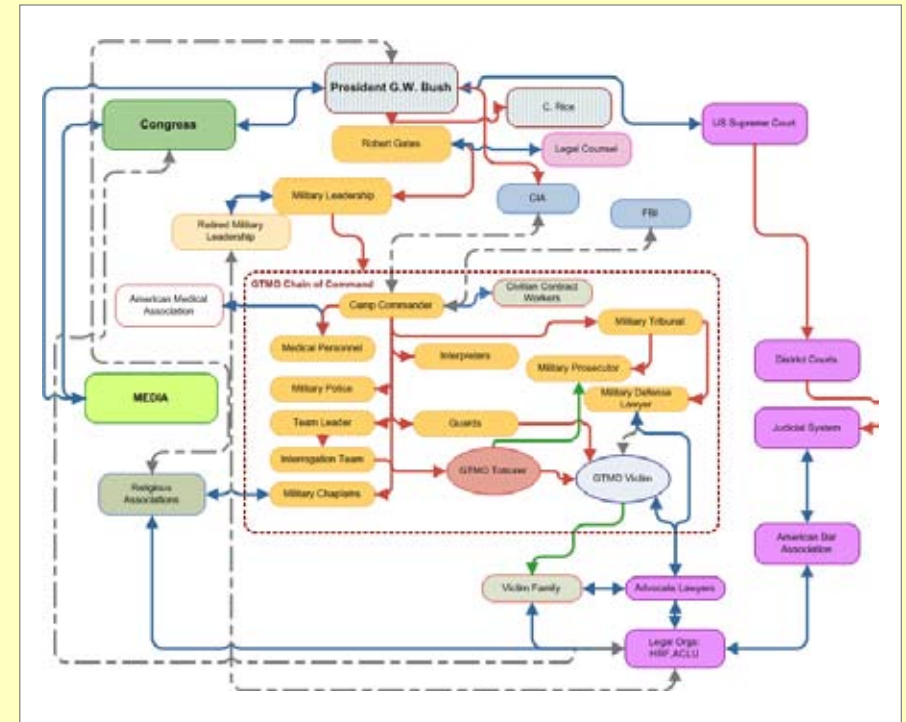
In a September 2006 workshop, members of the Malawi Economic Justice Network made this map of information's life-cycle in their campaign, in order to identify how information flows through their organization.

Tactical Mapping for Analysis and Planning

Tactical mapping is a visualization exercise used to analyze circumstances surrounding an issue and to form a strategic plan.

Tactical maps clarify the relationships between the parties in a given situation. They can be used to identify:

- Which key relationships need to be affected to move your strategy forward
- What tactics are currently being used or potentially available
- How these tactics might affect key institutions, relationships, social groups and contexts that you want to target
- Which key groups, relationships or contexts are not affected by current tactics
- What tactics might be brought into play to engage targets that are not currently affected
- Who are your potential allies for building a more comprehensive and effective strategy



Tactical map on torture by U.S. military in Guantanamo Bay.



A tactical map on domestic violence in the process of being created.

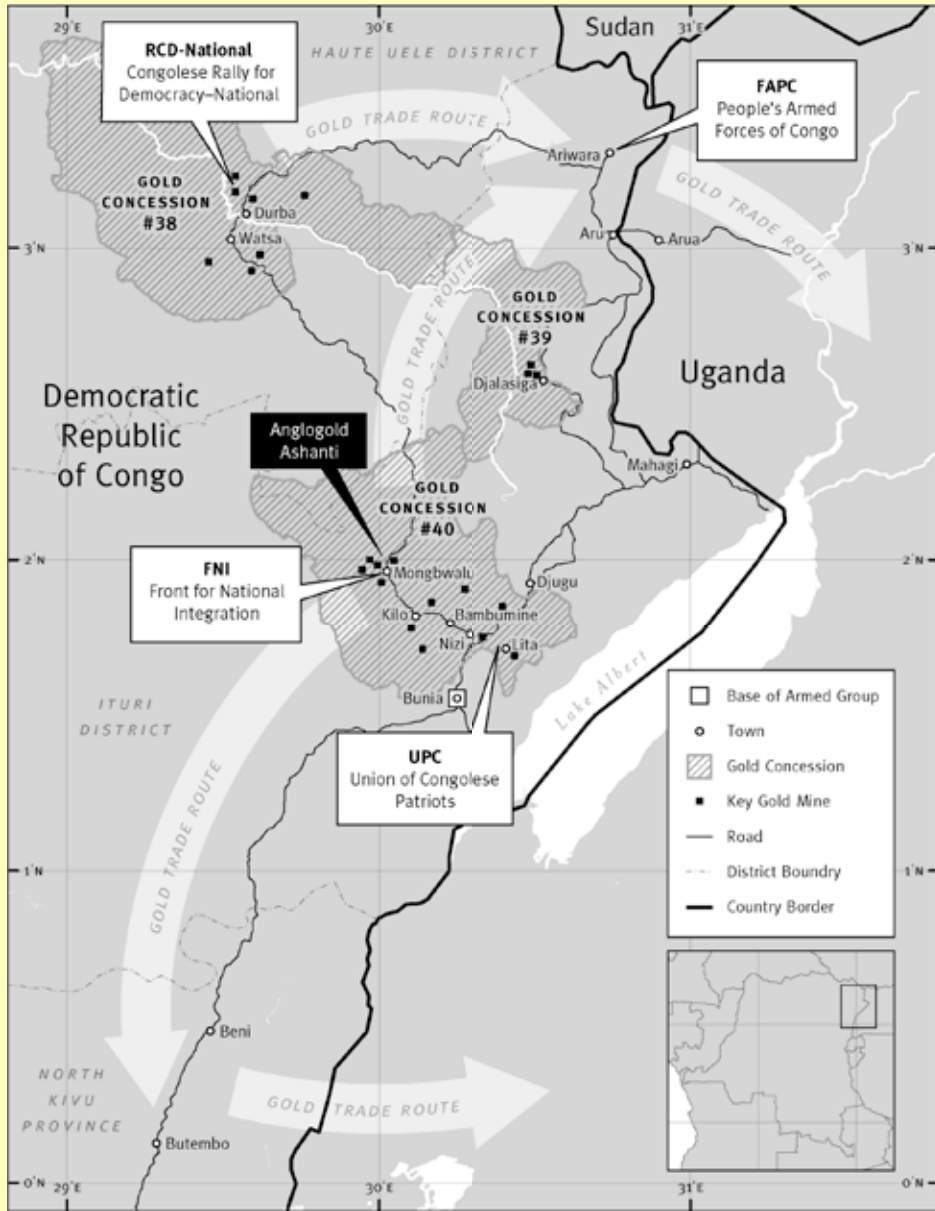
Sticky notes and marker on a white board provide a flexible, changeable surface on which to develop a map in progress.

To create a tactical map, start by identifying a human rights issue. The affected community is drawn in the center. From there, identify the individuals and organizations that affect the situation. Then draw direct and indirect relationships, with arrows showing who has influence over whom. Identify your allies and opponents.

With this in place, you can start devising a strategy. Examine what connections and resources you already have. With a strategic goal in mind, you can determine tactics you have access to or would like to explore.

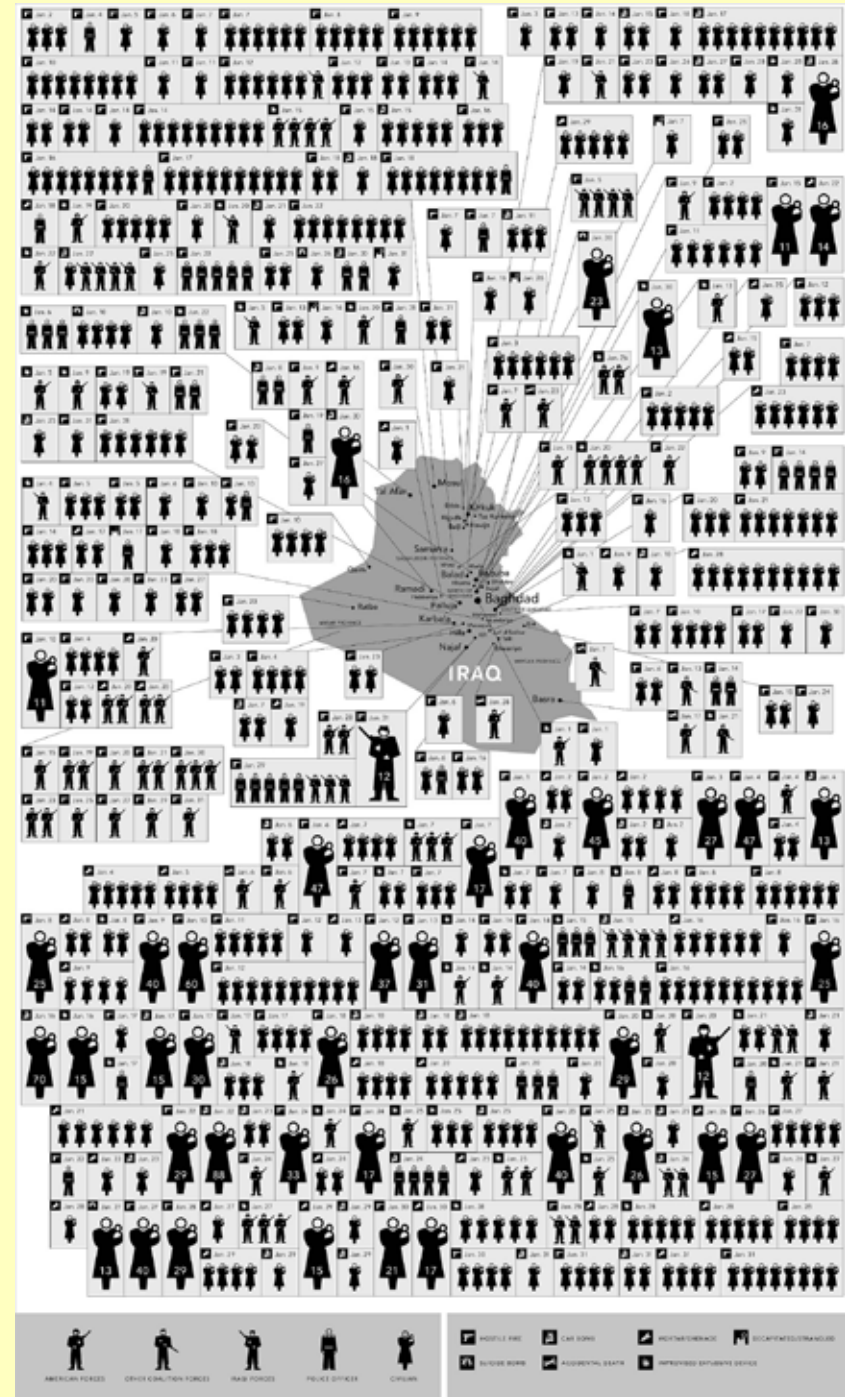
Both paper and interactive versions of the map allow the users to manipulate the map dynamically, changing and moving actors to visually represent different relationships and scenarios.

For more information on tactical mapping, visit <http://www.newtactics.org/main.php/TrainingTools>



In 2005, the Human Rights Watch report *The Curse of Gold* documented how the gold trade fueled massive atrocities in northeast Congo. It included the map above, which illustrated the relationships between local paramilitary

groups, international corporations benefitting from access to gold rich areas, and local towns where people suffered from ethnic slaughter, torture and rape. See <http://hrw.org/reports/2005/drc0505/>



This graphic, designed by Adriana Lins de Albuquerque and Alicia Cheng, ran in the New York Times in February 2007 to illustrate Iraqi civilian deaths in the month of January. The figurative depictions give a better sense of the magnitude of the tragedy than would a simple list of names or numbers. The use of the map illustrates the lack of safety and security across the entire country during the U.S. occupation.

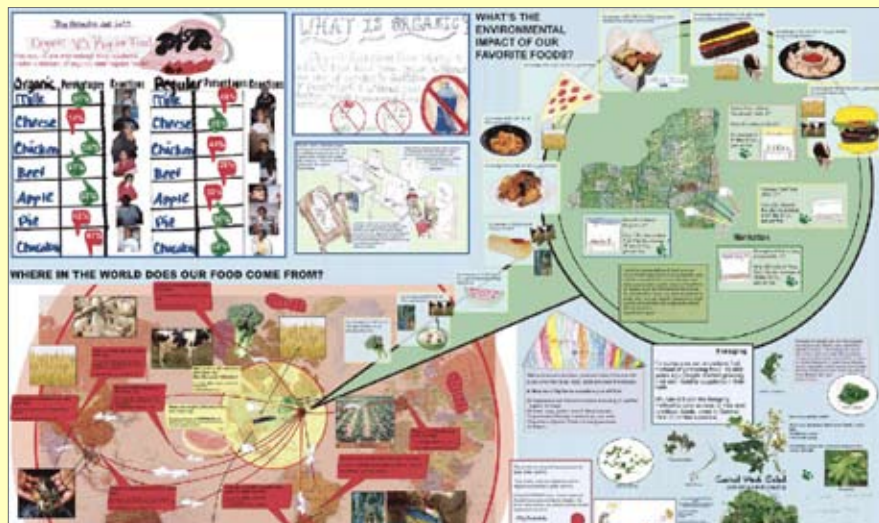
How to Begin

There are many ways to tell a story or to present data. How do you know what kind of presentation to use?

The main thing to consider is: how will your information design be used?

Is it for planning? Or advocacy? Are you trying to tell a specific story? Or are you trying to create a more neutral map to guide a process of discovery?

Keeping your purpose in mind can help guide your development process as well as your decisions about the most effective format and medium. The following pages focus on practical tips, suggestions and things to bear in mind when creating your information design.



The design process itself can be as illuminating as the final product. Students in New York City worked with artist Amanda Matles and the Center for Urban Pedagogy to investigate and map the sources of their favorite snacks and the resources required

to bring them to their neighborhood in East Harlem. The conclusion? That kids can reduce their environmental impact by buying foods grown close to New York City. See <http://anothercupdevelopment.org/projects/detail/41>

Planning Your Information Design

What kind of data is best presented as a chart, as a diagram or as a map?

Maps are useful for showing spatial issues or locations. Charts are useful for showing quantities and trends over time. Diagrams and flowcharts may best illustrate processes or relationships.

How do you know what information to focus on and what to exclude?

Some key questions are:

- What story do you want to tell?
- To whom?
- How do you want to reach them?

What is your overall strategy for change?

Consider your overall campaign — and how your information graphics fit within the context of your communications strategy and overall advocacy campaign.

What is your desired outcome?

Determining this will help determine who your audience is, and what you want them to do.

What will move your constituency or target?

Consider the story you are telling as well as the tone, style, and format of your message. How it will be read by your target audience? Does your audience have a prior interest in your subject or are you trying to reach a new audience?

Different audiences may respond better to different graphic treatments — for example a campaign targeting youth, a rural population or government officials.

Design for your audience, not for you.

If your audience doesn't get it, it's no good for you. Identifying your audience will help determine the tone of your language and the format of your publication.

A user-centered design process starts with lots of questions, rather than answers. The key is identifying the user's perspective at the outset.

Don't let your design reflect your institutional structure or bias. Design has a tendency to reflect bureaucracy, especially in NGOs.