What is the Future of GIS?

Luis Bermudez, Ph.D.
Sao Paulo, Brazil, May 29, 2012
We want a better world
Complex problems

Onde e que vai passar?
Sharing Information in the future for a better world - ideas

- Commonality of Data used to build a better world
- Sensors and models… another GIS layer
- GIS base maps
- Social challenge
- Agility of standards organization
- Multimedia and fun
Red Tide
Austria During the European Heat Wave of 2003

July and August of 2003, countries across Europe sizzled through what some scientists deemed their hottest summer since 1500 A.D. The scorching temperatures claimed at least 40,000 victims. Here, a coachman douses
Billions of Sensors – Real Time Data
Approximate temperature changes
Canada (2050)/ Global (2100):
Blue    -1 – 0
Green   1– 2/4
Yellow  2/4 – 3/5
Orange  3/5 – 5/7
What do challenges, phenomena, sensors, and models have in common?
Still Thinking?
Geospatial Integration
Layers can represent real time data
Layers can be forecast numerical model data
Layers can come from crowd sourced data
Base maps are real time features!
Air Quality Monitoring Station O3, August 15 2002

- Good
- Fair
- Poor

Population per square kilometre 2001, NB Health Regions

- 4.84000
- 4.84001 - 5.51000
- 5.5101 - 7.06000
- 7.08001 - 16.30000
- 16.30001 - 18.25000

Courtesy:
Eddie Oldfield
Director, NB Climate Change Hub

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What technologies should we use?
What processes should we engage with?
“Interoperability seems to be about the integration of information. What it’s really about is the coordination of organizational behavior.”

David Schell

Founder and Chairman Emeritus, Chief Strategist

OGC

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Standard Development Organizations (SDO)
World Wide Consensus

450 Members

- University: 24%
- Commercial: 41%
- Research: 7%
- NGO: 10%
- Government: 18%

- Asia Pacific: 59
- North America: 163
- Europe: 203
- Africa: 4
- Middle East: 7

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Agility – testing, prototyping ...
Product -> standard

- Agreement
- Document
- Set of rules
- Implementable
- World Wide Accepted
Capturing real needs

Capturing Requirements from **Domain Working Groups**

- Decision Support
- Earth Systems Science
- Meteorology and Oceanography
- Workflow
- …
Interoperability Program

I have not failed, I’ve just found 10,000 ways that won’t work.

Thomas Edison
Compliance Program

More than 650 implementing products in the market
Expect in the future more multimedia and fun

… OGC in 2 min.
Obrigado

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