Sensors, empowerment, and accountability (SEMA) in Africa

Yola Georgiadou
Faculty of Geo-information Science and Earth Observation (ITC)
University Twente, The Netherlands

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Some preliminary remarks

ICT as silver bullet for development

“Mobile telephony... can contribute meaningfully to every single MDG. The gains are breathtaking in promoting livelihoods, improved health, better schools, and other areas.”

- Prof Jeffrey Sachs, special adviser to the UN Secretary General on the MDGs

“New technology-based solutions that did not exists when the [Millennium Development] goals were endorsed can and should be leveraged to allow for rapid scaling up. The most important of these technologies involve use of mobile telephones, broadband internet and other information and communication technologies”

- UN Secretary General Ban Ki Moon
ICT Applications

For commerce, social interaction, knowledge production, citizen science and political action on the web

- Disruptive / Killer apps
- Non-disruptive apps (yet)

An app is a killer when...

1. Users adopt the app and abandon their old way of doing something

   Because it improves their experience by changing how they do that thing

2. Organizations harnessing the app displace organizations using old ones
Focus on political ICT applications

Apps for commerce, social interaction, knowledge production, citizen science and political action on the geoweb

- Disruptive / Killer apps?
- Non-disruptive apps (yet)
Killer apps: political mobilization

Killer apps: political decision making
Points

• SEMA: a story

• Political killer apps on the geoweb?

• Propositions

Water
Human Sensor Web (HSW): Pilot - Jeroen Verplanke & Robert Becht
NO WATER?
sms
“MAJI A 999”
to
0778 700 700
Human Sensor Web (HSW) Implementation
Implementation
1st lesson

*People do not send SMS: “no”, “dirty”.*

*Greeting, how are you this holiday? In the area, Mwembe Shauri, there is no water since 7:00 in the morning; we do not know what the problem is. We request you to come and help us.*

The software of the human sensor web does not understand complex speech acts

2nd lesson

*There is a gender mismatch*

The mobile phone owners are usually men

Those who fetch the water from the public water points are usually women.
3rd lesson

Community loyalty may override the urgency of reporting the grievance.

Community members are loyal to their leader.

They may refrain from using the human sensor web unless the community leader endorses it.

4th lesson

Distrust towards the water authority in Zanzibar runs deep in some communities.

This is due to the past history of the water authority.

The water authority often did not respond to citizens’ grievances in a timely fashion.
5\textsuperscript{th} lesson

Citizens will report problems with service delivery to \textit{independent} parties, who they trust and who are closer to them than official authorities.

Citizens must clearly see a benefit—that their voice is heard & their grievance is taken to the Member of Parliament representing their district.

6\textsuperscript{th} lesson

\textbf{Government may use the HSW for two reasons:}

(1) to tap on citizens as ‘cheap labour’ to report on problems in sparsely populated rural areas

(1) as independent information to verify their own official information.
Question

To what extent and how can citizens in Tanzania directly exact accountability from public service providers with the human sensor web (HSW)?
Sensors, empowerment, and accountability: a Digital Earth view from East Africa

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Yola Georgiadou\textsuperscript{a}, Benson Bana\textsuperscript{b}, Robert Becht\textsuperscript{a}, Robert Hoppe\textsuperscript{c}, Justinian Ikingura\textsuperscript{d}, Menno-Jan Kraak\textsuperscript{a}, Kate Lance\textsuperscript{a}, Rob Lemmens\textsuperscript{a}, Juma Hemed Lungo\textsuperscript{d}, Michael McCall\textsuperscript{a}, Gianluca Miscione\textsuperscript{a} & Jeroen Verplanke\textsuperscript{a}

Points

• SEMA: a story

• Conceptualising political killer apps on the geoweb?

• Propositions
Old Politics

Citizens → Traditional Organizations → Politicians & Public Agencies → Public Sphere/Public opinion → Communicative Pressure → Public Action → Laws & Policies

input

Elections Lobbying

Archon Fung et al 2011
Old Politics in Africa (our POV)

- Traditional Organizations
- Laws & Policies
- Donors / IFIs
- Public Action
- ‘Development’

Elections Lobbying
Communicative Pressure

Citizens
Public Sphere/ Public opinion
Global media

New Politics in Africa with HSW

- Traditional Organizations
- Laws & Policies
- Donors / IFIs
- Public Action
- ‘Development’

HSW
Public Sphere/ Public opinion
Global media

Georgiadou and Verplanke 2011

Georgiadou and Verplanke 2011
New Politics in Africa with HSW

New Politics in Africa with SEMA

Georgiadou and Verplanke 2011
isruptive – Killer apps

No political killer apps yet ....

Georgiadou and Verplanke 2011
But huge interest in DCs & unexplored potential...

The silver bullet does not work...
Politics in Africa with ICT

- Traditional Organizations
- Politicians & Public Agencies
- Laws & Policies
- International NGOs
- Donors / IFIs
- Aid / Contracts

ICT application: Development

Politics in Africa with ICT (Incorrect)

- Tradition Organizations
- Politicians & Public Agencies
- Laws & Policies
- International NGOs
- Donors / IFIs
- Aid / Contracts

ICT application: Development
Propositions

1. For Geo-information Science research to be truly global, attention to political apps on the geoweb is warranted

2. Inter-disciplinarity a sine qua non to understand the dynamics of success and rate of innovation of political apps

A template for research
Sources of inspiration for the ideas we present here:

1. **MSc students at ITC**: Field work with the pilot HSW in Zanzibar

2. **Prof. Robert Hoppe**: on differences between the media/the web as a means for improved deliberation and decision-making and the media/the web as a means for agenda-setting, issue formation and political mobilization.

3. **Kate Lance**: PhD research on the influence of donors on the behaviour of government agencies in the geospatial sector in Africa

   video: [http://cddrl.stanford.edu/events/recording/6389/1/538](http://cddrl.stanford.edu/events/recording/6389/1/538)
   [especially Fung’s concept of political apps on the web & dynamics of different types of apps]

*Georgiadou and Verplanke 2011*

thank you