Empowering Citizens’ Observatory
Enhancing Geo-data Connectivity

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Emerging trends in GI

**GI Trends**
- Real-time & 3D
- Fusion & Convergence
- Sharing & Openness

**Technologies**
- LBS, UAV, AR
- LBSNS, Mash-up service
- Open data, Big data

**Values**
- Mobility & Reality
- Effectiveness & New leading business
- Accessibility & User-friendliness
Citizen scientists classify storms for the Cyclone Center

Massive crowdsourced identifications of cyclones are helping scientists classify storms

The authors report more than 7,500 volunteers have sifted through approximately 350,000 images. Each citizen scientist classifies a storm based on satellite images. Multiple classifications are given for each image so that there is a degree of redundancy. When the classifications were compared with automated methods and aircraft data from the Atlantic, the authors found that in some cases, the crowd outperforms the automated method.

Cyclone Gilbert, September 14, 1988 top-of-cloud temperatures.
Volunteered Movement in Korea

Saemaeul Movement for rural small village

- Rapidly industrialising, but the small villages in poverty.
- Slogan: Diligence, Self-helping and collaboration
- Encourage community members to participate in the development process
WHAT TO DO?

1. Understand from citizen’s geospatial experiences and expectations
2. Raise geospatial awareness capacity in the community and society
3. Stimulate stakeholder groups’ participation in societal decisions
4. Provide a transparent link between citizens and the decision-making process
VGI & Quality Assurance

CrowdSourcing

High Velocity, but Quality Concerns, Need to Support!

QC. from history analysis
QC. from comparison with National GI
Validated Quality approved Compliant

National Authorised Data
Metadata
Physical Sensors SDI, GNSS, RS

Social Sensors Stakeholder, Governance

Community Group
Crowd Source
Holistic Approach

Accessibility Community Map for the Disable People in Seoul City

Source: CMCKorea.org
Standardisation for Connectivity

Ease to Use
Ease to Access
Linked Data

ISO/TC211
OGC
IHO

ISO 19154 GI – Ubiquitous Public Access – Reference Model
Evidence-based Decision Making

Grid-based Statistical Mapping System for Spatial Decision Making Support in Korea
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THANK YOU
FOR LISTENING!