

Lives on the Line

Securing Crisis Maps in Libya, Sudan, and Pakistan

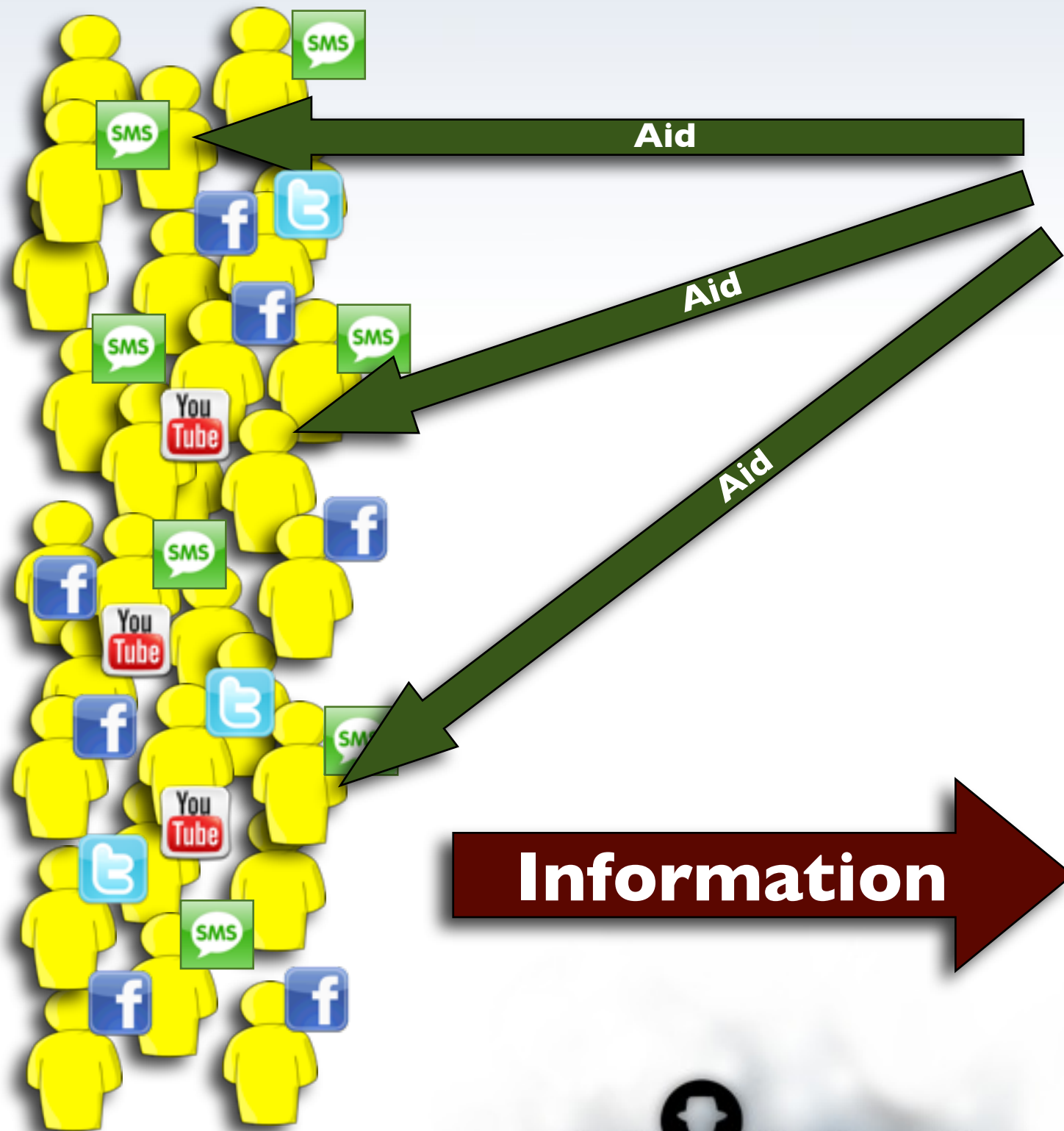
george chemales - rogue genius llc



USA + 2011
EMBEDDING SECURITY

THE HUMANITARIAN TECHNOLOGY COMMUNITY NEEDS YOUR HELP.

CRISIS



Crisis Mapping Platform





Demande aide 4636
je suis perdu enbas
une maison 2 etage
no 147 av christophe
chanel cafour

I'm asking for help. I
am lost beneath a
house. Second Floor
147 Avenue Christophe
Chanel Carrefour



**MISSION
4636**



NATURAL DISASTERS DON'T SHOOT BACK



PAKISTAN

WHAT YOU SEE ABOUT FLOODS

SMS TO 3441

{ FL + Your Message + Exact Location }

SHARE

English (US)

Q

SUBMIT A REPORT



HOME REPORTS BLOG SUBMIT A REPORT GET ALERTS ABOUT US VOLUNTEER

FILTERS + REPORTS NEWS PICTURES VIDEO ALL



4 CATEGORY FILTER

- ALL CATEGORIES
- EMERGENCY
- FOOD
- WATER AND SANITATION
- HEALTH
- MIGRATION
- SHELTER
- LOGISTICS
- FLOODING
- SECURITY
- PROTECTION
- INFORMATION
- SERVICES
- VOLUNTEERS

HOW TO REPORT

1. By sending an email to submit@pakfloods.org
2. By filling this form
3. Calling 021 3 412 3441 or 021 3 412 3442
4. Sending SMS Message + Your Location

MailOnline

Home U.K. Home News Sport U.S. Showbiz Femail Health Science&Tech Money

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Taliban issues threat to 'foreign horde' of aid workers in Pakistan helping flood relief effort

By JAMES WHITE

Last updated at 5:28 PM on 27th August 2010

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Like

Foreign aid workers could become a target for Taliban fighters as they help Pakistani flood victims, a spokesman for the militant group claimed today.

As increasing numbers of aid agencies fly into the disaster-hit country to offer assistance spokesman Azam Tariq said the 'horde of foreigners' could be at risk.

The terrorist group has a history of attacking aid workers, including agencies under the UN umbrella.

Pakistani Taliban spokesman Tariq claimed that the U.S. and other countries that have pledged support are not really focused on providing aid to flood victims but have other motives he did not specify.

'Behind the scenes they have certain intentions, but on the face they are talking of relief and help,' he said.

'No relief is reaching the affected people, and when the victims are not receiving help, then this horde of foreigners is not acceptable to us at all.'

UN humanitarian chief John Holmes said it remains committed to helping flood victims in Pakistan.



Threat: Pakistan Taliban spokesman Azam Tariq, pictured in 2002, has spoken of his group's

17 JUNE

4 JULY



CLUSTER OF WHITE OBJECTS
CONSISTENT WITH REPORTS OF BODY BAGS



LIGHT
VEHICLES

SUDAN

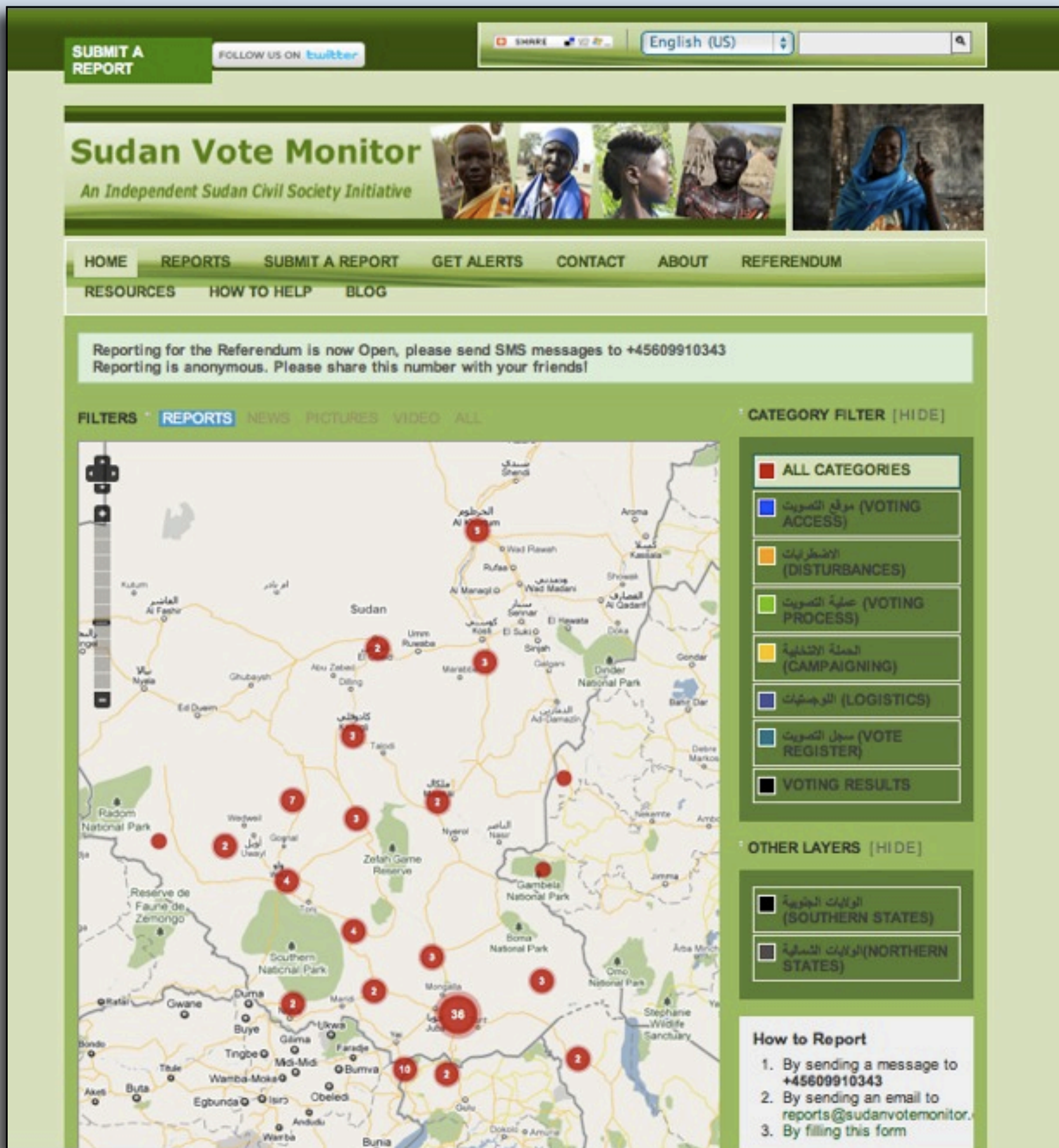
Satellite Sentinel Project



enough

COMPARISON: 17 JUNE - 4 JULY 2011 | FIG 4
OBJECT CLUSTER IN KADUGLI TOWN | KADUGLI, SOUTH KORDOFAN

<http://www.satsentinel.org/sites/default/files/SSP%2016%20Final%20Smaller.pdf>



Obviously
Faked Reports

Site Blocked
by IP address

Inadvertent
Spam DOS



REUTERS



REUTERS



LIBYA

Libya Crisis Map

Social Media Mapping for Common Operational Datasets

SEARCH

Q

HOME

REPORTS

GET ALERTS

SOURCES

ANALYSIS

BLOG, TWITTER & RSS

VOLUNTEERS

BIG MAP

Reports: Showing page 1 of 27 pages

Total Reports

535

Avg Reports Per Day

33.44

% Verified

42.06%

Jordanian doctor reported missing

UNVERIFIED

DESCRIPTION REDACTED

Benghazi, unable to determine more precise location

CATEGORIES

23:26 Mar 09, 2011

Aerial attack on oil transportation terminal

VERIFIED

DESCRIPTION REDACTED

30.6315, 18.348767

CATEGORIES

23:00 Mar 09, 2011

Djerba airport - 7 Red Cross/Red Crescent flights have arrived

VERIFIED

DESCRIPTION REDACTED

Zarzis Djerba Airport

CATEGORIES

22:58 Mar 09, 2011

Latrine construction by Red Cross/Red Crescent

VERIFIED

DESCRIPTION REDACTED

UNHCR Shousha Camp

CATEGORIES

22:49 Mar 09, 2011

Tunisian Red Crescent Society border health clinic - Ras Ajdir

VERIFIED

DESCRIPTION REDACTED

Ras Ajdir

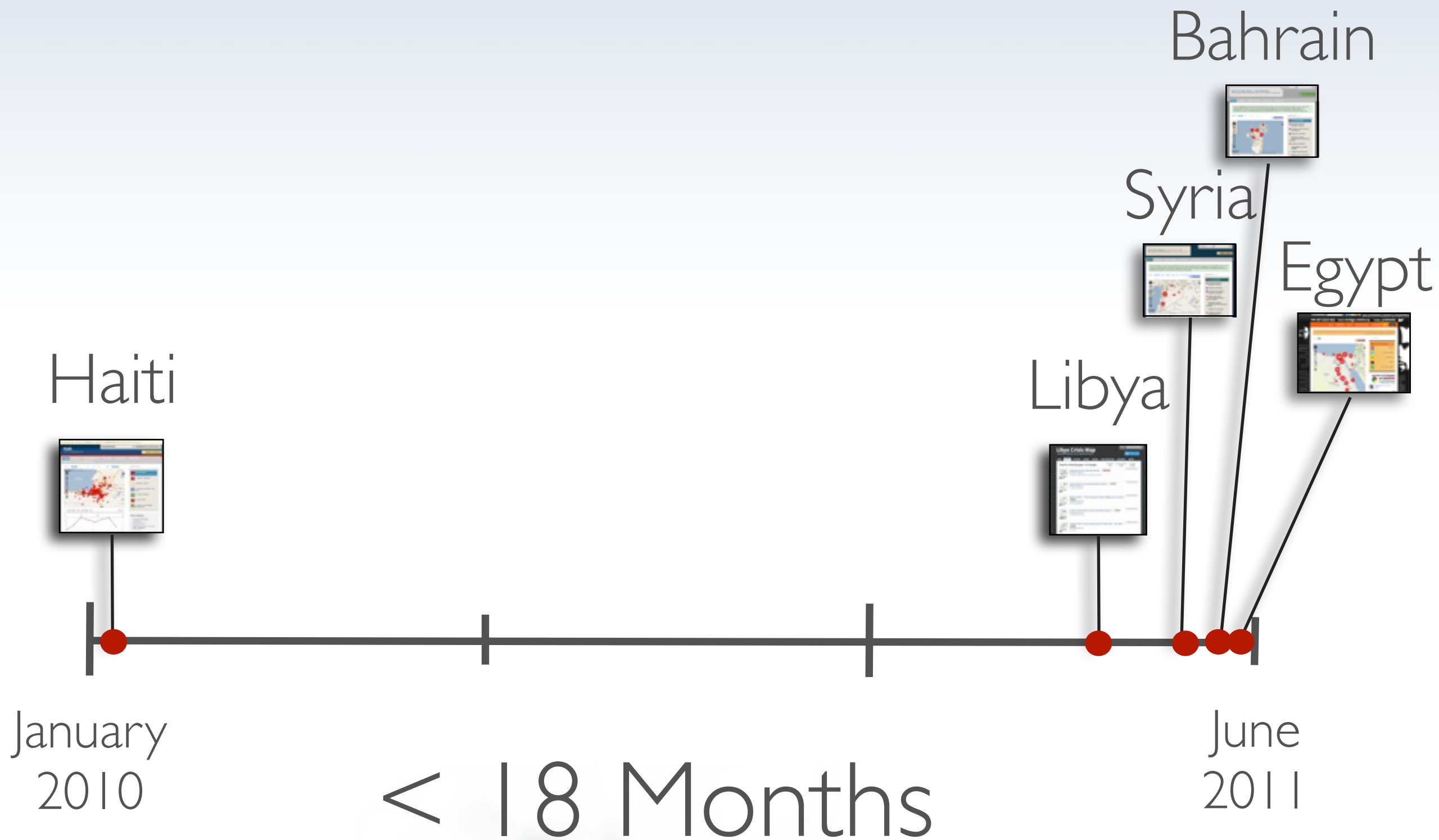
CATEGORIES

22:45 Mar 09, 2011

Protecting
Observers

Verifying
Information

Trusting
Volunteer
Analysts





@JosetteSheeran

Josette Sheeran

Excellent [#Libya](#) "Crisis Map" can help
[#UN](#) [#WFP](#) plan [#humanitarian](#) [#food](#),
also 4 borders w/ [#Tunisia](#) [#Egypt](#) -
<http://libyacrisismap.net/main>

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Retweeted by [pauline_c64](#) and 36 others



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“We gave Egyptian National Security a dedicated username and password [to access the Ushahidi platform]”

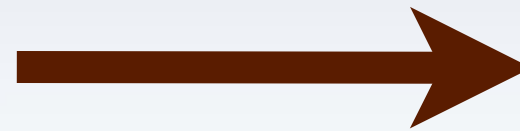


“Ooh Shiny!”

“Oh \$#!@!”

“Don’t just stand there,
DO SOMETHING!”

Users' Identities
Compromised



People Arrested

Site Knocked
Offline



Lifeline Lost

Deployment
Compromised



Technology
Abandoned

THIS IS WHERE
YOU COME IN

Present What's Been Done So Far

Feedback on Current Best Practices

Generate Interest in the Security Community

LIVE SIMULATION

HOME REPORTS SUBMIT A REPORT GET ALERTS CONTACT US

Attention . Submit first-hand REPORTS from the street to . Post YouTube VIDEOS. Help us map, document and share what's happening in your country. Click "Submit a Report", use # on Twitter or e-mail us at . We will DISTRIBUTE reliable reports on <http://www.Facebook.com/> and SHARE these stories on our international broadcasts and websites.

FILTERS * **REPORTS** NEWS PICTURES VIDEO ALL

[FULL SCREEN MAP](#)

Insert Crisis Here

ALL CATEGORIES

- CIVILIAN KILLED BY MILITARY / POLICE
- PEACEFUL PROTEST
- SOLDIER / POLICEMAN KILLED BY CIVILIAN
- TANK / ARTILLERY DEPLOYED IN CIVILIAN AREA / STREETS
- MILITARY / POLICE SHOOTING INTO PEACEFUL CROWDS
- ARREST OF CIVILIANS
- HOSPITAL INCIDENT - OVERCAPACITY, SHORTAGE OF SUPPLIES
- FUNERAL / FIRING ON CEMETERY

From: May 2011 to: Jul 2011 [Play](#)

There has just been a _____
in the country of _____.

As a team from _____ we
are responsible for deploying a crisis
map in order to _____.

There has just been a _____

REVOLUTION

NATURAL DISASTER

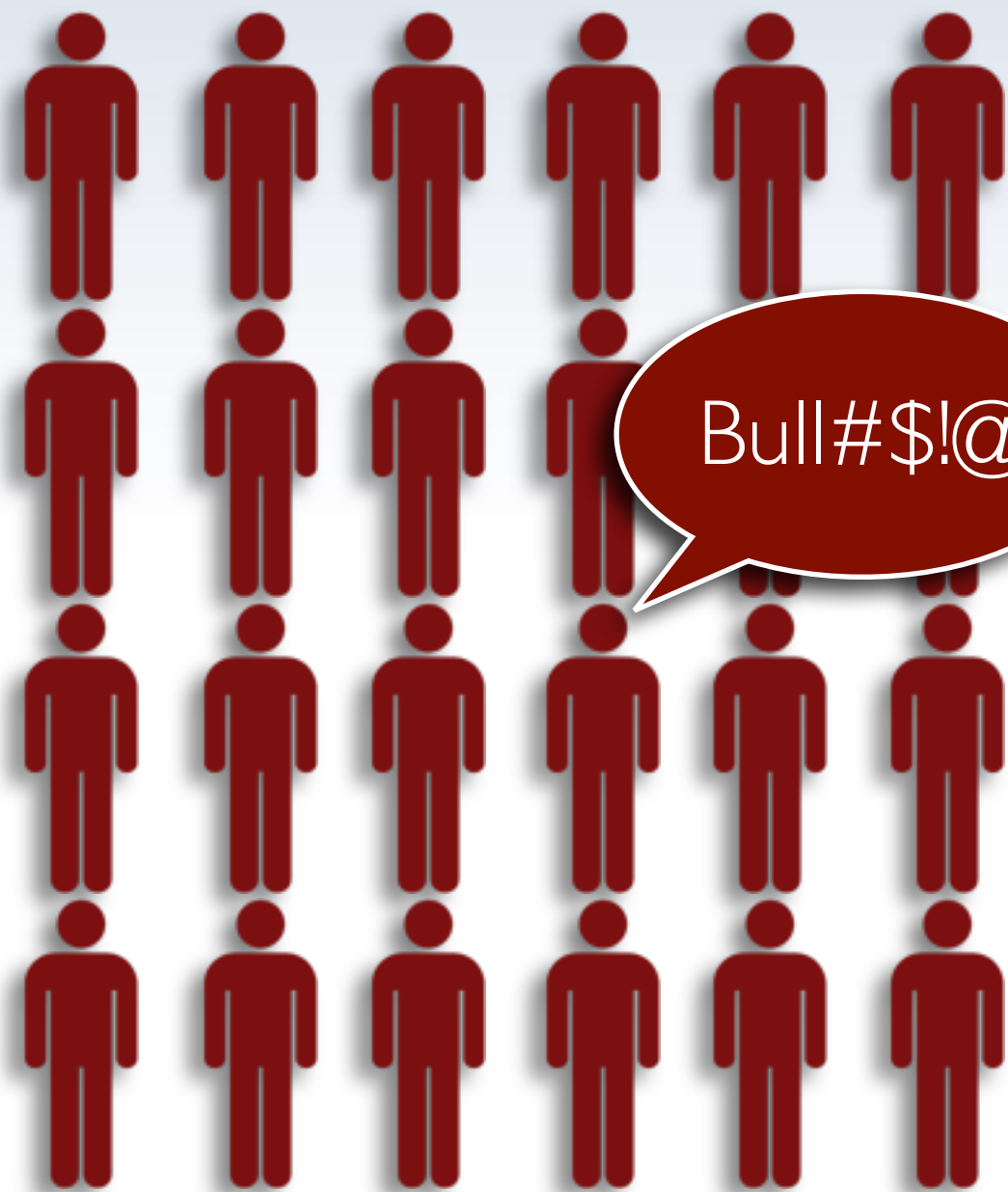
MILITARY CRACKDOWN

CONTESTED ELECTION

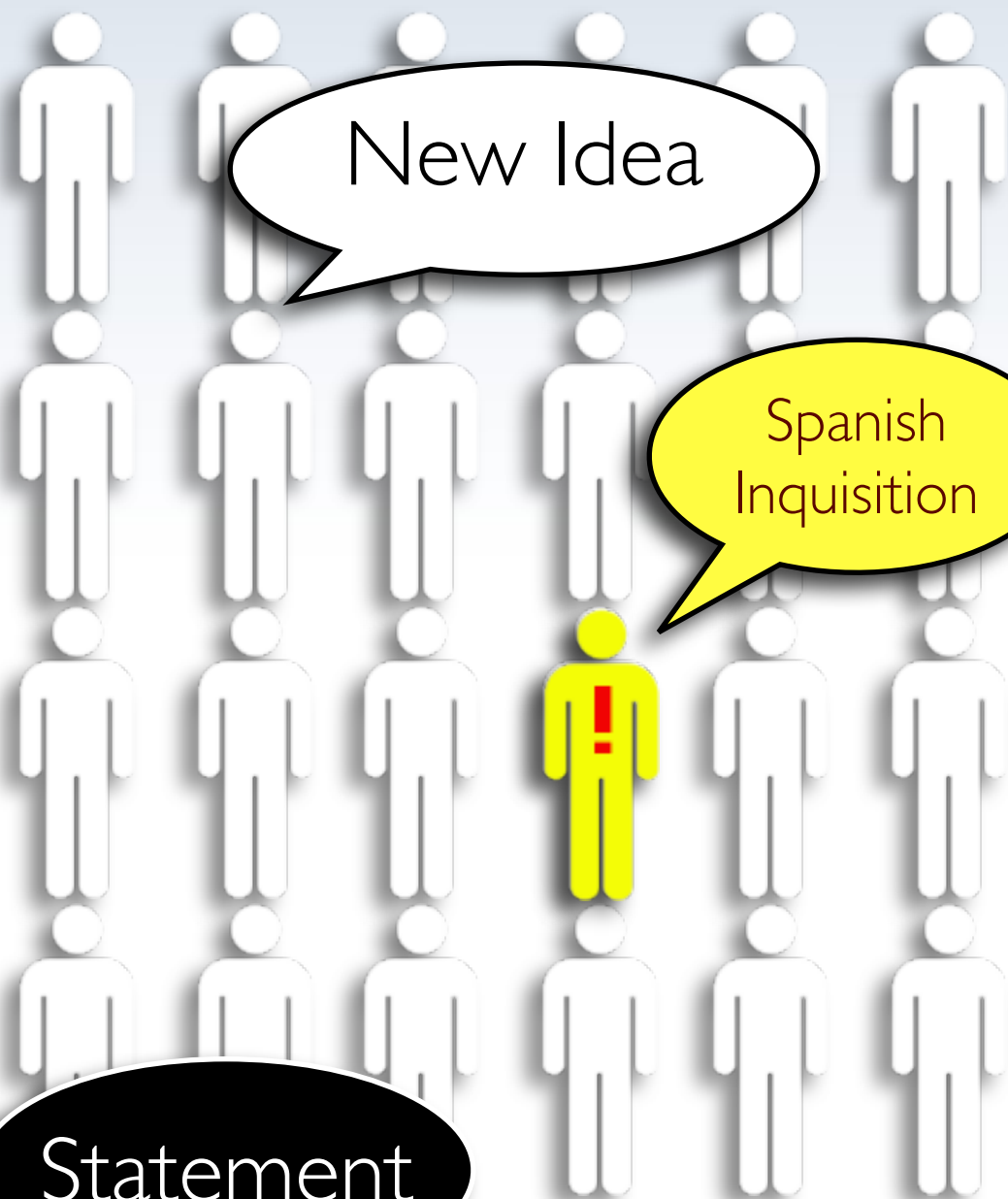
OUTBREAK OF SECTARIAN VIOLENCE

...in the country of _____





Bull#\$!@



New Idea

Spanish Inquisition

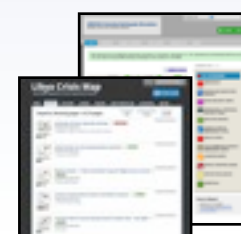
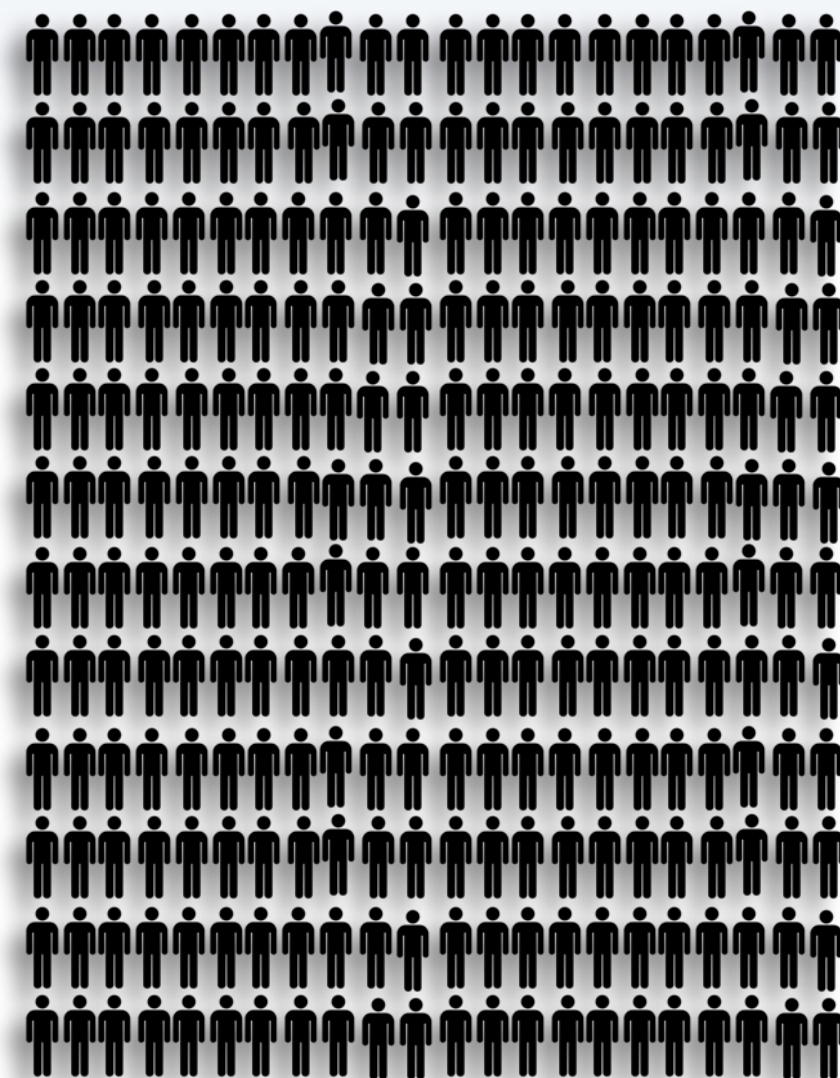
Statement



...as a team from the _____



Military



International
NGO



Media
Org



Local
NGO



Individual



ON THE GROUND



Committee to Protect Journalists
Defending Journalists Worldwide

DONATE NOW

Home
News Alerts
Statements
Protest Letters
Reports & Publications
CPJ Blog
CPJ Internet Channel

Killed in 2011
Imprisoned
Missing
Killed Since 1992

Africa
Americas
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Europe & Central Asia
Middle East & North Africa

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Bahraini blogger dies in custody; journalists under attack



Newspaper headlines Al-Wasat. (Reuters)

New York, April 12, 2011-- The CPJ has called on the U.S. to launch an immediate and thorough investigation into the custody. Bahraini authorities, meanwhile, have arrested three senior editors at the newspaper in a months-long pattern of violence, widespread civil unrest. CPJ documents

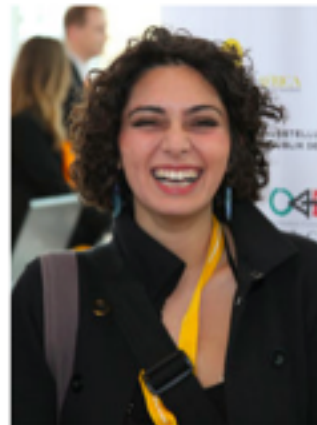
Iranian blogger arrested before Germany trip

AP Associated Press

AP — Mon, Jul 18, 2011

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RELATED CONTENT



The photo provided by German public radio Deutsche Welle on Monday, July 18, 2011 ...

TEHRAN, Iran (AP) — A dissident Iranian blogger was arrested as she prepared to leave for the Deutsche Welle radio station aboard a plane to Germany, the semi-official ISNA news agency said.

Pegah Ahangarani, 27, was arrested by police in the prosecutor's office in Tehran. She had been in Germany after the disputed presidential election and the role in the postelection riots.

Ahangarani is the daughter of Iranian dissident and Jamshid Ahangarani.

The investigation into her case was ongoing.

Deutsche Welle said Monday it has learned from Ahangarani that the actress is being held in prison.

The broadcaster urged Iranian authorities to release her.

guardian.co.uk

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Comment is free

Jailing Maikel Nabil betrays the Egyptian people's revolution

By unjustly imprisoning the blogger Maikel Nabil, the Egyptian army only amplifies his simplistic pro-Israel rantings



Mohammad Talat

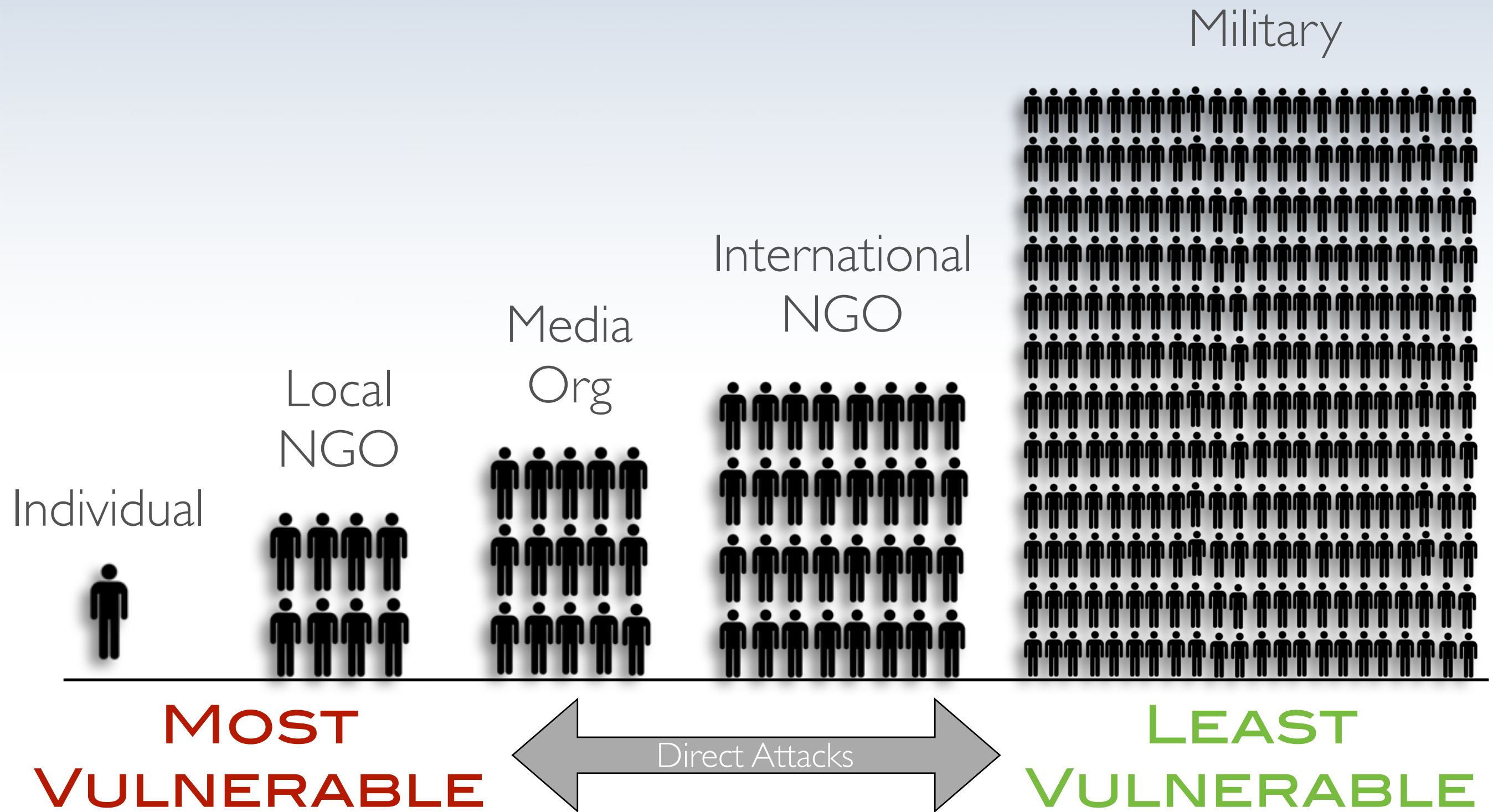
guardian.co.uk, Sunday 24 April 2011 11.00 BST

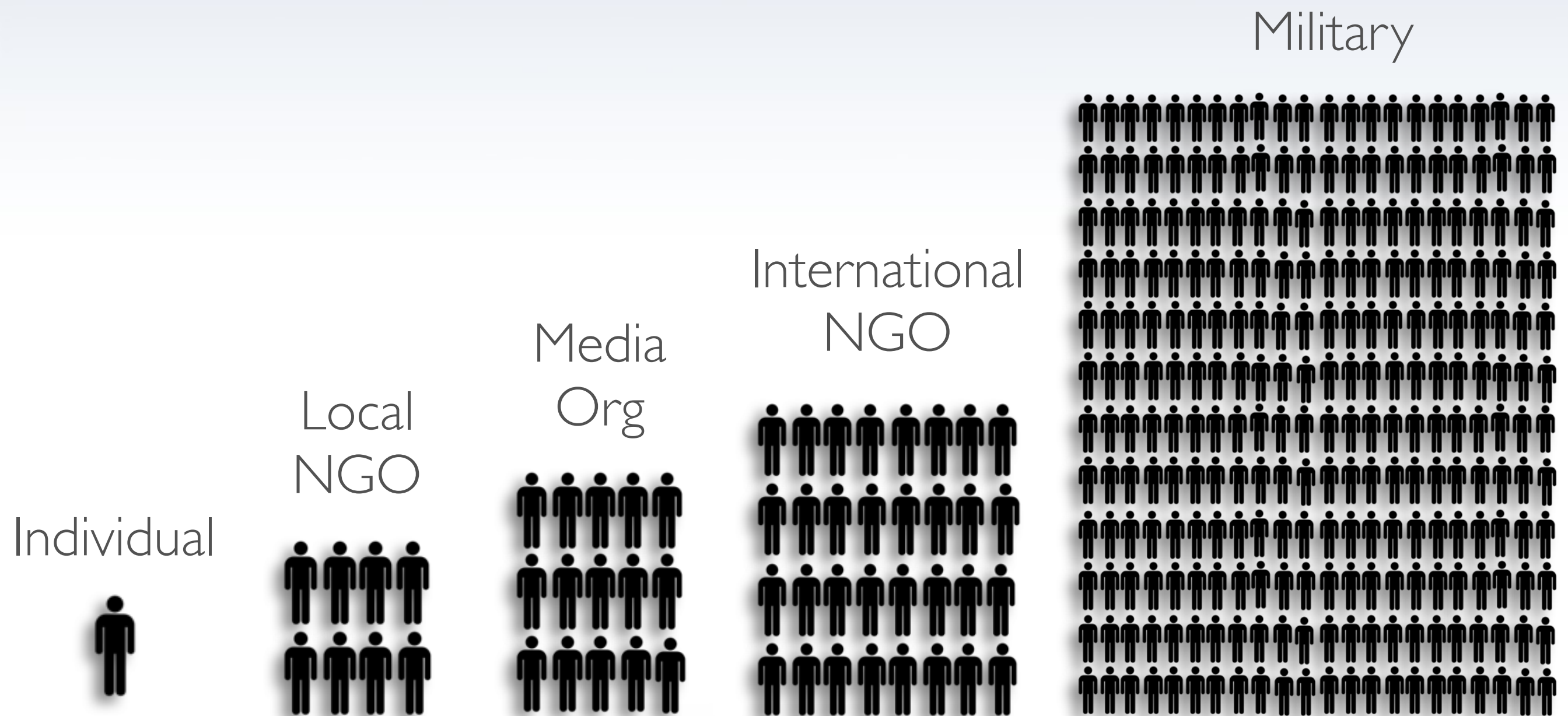
Article history

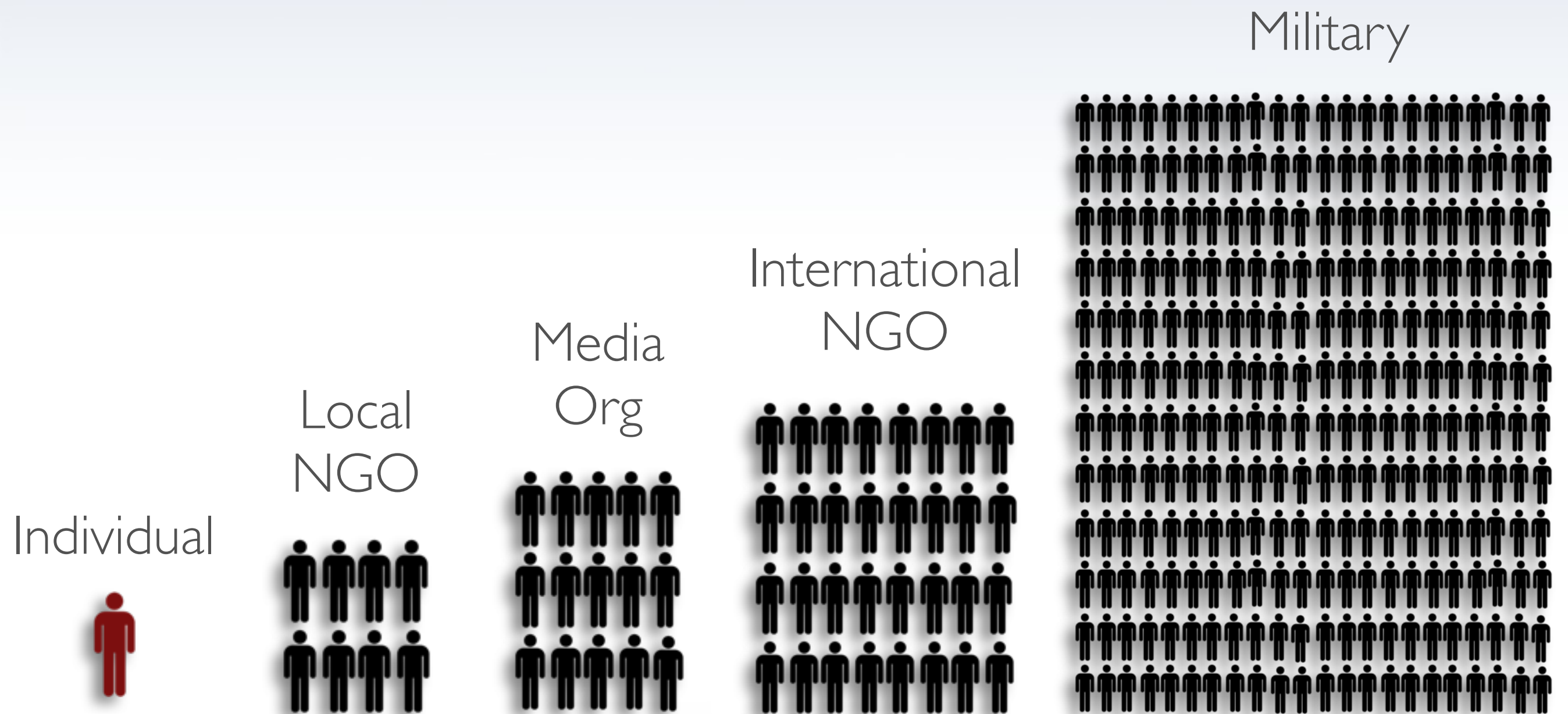
Maikel Nabil is an Egyptian citizen and blogger who was sentenced to three years' imprisonment on 10 April by a secretive military tribunal on the dubious charge of "insulting the army". This is a grave violation of human rights and a betrayal of the objectives of the Egyptian people's revolution. His sentence must be overturned regardless of what one thinks of Nabil's writings or of his politics. Patriotism cannot be invoked to defend injustice.



“We gave Egyptian National Security a dedicated username and password [to access the Ushahidi platform]”







Individual



Local
NGO



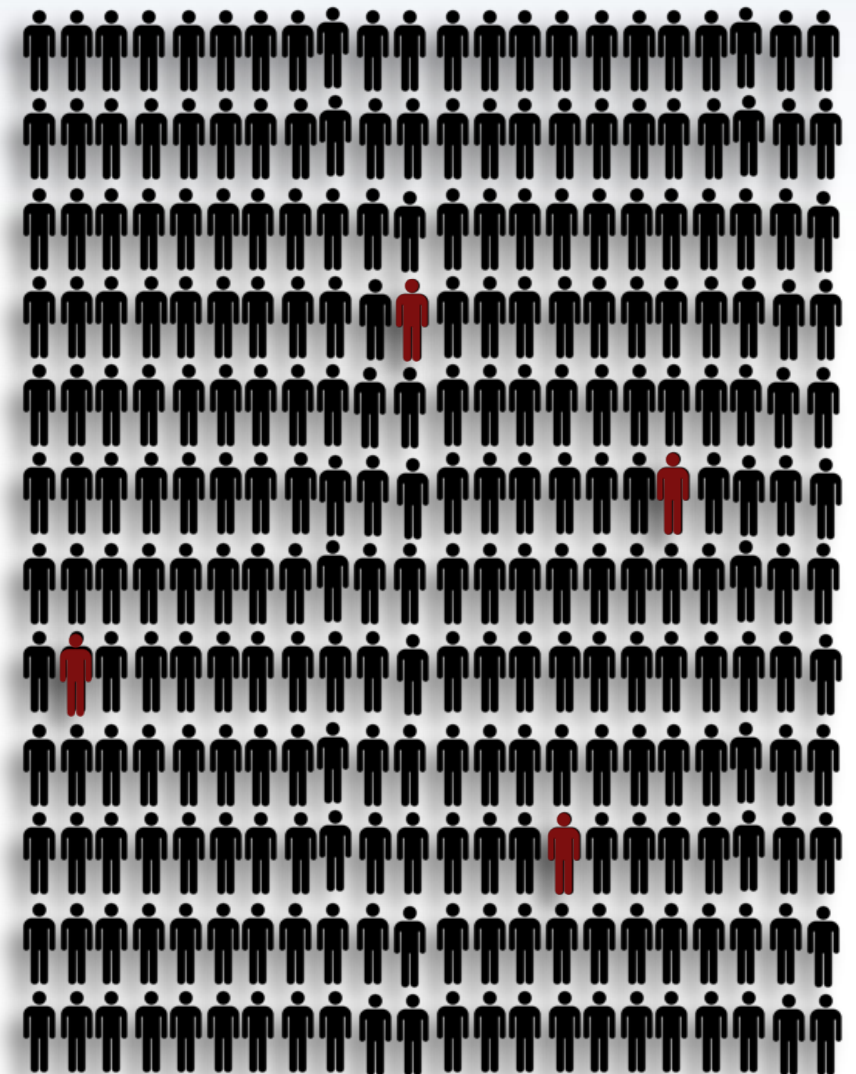
Media
Org



International
NGO



Military





TED Fellow



Colleague's
Consulting



Worked on
Pakreport

Reputation

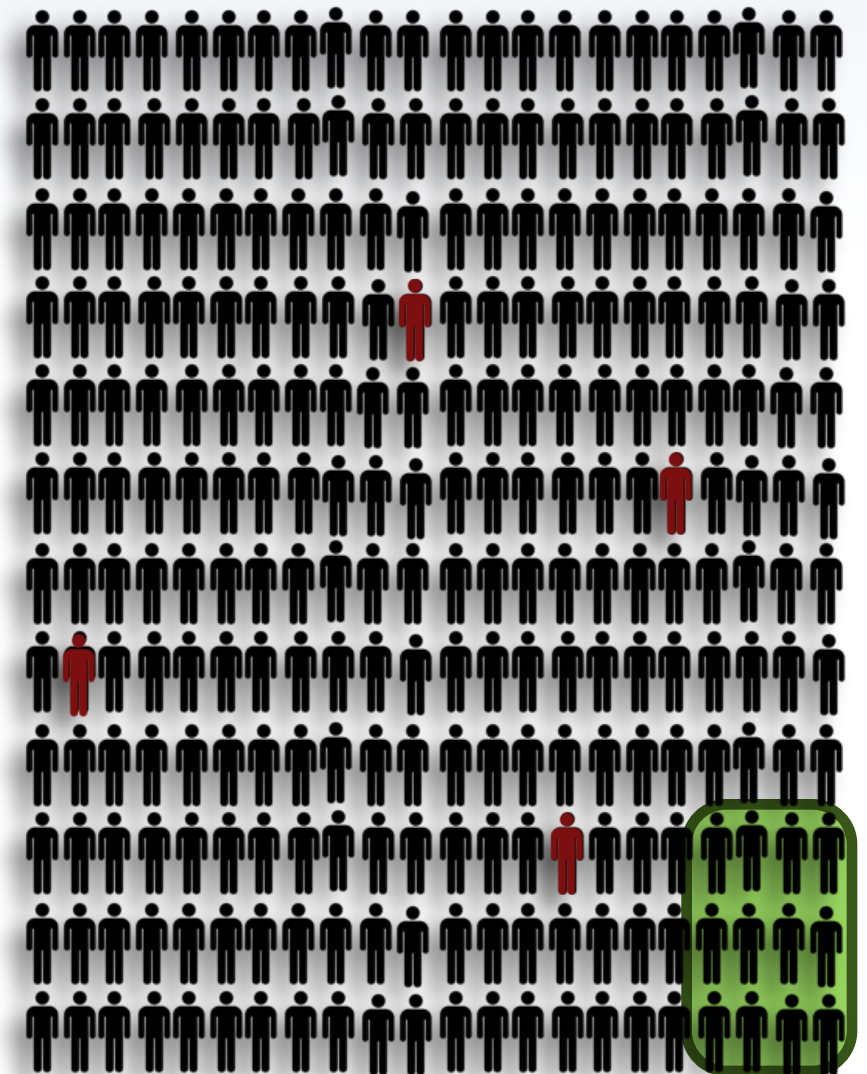
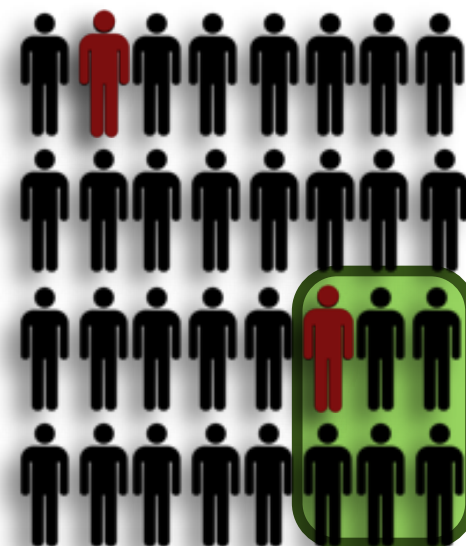
Military

International
NGO

Media
Org

Local
NGO

Individual



Isolation of Operations

Threats to Deployment Managers

Ignorance



Education
Standards
Best Practices

Direct
Attacks



Anonymity
Bigger the Better

Infiltration



Reputation
Isolate Operations

...we are responsible for deploying a crisis map



...we are responsible for deploying a crisis map



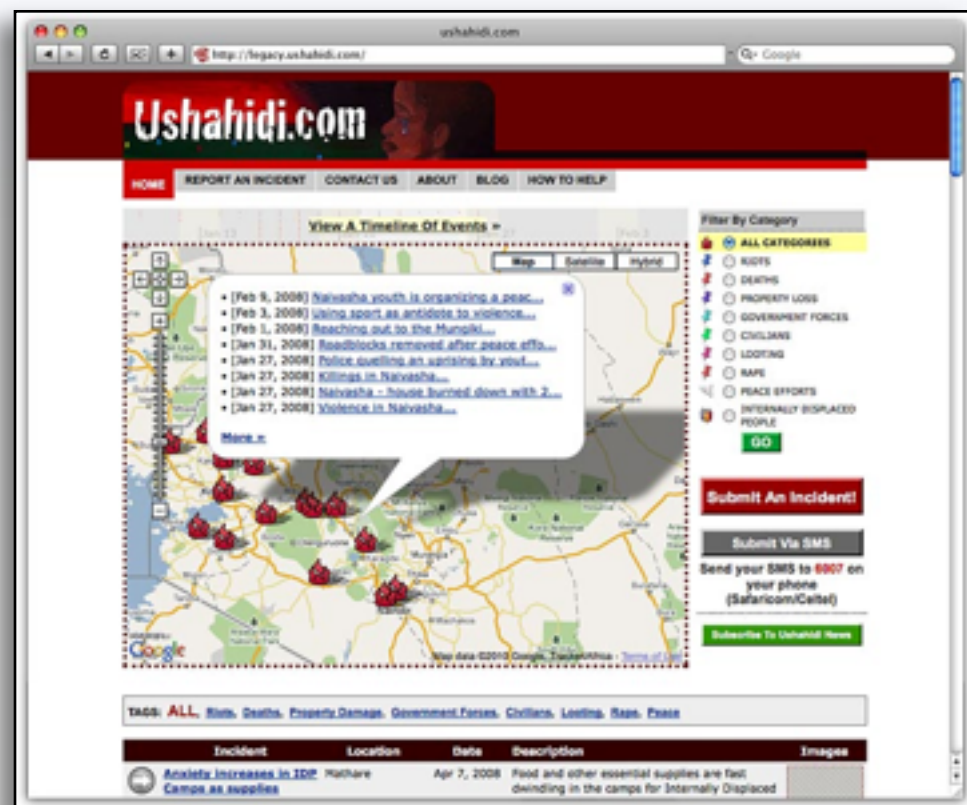
Code it
Yourself



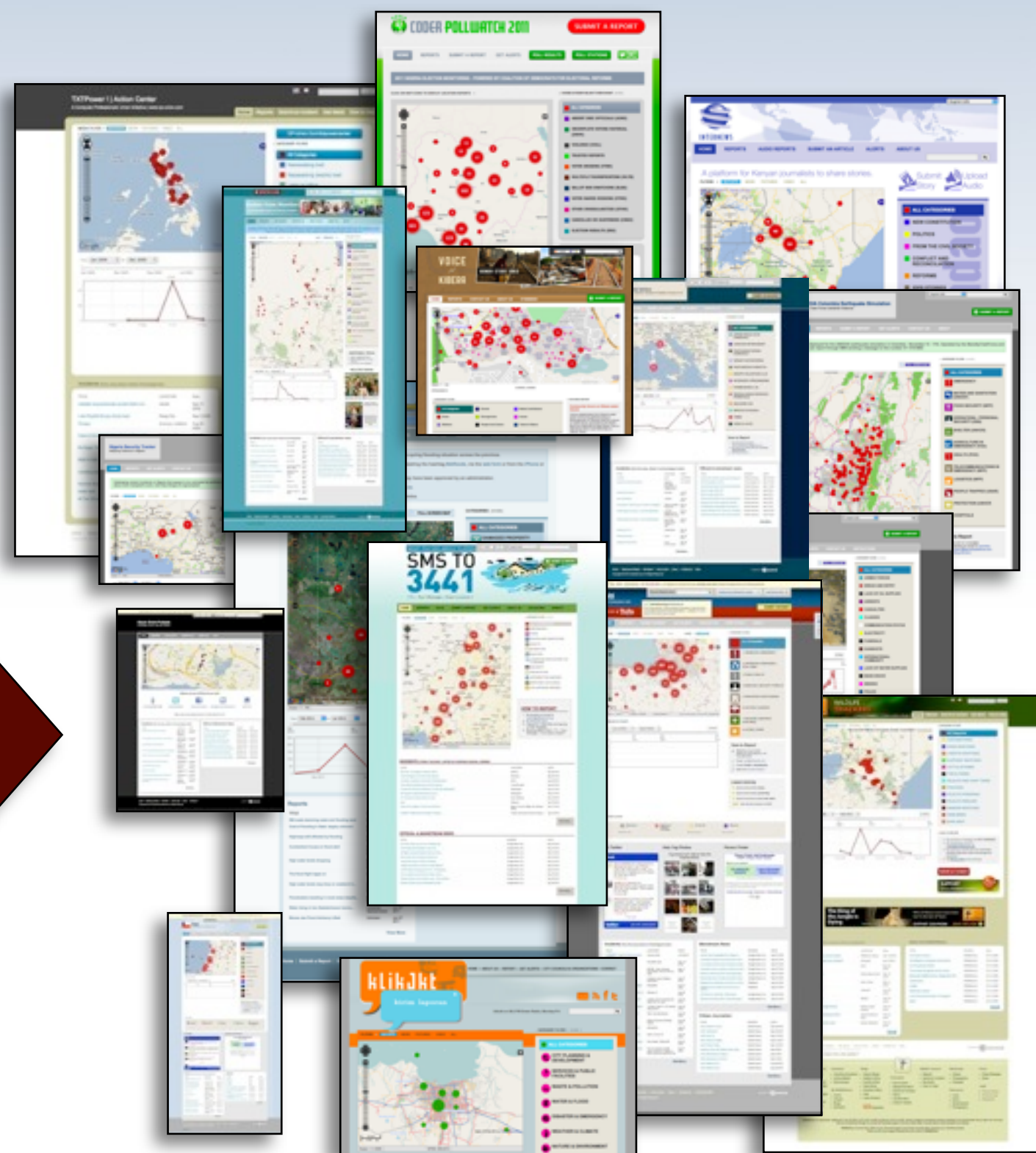
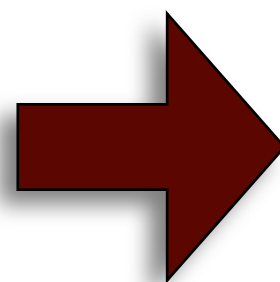
Open Source
Crisis Mapping Apps



Kludge Existing
Services



2008

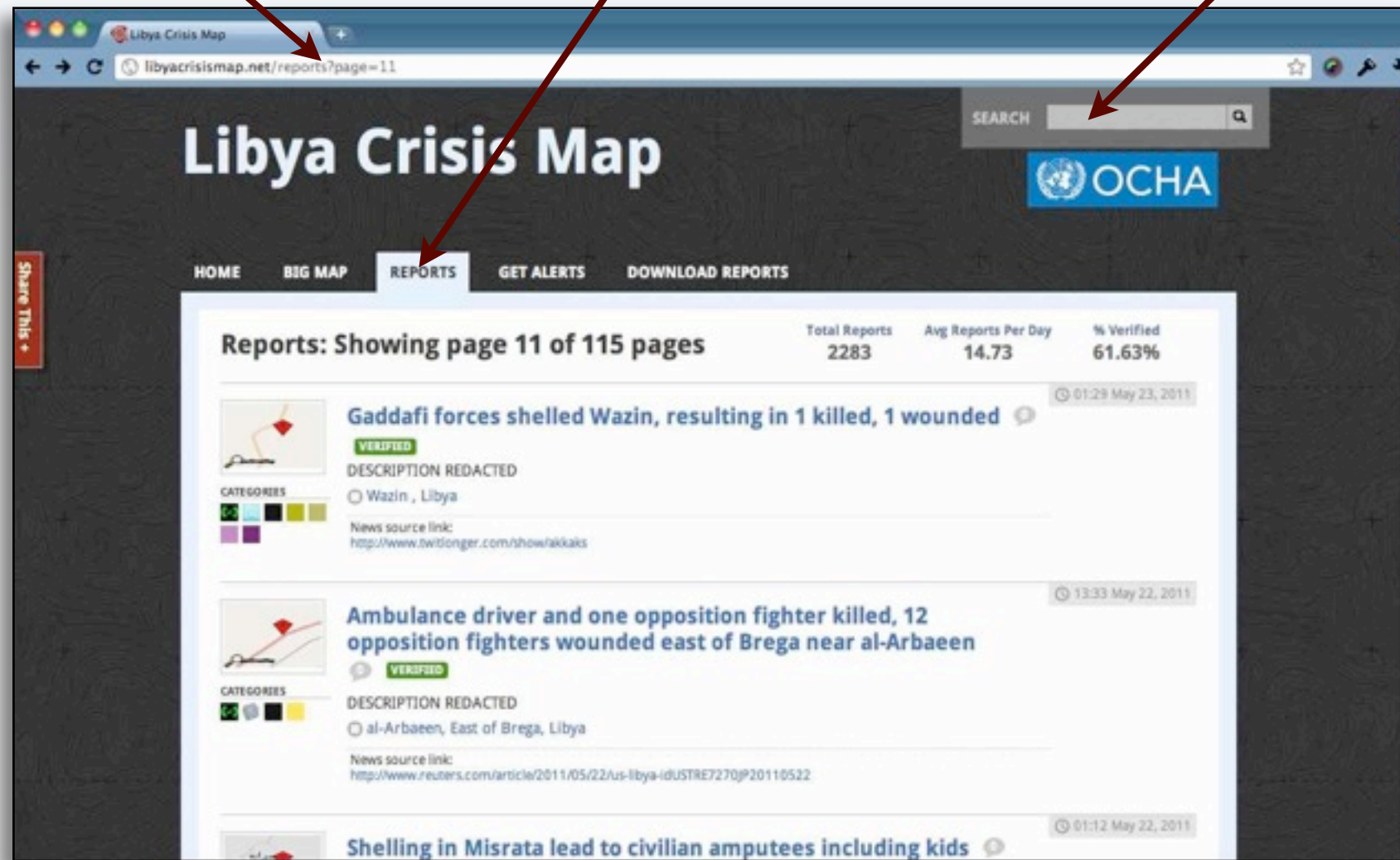


2011

Direct URL Access

Search Leakage

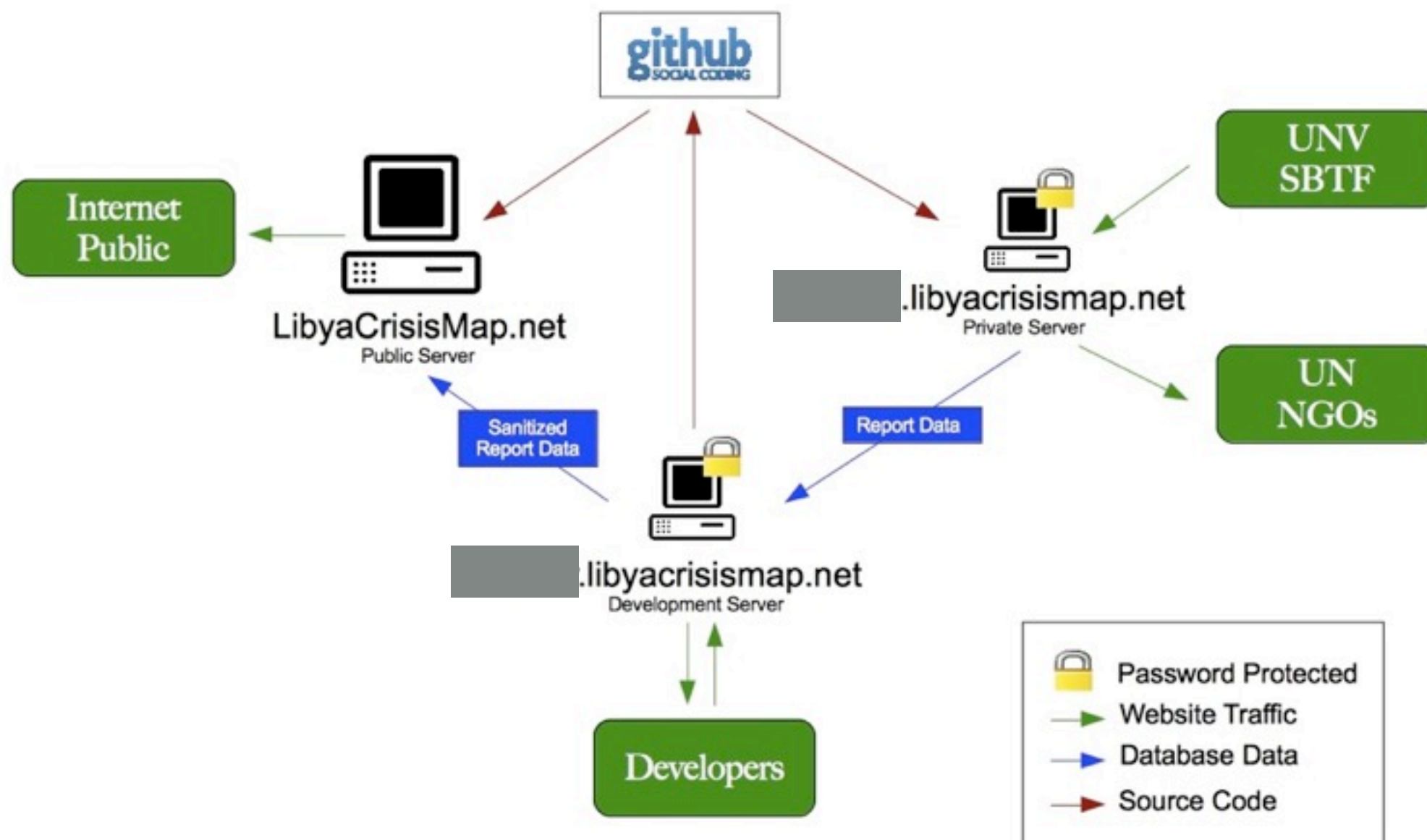
Reports Listing



Reports are private until approved.....unless

Libya Crisis Map

Social Media Mapping for Common Operational Datasets



Platform Considerations

Security



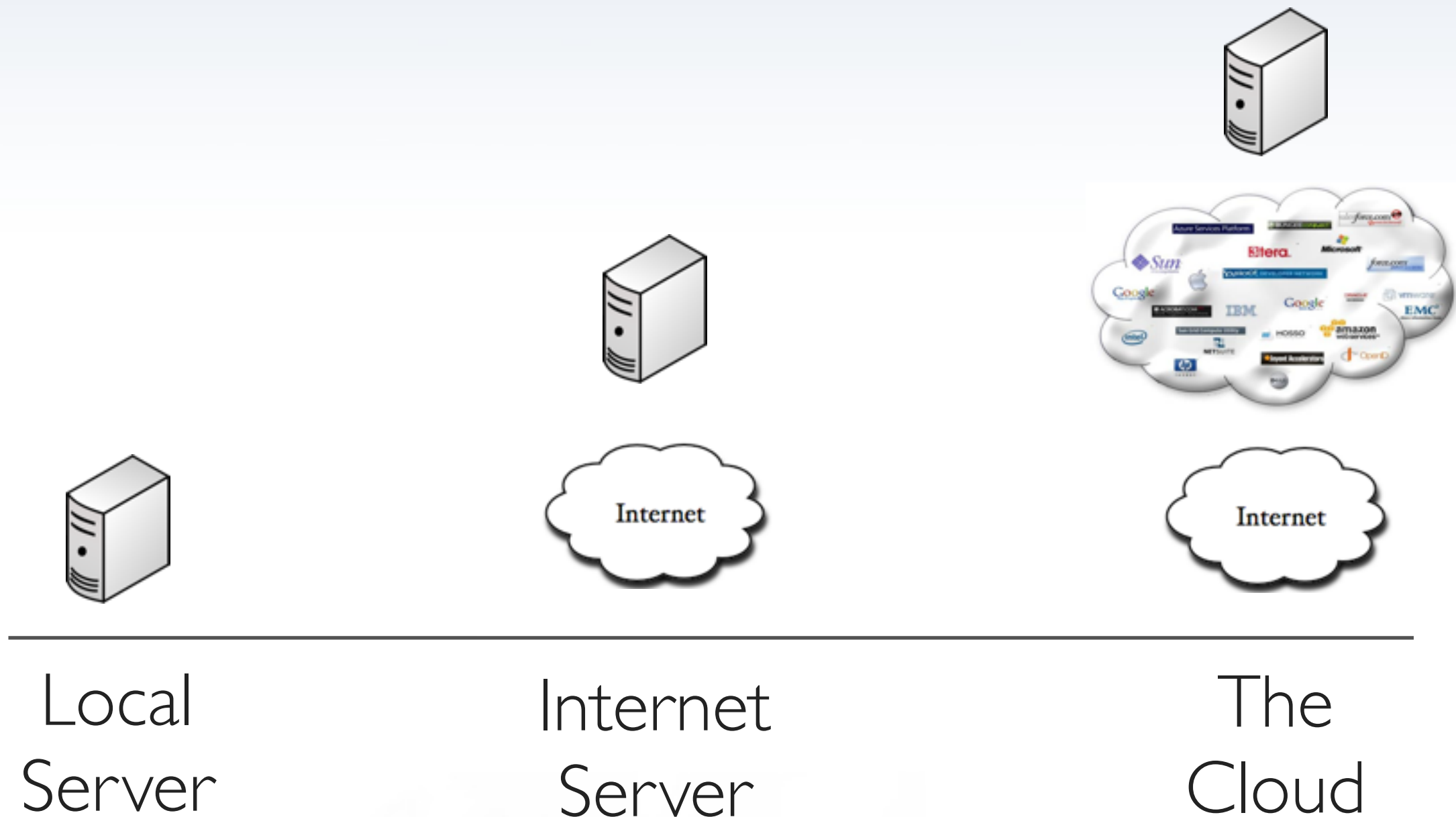
Code Vetting
Secure Coding

Adaptability



Source Access
Helpful Authors
Previous Additions

...we are responsible for deploying a crisis map



HOME / TECHNOLOGY: THE FUTURE AND WHAT TO DO ABOUT IT.

Block Like an Egyptian

How did the Egyptian government turn off the Internet?

By Christopher Beam

Posted Friday, Jan. 28, 2011, at 4:55 PM ET



As protesters take to the streets in Egypt, government has reportedly [shut down the Internet](#). How does that work? Does Egypt's Internet have an on/off switch?

No. While we don't

or anyone—can push government official c providers—Link Egypt Misr—and told them [cooperated](#) because t such a halt.) An engi of all the IP addresse addresses, thus cutti country. That doesn't simply had to chan

THE WALL STREET JOURNAL Digital Network

Wednesday, June 1, 2011 As of 12:00 AM New York 80° | 60°

THE WALL STREET JOURNAL TECHNOLOGY

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Digits Personal Technology What They Know All Things Digital

TOP STORIES IN Technology

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2 of 12 Ameritrade to Discuss Pursuit of E*Trade

3 of 12 Google+'s Bradley Horowitz Joins Board of Wordnik

TECHNOLOGY | JUNE 1, 2011

Mideast Uses Western Tools to Battle the Skype Rebellion

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Syria Cuts the Internet Government halts connection, hoping to halt protests By Kari Lipschutz

June 04 2011

Technology

Share 47

Like

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0

Syria pulled the plug on the Internet. As an unwavering anti-government movement continues to demonstrate against Syrian President Bashar al-Assad, government officials blocked most of the country's Internet network, cutting off a vital

Advertisement

Cast Your Vote

Real-Time Results

Platform Location

Observable



Encryption
Obfuscation

Attackable



DOS Prevention
IP Mobility
Synchronization
Expect Outages

...in order to _____.

?

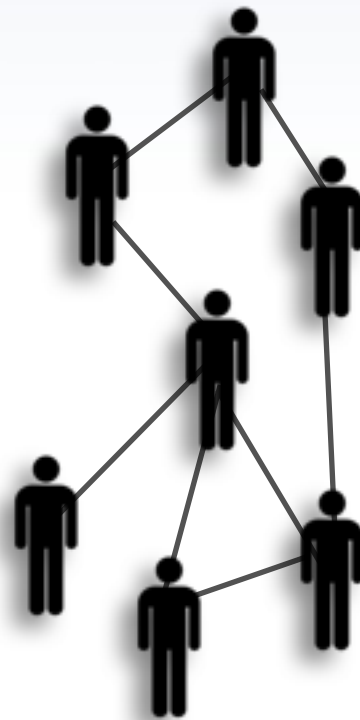
Setup Platform

basic tech skills + server

Operate Successfully

the skills needed to perform the deployment effectively, securely

Spreading the Word



No One

Private
Network

Everyone



Message Corruption

Spreading the Word

Misinterpretation



Anonymity
Bigger the Better

Corruption



Source Access
Helpful Authors

Collection Sources



Direct
Messages



Social
Media



Professional
Media



A Gay Girl In Damascus



A Heterosexual Married American Guy in Ireland

Collecting Reports

Verification



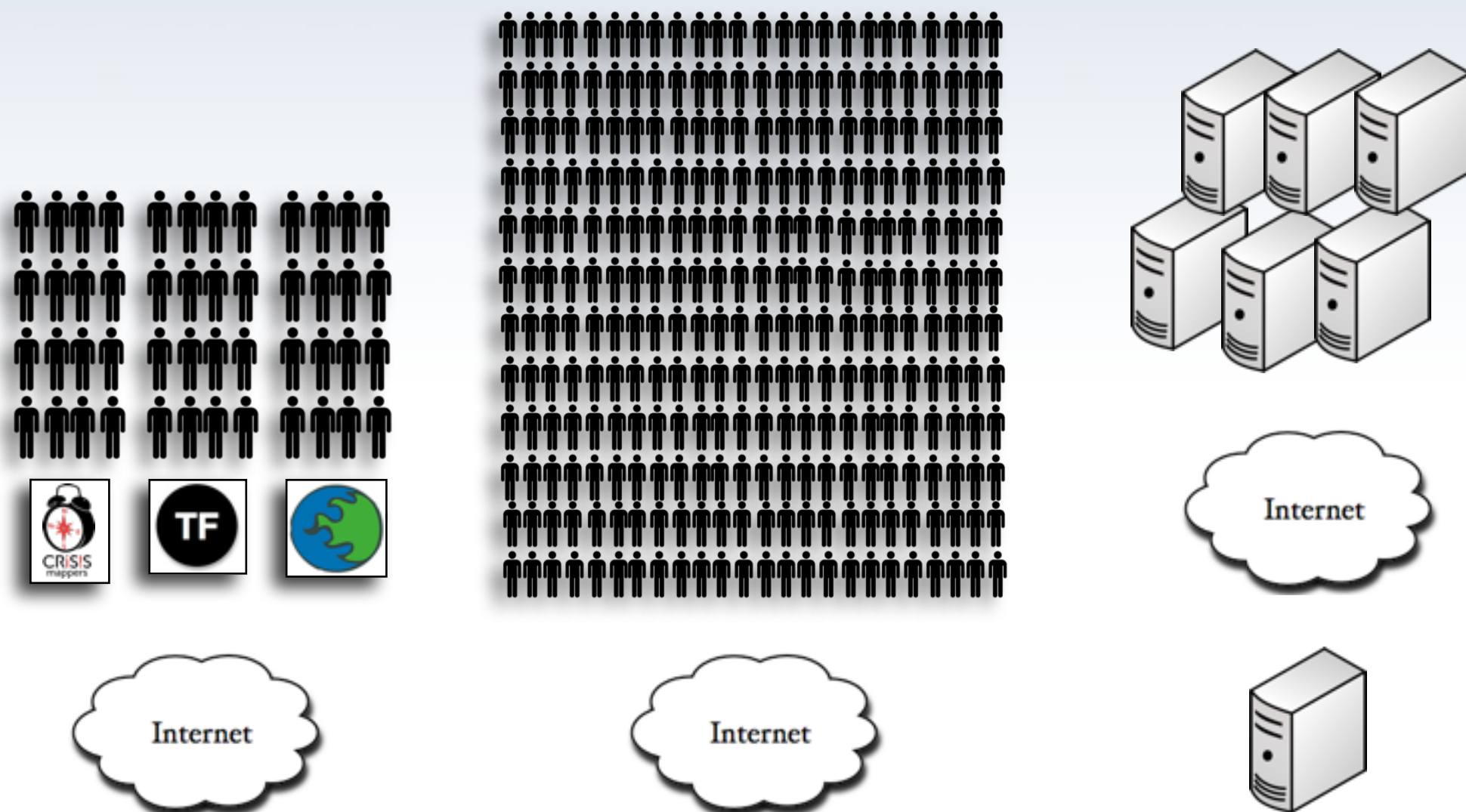
History
Reputation
Collaboration

Collection



Multiple Methods
Expect Outages

Message Processing



Local
Team

Crisis Mapping
Community

Any Online
Volunteers

Automated
Analysis

Mail Calendar Documents Sites Groups more »

george@roguegenius.com

Google docs ☆ Libya Geolocations Anyone with the link Updated 140 days ago by r.kirk.morris Saved Share

File Edit View Insert Format Data Tools Help

Formula: # Show all formulas

	A	B	C	D	E	F	G	H	I
1	#	INCIDENT TITLE	LOCATION	CATEGORY	LATITUDE	LONGITUDE	APPROVE	VERIFIED	
2	347	Economiste	: 4, Rue Abdelaziz Ethaalbi Al El Menzah V Tunis	Geo-Located, Print, Other,	36.846959	10.174695	YES	YES	
3	349	Le Temps	1004 El Menzah - Tunis - Tunisie T: +216 71 238 222 Fax: +216 71 232 761	Geo-Located, Print, Other,	36.846959	10.174695	YES	YES	
4	340	Nessma TV	14, Rue 8006, Monplaisir 1073, Tunis	Geo-Located, TV Stations, Other,	36.815458	10.185734	YES	YES	
5	359	Al-Chourouk	25, Rue Jean Jaures, Tunis 1000, Tunisia	Geo-Located, Print, Other,	36.80325	10.182649	YES	YES	
6	69	Health Clinic - Gasser Ben Ghashir	32.683284, 13.175867	Geo-Located, Hospital Location, Other,	32.683115	13.176142	YES	NO	
7	38	HOSPITAL Al Tripoli Al Tripoli Medical Centre	32.854679, 13.229728	Geo-Located, Hospital Location, Media News,	32.853498	13.230099	YES	NO	
8	64	Psychiatric Hospital - Tripoli	32.874938, 13.137975	Geo-Located, Hospital Location,	32.875027	13.140584	YES	NO	
9	41	HOSPITAL Al Tripoli Al Tripoli Central Hospital	32.880596, 13.190106	Geo-Located, Hospital Location,	32.880717	13.190981	YES	NO	
10	48	HOSPITAL - Tripoli - Al Jalaa Children Hospital.	32.8851, 13.1633	Geo-Located, Hospital Location, Media News,	32.884705	13.164151	YES	NO	
11	39	HOSPITAL Al Tripoli Al Tripoli Eyes Hospital	32.8962, 13.200803	Geo-Located, Hospital Location, Media News,	32.895103	13.201043	YES	NO	
12		Desperate refugees continue to flow to Libya's border		Geo-Located, Border Crossing, Refugees/IDPs.					

Low-Tech Crowdsourcing

Want to Help Humanitarian Operations in Libya using your Laptop? Join UN Volunteers Online Now!

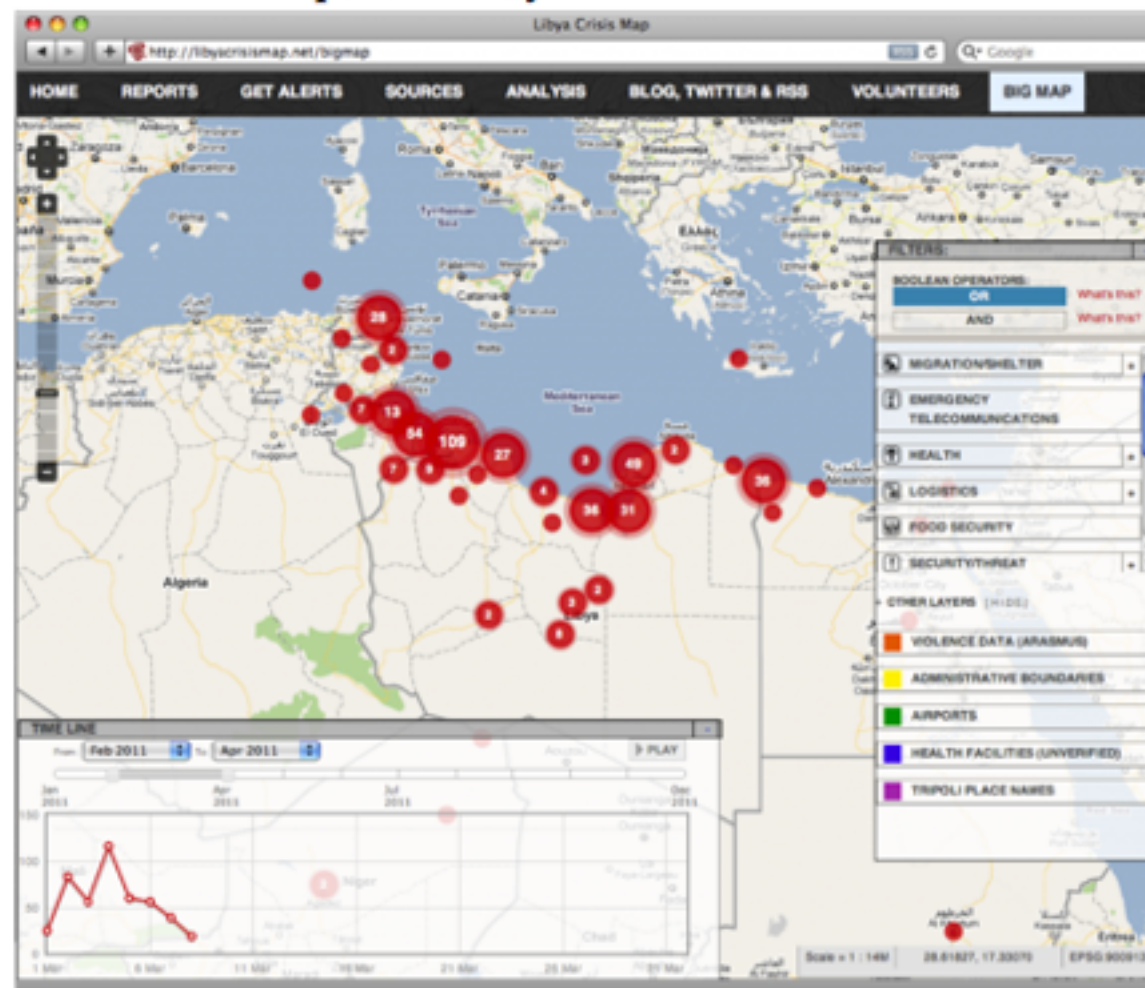
By PATRICK | Published: MARCH 10, 2011

The UN Online Volunteer Service (OVS) has now teamed up with the UN Office for the Coordination of Humanitarian Affairs (OCHA) and the Standby Task Force to support [crisis mapping efforts in Libya](#). This means you can now join the UN as a volunteer to provide direct support to the humanitarian response in Libya.

0

tweets

tweet



Help map SMS messages from the crisis in Pakistan

Instructions [Hide](#)

This job involves the translation, categorization and geotagging of SMS messages from Urdu, Pashtu or English speakers. This is a volunteer job for humanitarian benefit. We thank you in advance for your efforts to support this project.

1. Read the SMS message from Pakistan.
2. If you don't understand the language the SMS is written in, click "I can't understand this language, get me a new message"
3. If the SMS is illegible, junk, or does not contain words, check the box to "Mark as not enough information"
4. Answer the questions that follow
5. Select the appropriate/applicable category for the message from the list shown. You may select more than one category.
6. If the SMS contains geographic information, click on the map to place a red marker in the location nearest to the geographic location from the SMS.

Please use the "Notes" box to include any other relevant or important information about the SMS message content. Thank you!

The SMS: [FL communities using un safe water resources (rivers,ponds) in thatta, sindh]

Can you translate this SMS?

Language (required)

- ☐ English
- ☐ Pashtu
- ☐ Urdu
- ☐ Other

Please fill out as many fields about this SMS as possible

Hi-Tech Crowdsourcing

Crowdsourced Micro-Tasking

Message

00479 - the people in the village of god need food and water so that they can stay . It is isn the university of Kiskeya (in the area of delams 35 right of the main delmas road) . pleas respond - 00479 GeoLoc () **
Preprocessed by the QN Plugin SMS Parser**

Spam Can't Understand No Location Not Actionable Actionable

Filtering Tips

1. PRETEND THE LATITUDE / LONGITUDE DOESN'T EXIST. If the message words itself mention a location. Ignore it.
2. Super-critical messages: If you see a message that has a major impact to responders, significant violence or other emergency.
3. When in doubt, mark NO LOCATION. If a message says "no location".
4. Use your best judgement on whether or not a message contains information in the message is something that you can use to do your job.
5. A location can be anything that could be used to find a district, name of hospital / school / etc.
6. When in doubt, mark "No Location"

Description

- **Spam:** Message is completely out of context.
- **Can't Understand:** Have no idea what is being said.
- **Not Actionable:** No description of needs or information.
- **No Location:** No location is mentioned in the message.
- **Actionable:** Message has a location and a clear need.

Message

00479 - the people in the village of god need food and water so that they can stay . It is isn the university of Kiskeya (in the area of delams 35 right of the main delmas road) . pleas respond - 00479 GeoLoc () **
Preprocessed by the QN Plugin SMS Parser**

Categories

- ☐ Agriculture
- ☐ Camp Mgmt
- ☐ Comms
- ☐ Education
- ☐ Functioning communication hubs
- ☐ Health
- ☐ Logistics
- ☐ Medical Emergency
- ☐ Not Actionable
- ☐ Nutrition
- ☐ Other
- ☐ Personal Security
- ☐ Priority
- ☐ Protection
- ☐ Recovery
- ☐ Search and Rescue
 - ☐ Missing persons
 - ☐ Removal of corpses
 - ☐ Buried and injured persons
- ☐ Shelter
- ☐ Unspecified help requests
- ☐ Water and Sanitation

Submit

Message

00479 - the people in the village of god need food and water so that they can stay . It is isn the university of Kiskeya (in the area of delams 35 right of the main delmas road) . pleas respond - 00479 GeoLoc () **
Preprocessed by the QN Plugin SMS Parser**

Incident Location



City, State and/or Country

FIND LOCATION

* Search for your location using a location name or latitude,longitude coordinates (format: 38.19,-85.61), or click on the map to pinpoint the correct location.

Refine Location name

Example: Corner of City Market, 5th Street & 4th Avenue, Johannesburg

QuickNets Test Center

Not Found

Approx to City / Village

Approx to 10KM

Approx to 1KM

Exact

Message Processing

Infiltration



Need to Know
Corroboration

Inaccuracy



Corroboration
Reputation
History

Post-Crisis Opportunities

The screenshot displays the noula.ht website, a crisis management portal for Haiti. The header includes contact information (e-mail: info@noula.net | tel: 177 ou 3753-8500), navigation links (Nous Contacter, Remerciements, Se connecter), and a timestamp (lundi 25 juillet 2011 19:10:46). The main content area features a map of Port-au-Prince with numerous green circular markers indicating message origins, each labeled with a number. A sidebar on the left titled 'CARTOGRAPHIE DE LA SITUATION' lists categories: Origine des messages (30508), Sites d'hébergement (1396), Hopitaux (757), and Associations de Quartier (25). A red alert box titled 'Alerte au Choléra!' contains the text: 'Attention! : Les messages enregistrés doivent être vérifiés par les responsables'. The bottom navigation bar includes links for 'Rapporter un incident', 'Centre d'appel : 177 or 3753-8500', 'Par SMS : 177', and 'En Ligne : Cliquez ici'. The footer section contains a 'Notification' box, tabs for 'Messages & Alertes' and 'Lieux Critiques', and a link to 'Voir tous les messages ...'.

noula.ht e-mail: info@noula.net | tel: 177 ou 3753-8500 | [Nous Contacter](#) [Remerciements](#) [Se connecter](#) lundi 25 juillet 2011 19:10:46

NOULA, Portail de gestion de crise Fait en Haïti . Inspiré par et développé pour une nation forte.

Toutes les catégories

CARTOGRAPHIE DE LA SITUATION

- Origine des messages(30508)
- Sites d'hébergement(1396)
- Hopitaux(757)
- Associations de Quartier(25)

Alerte au Choléra!

Attention! :
Les messages
enregistrés
doivent être vérifiés
par les responsables

Messages

Map Satellite Hybrid O.S.M.

Google search the map Search Séquence Du 06/25/2011 Au 07/25/2011 Grouper les messages

Rapporter un incident Centre d'appel : 177 or 3753-8500 SMS Par SMS : 177 En Ligne : Cliquez ici

Notification

Lettres originales collectées par l'OIM

Cliquez ici pour vous enregistrer

Messages & Alertes Lieux Critiques

Les derniers messages postés Voir tous les messages ...

YES

Worth it?





Lives on the Line

Defending Crisis Maps in
Libya, Sudan, and Pakistan



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