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FROM «INFORMATION DELUGE» TO STRUCTURED KNOWLEDGE. How web technologies and web collaboration could support Natural Hazards Communication

This is the author's manuscript

Original Citation:

Availability:

This version is available <http://hdl.handle.net/2318/153333> since

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(Article begins on next page)



FROM «INFORMATION DELUGE» TO STRUCTURED KNOWLEDGE

How web technologies and web collaboration could
support Natural Hazards Communication

Elena Rapisardi | NatRisk-UNITO Sabina Di Franco | CNRIIA Marco Giardino | NatRisk-UNITO

GEOITALIA 2013

#From War Against Hazards



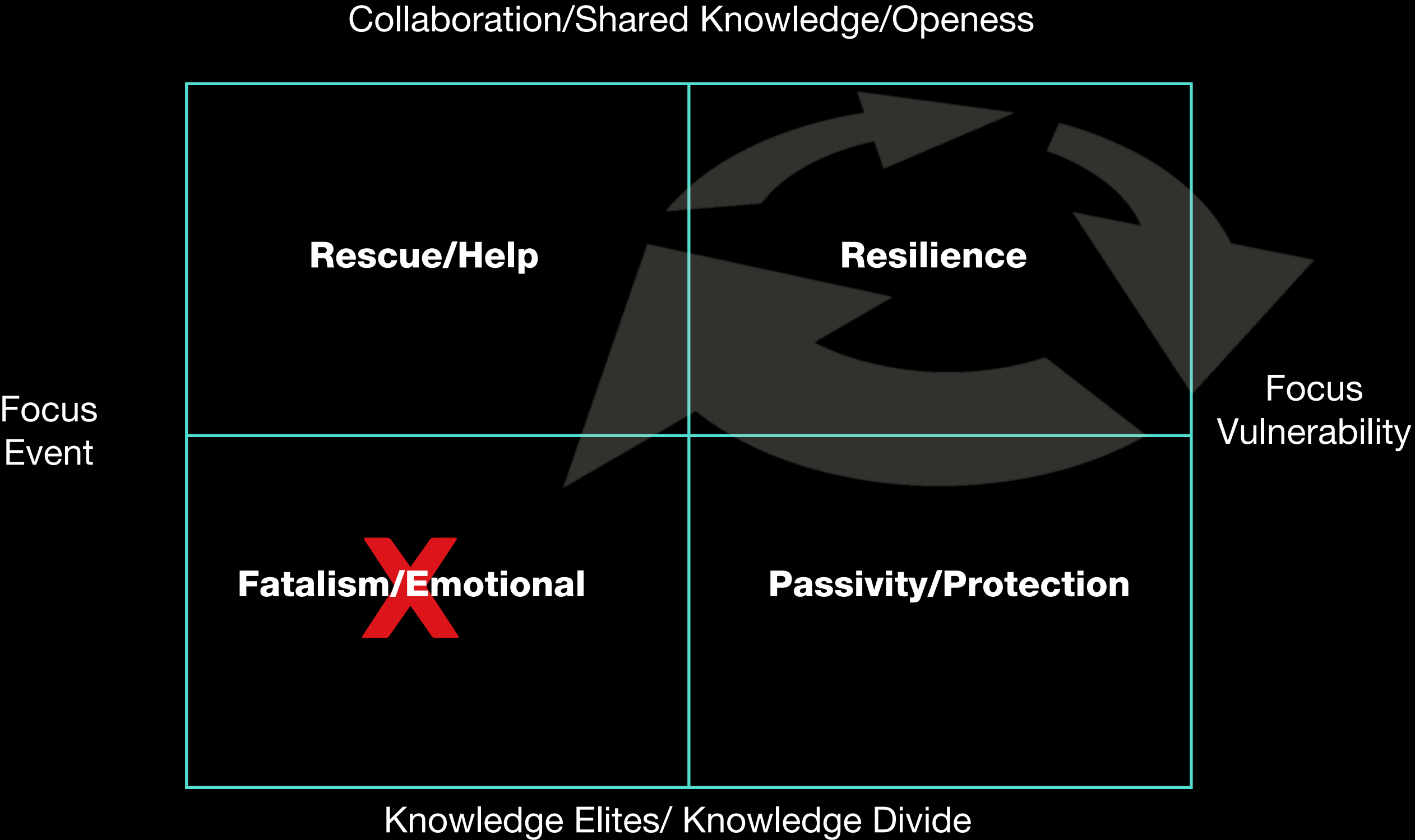
#To Preparedness





DISASTER RESILIENCE

From Protection to Resilience





WHAT HAPPENS

IN THE WEB ERA

THE WORLD OF DATA

NUMBER
OF EMAILS
SENT
EVERY SECOND

2.9
MILLION

DATA
CONSUMED BY
HOUSEHOLDS
EACH DAY

375
MEGABYTES

VIDEO
UPLOADED TO
YOUTUBE EVERY
MINUTE

20
HOURS

DATA PER
DAY
PROCESSED
BY GOOGLE

24
PETABYTES

TWEETS
PER
DAY

50
MILLION

TOTAL MINUTES
SPENT ON
FACEBOOK
EACH MONTH

700
BILLION

DATA SENT
AND RECEIVED
BY MOBILE
INTERNET USERS

1.3
EXABYTES

PRODUCTS
ORDERED ON
AMAZON PER
SECOND

72.9
ITEMS

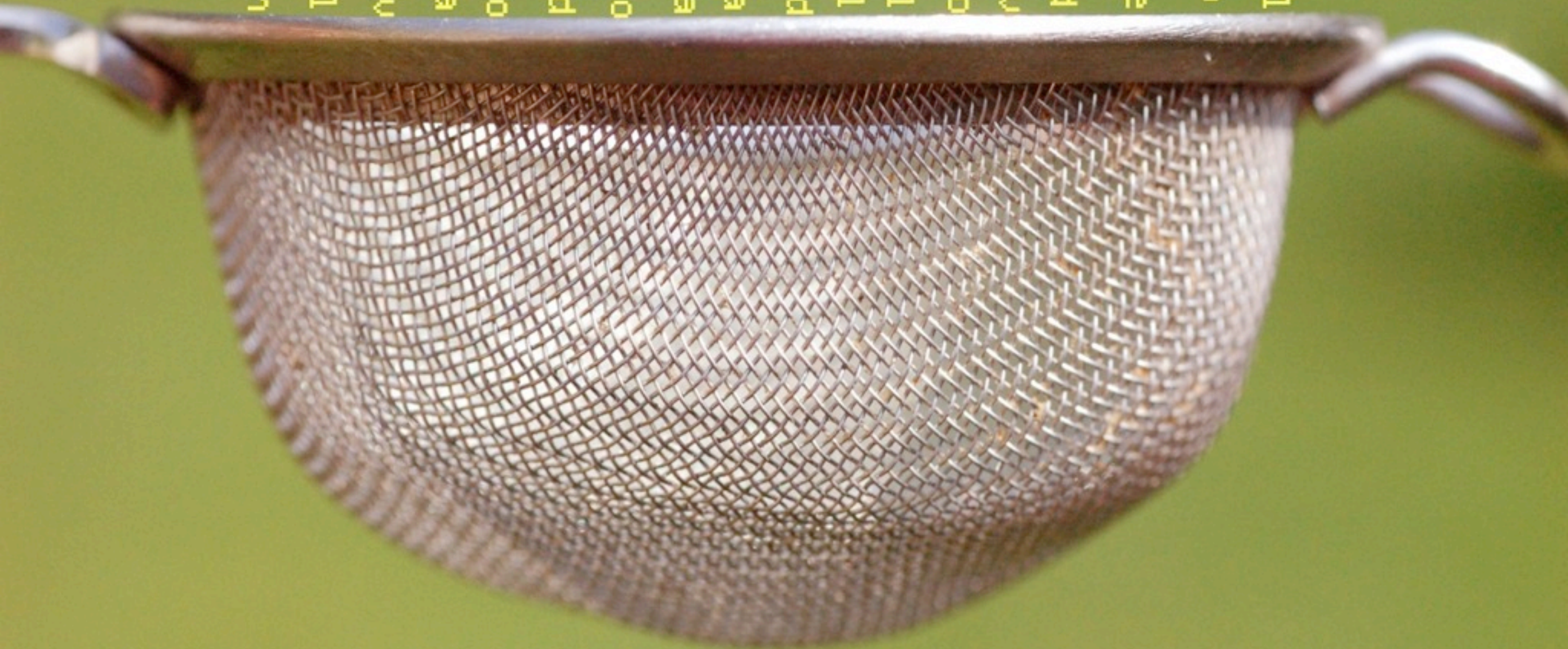
SOURCES: Cisco, comScore, MapR, Radicati Group, Twitter, YouTube

IN THE 21ST CENTURY, we live a large part of our lives online. Almost everything we do is reduced to bits and sent through cables around the world at light speed. But just how much data are we generating? This is a look at just some of the massive amounts of information that human beings create every single day.



21st CENTURY

Organize Complexity

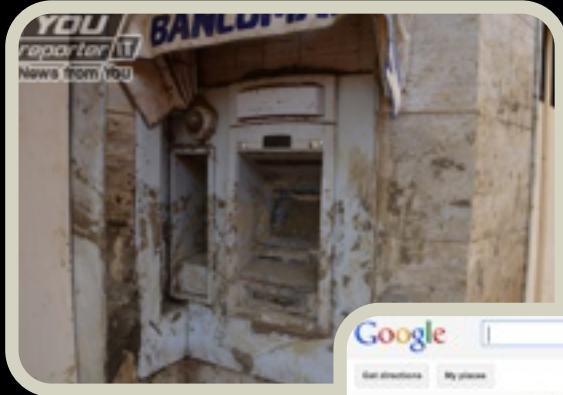
[illegible]

Information

Any Filter?

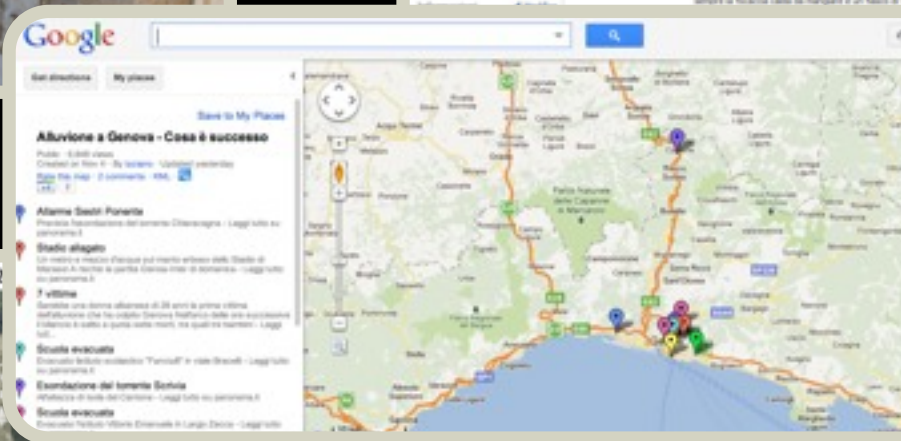
Information «deluge»

Citizen Journalism

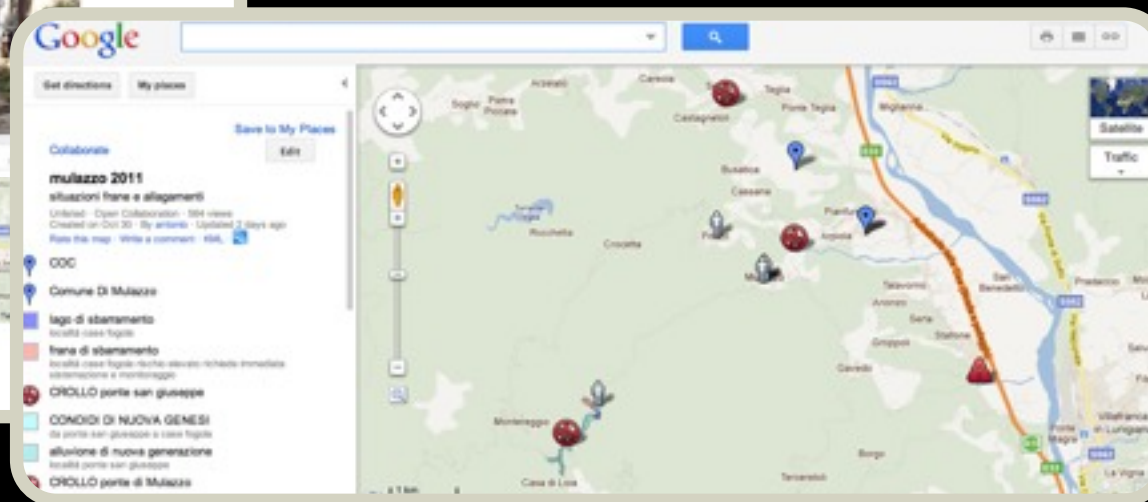
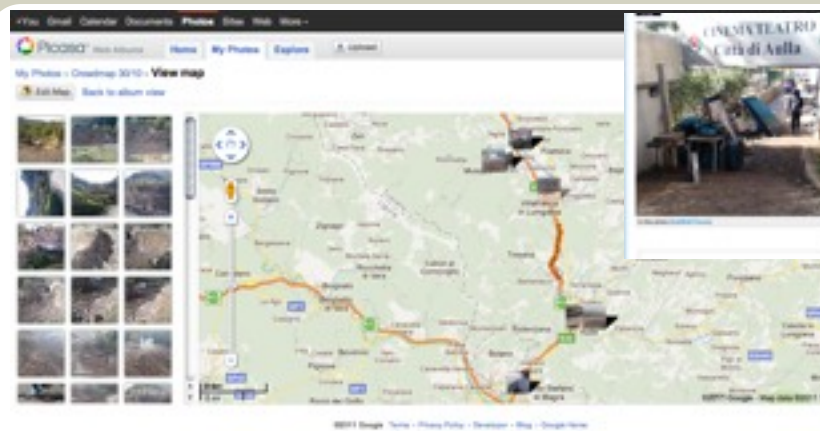


Citizens [Sensors]

Meteo web sites



Local Civil Protection



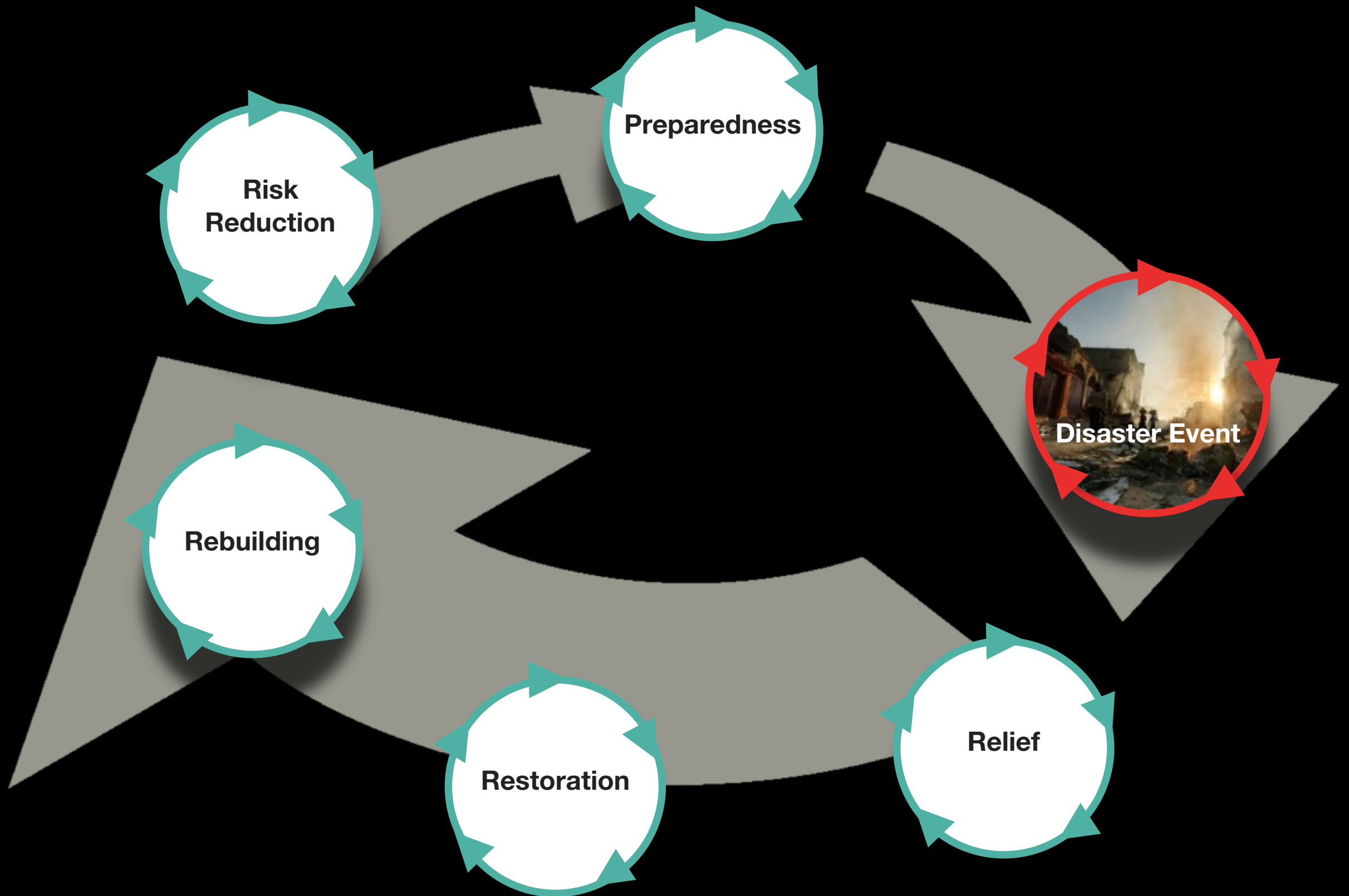
University-Relief Bodies

Citizens University-Media

Information Change



The Disaster is a Cycle





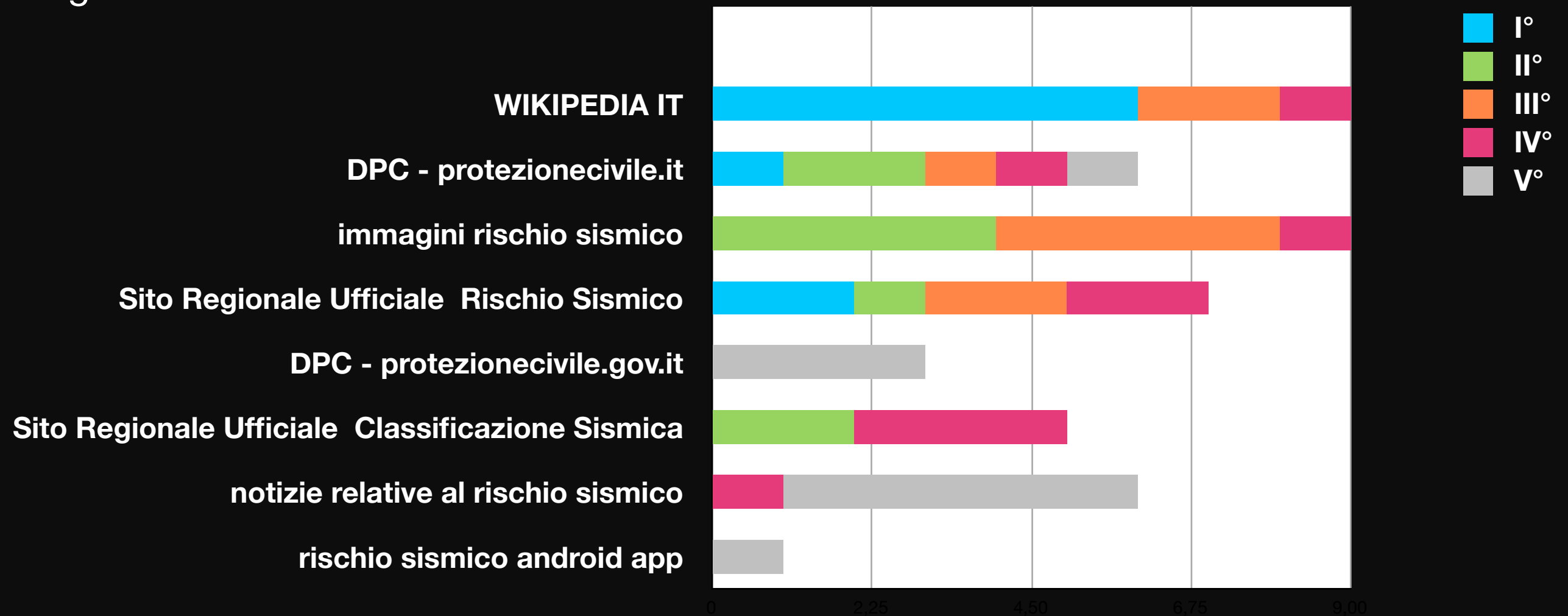
**HOW TO FIND
WHAT
WE SEARCH?**

Google Search: innvendo?

Search term: “rischio sismico”

Number of searches: n.9

Regions: n.3



Please Note that these results have not a statistical relevance, however they represent a sample of the differences in google search results.

A black and white portrait of Albert Einstein, showing his characteristic wild white hair and mustache. He is looking directly at the camera with a slight smile. He is wearing a dark, textured cardigan over a collared shirt.

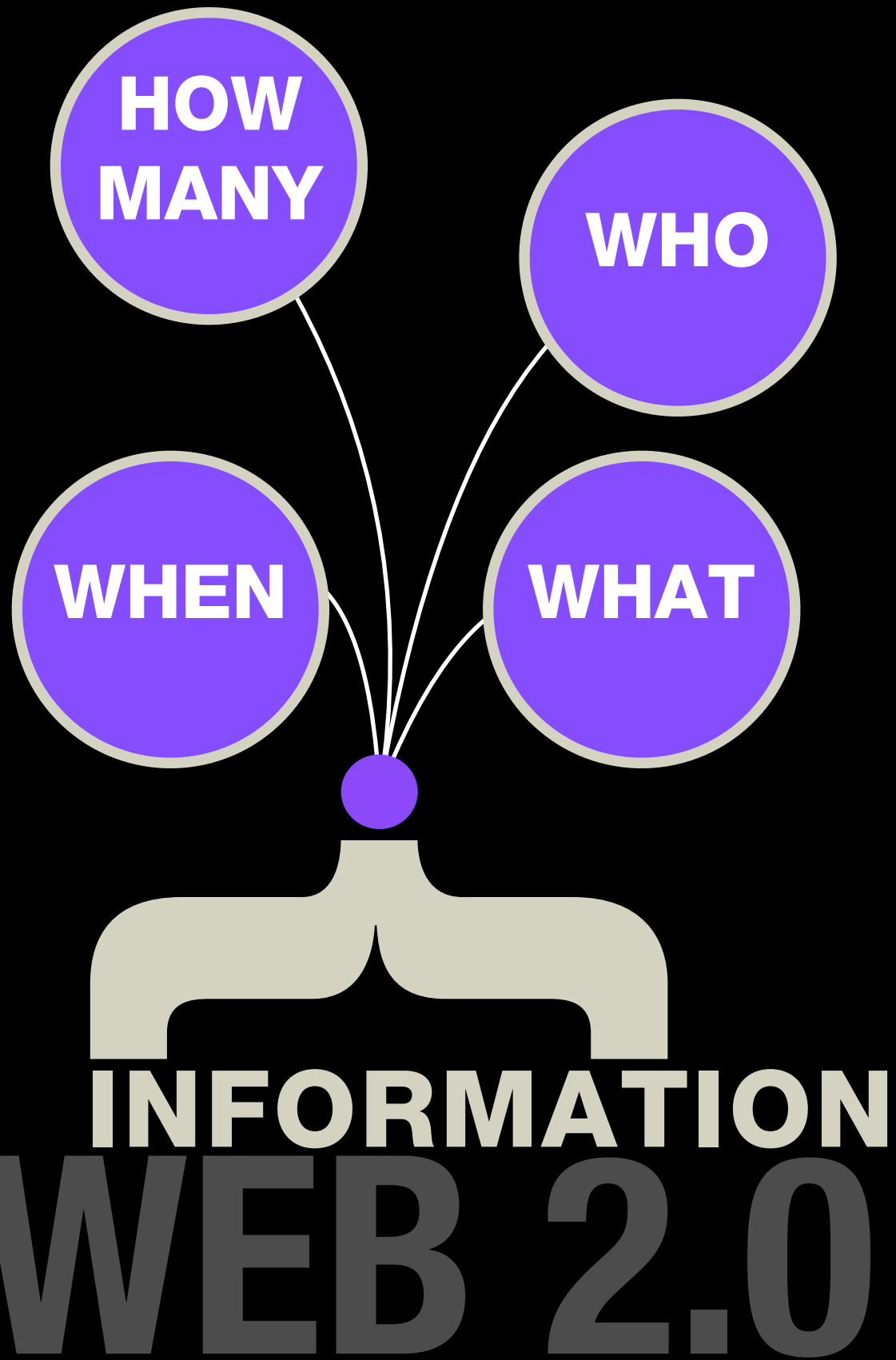
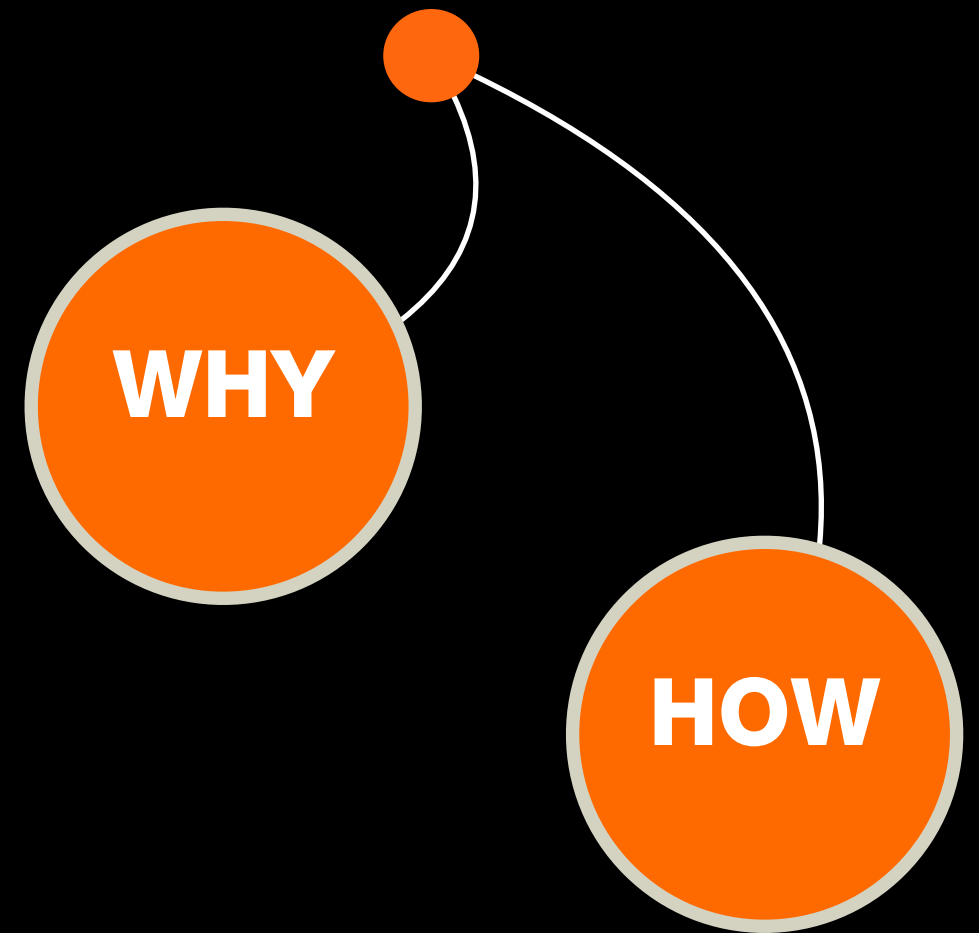
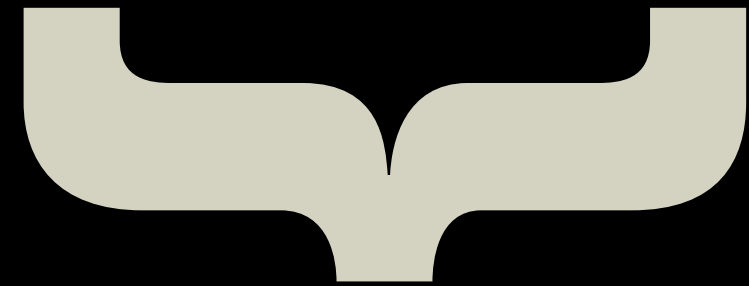
A «WORD» IS NOT ENOUGH

Most of the fundamental ideas of science
are essentially simple, and may, as a
rule, be expressed in a language
comprehensible to everyone.

Albert Einstein

WEB 3.0

KNOWLEDGE

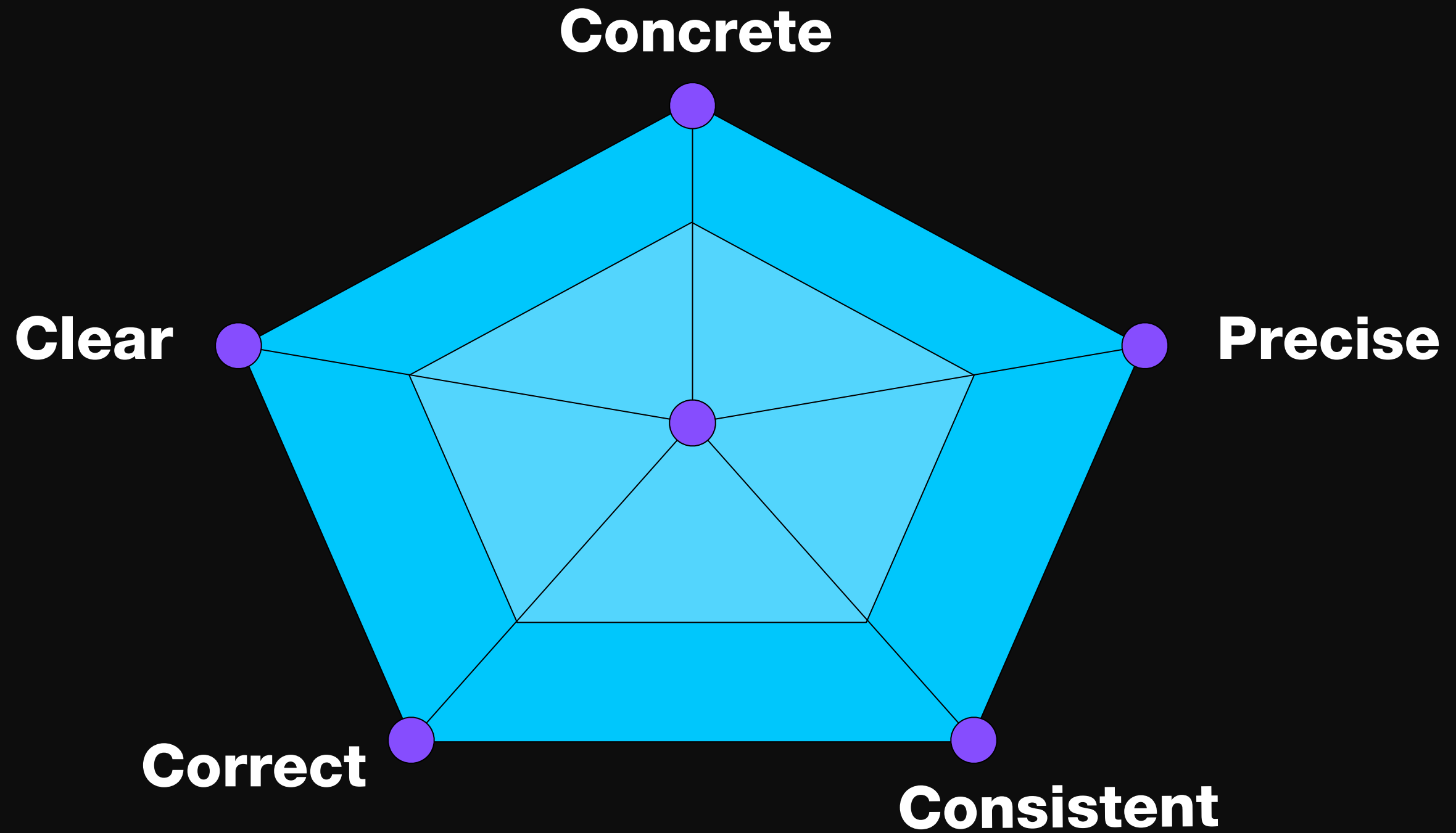


INFORMATION

WEB 2.0

Effective Communication

Sender ↔ Receiver



Resilient Knowledge

competences

precision

Open multiplicity

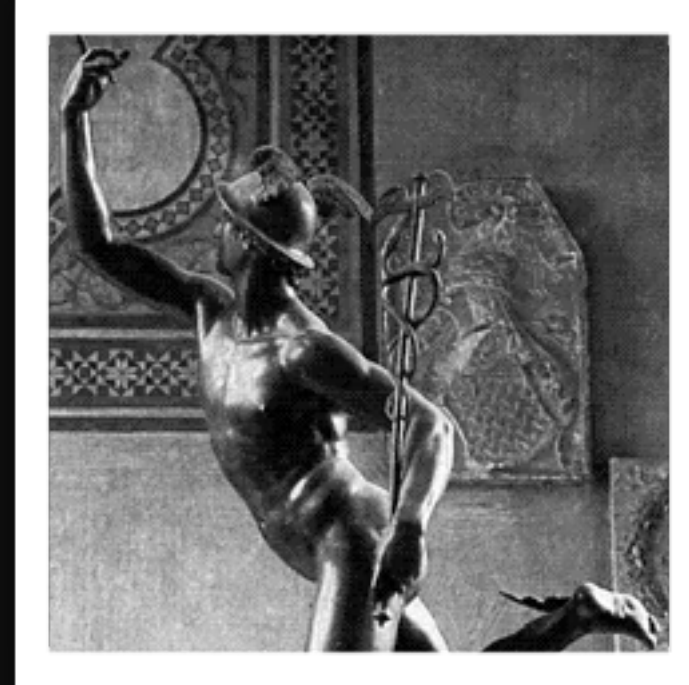
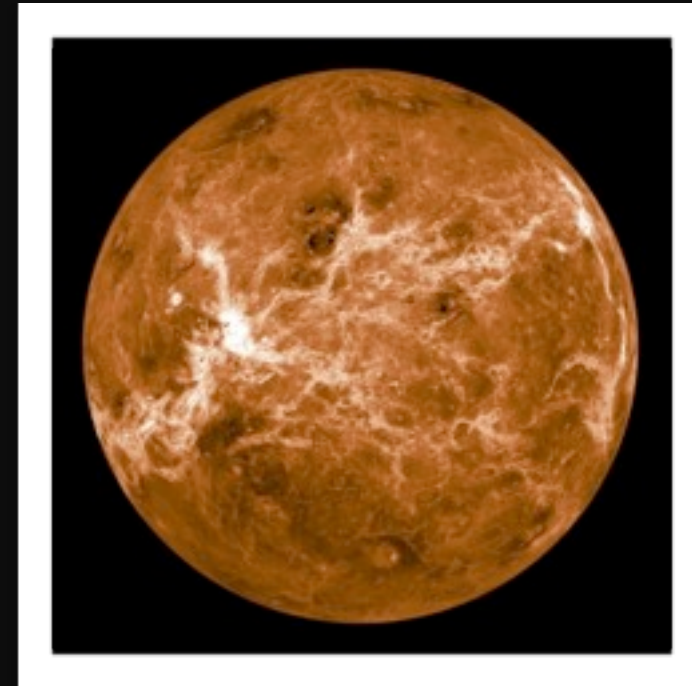
collaboration

semantic
rapidity



by www.infoasaid.org

Term: Mercury is....



#K TRANSFER

Domain X
Language Y

Domain Z
Language J



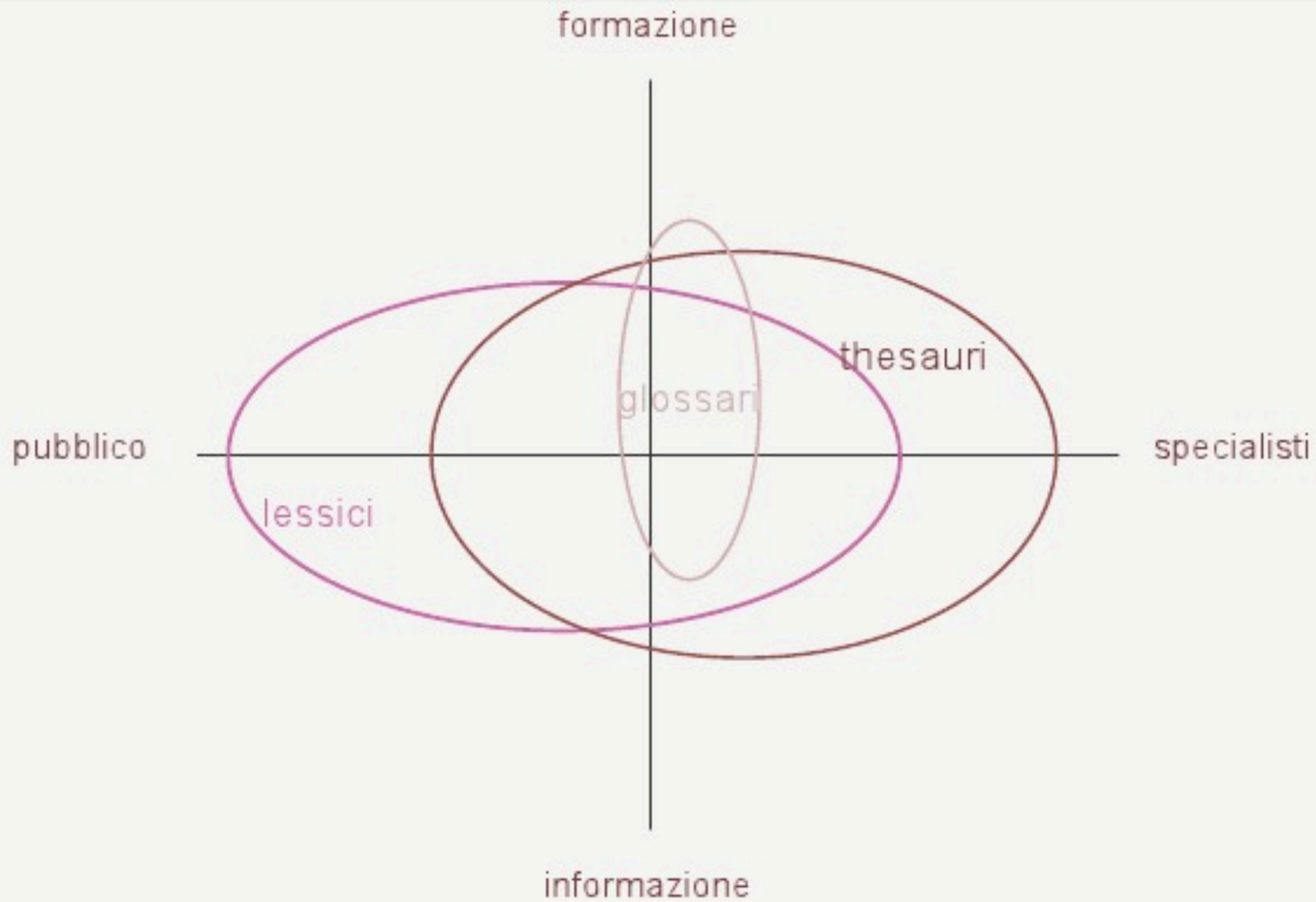
KNOWLEDGE



RSA Animate - The Power of Networks

Manuel Lima, senior UX design lead at Microsoft Bing, Animation by Cognitive Media.

Tools



Gli strumenti terminologici

Hyperispro

Civil Protection Wiki

Ispro - G. Zamberletti



EARTH

Environmental Applications

Reference Thesaurus

CNR IIA



NATURAL HAZARDS WIKISAURUS



a “matrix” of a model to be used in “practice”.

a structured and collaborative web platform based on validated information on geosciences to support a common understanding

open to a next step that could take advantage from the power of «linked data» so to contribute to a natural hazard semantic, or to a «semantic disaster resilience».

Rules:

- contributors: request, cv submission
- comments: free & moderated

Search

Term - Wiki definition

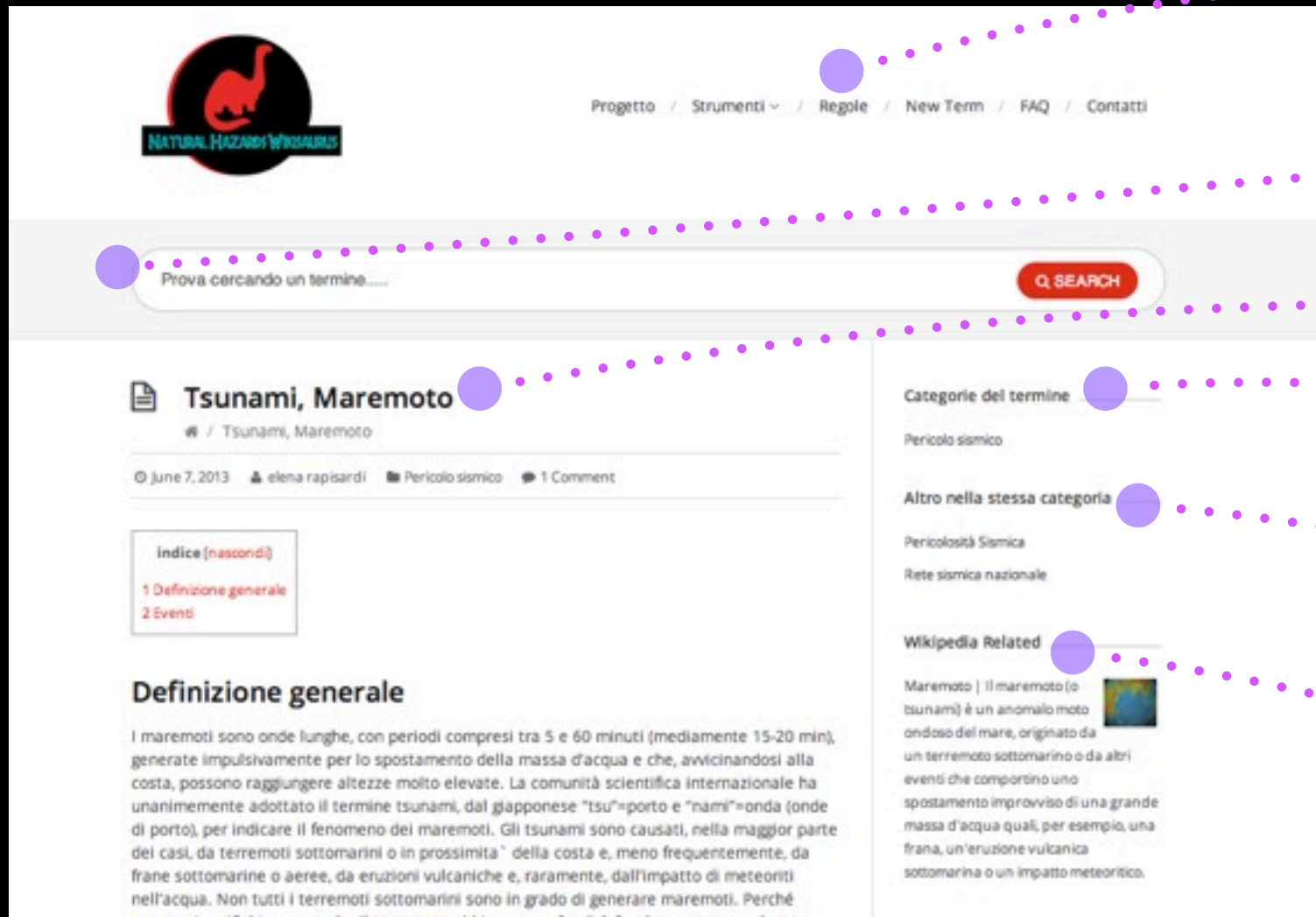
Term Category (based on thesaurus)

Other Terms in the same category

Relation: Wikipedia term

advanced search

Glossary Term (function)



e Reggio Calabria ed un violento tsunami seguì la scossa principale, causando ingenti danni e centinaia di vittime, con onde che raggiunsero i 13 m di altezza sulle coste calabre, a Pellaro e 11,70 m a S. Alessio, sulle coste della Sicilia. L'ultimo maremoto italiano è quello avvenuto a Stromboli (isole Eolie) il 30 Dicembre 2002, causato dallo scivolamento (prevalentemente sottomarino) di un enorme massa di materiale vulcanico alla Sciara del Fuoco. Le onde, che hanno raggiunto 11 metri di altezza a Stromboli, hanno prodotto danni ingenti e si sono propagate fino a Ustica, Sicilia settentrionale e coste campane. **Maremoto di Stromboli, 2002** a cura di ISPRO

Buglardino per i False Friends	
Ambiguità Semantica Naturale	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Questo termine nel linguaggio naturale ha un significato diverso rispetto al suo uso tecnico-scientifico. <i>Nel linguaggio comune, sono capitati casi in cui è stato utilizzato il termine Tsunami nel caso di una forte mareggiata determinata però da fenomeni meteo, per enfatizzare la violenza dell'evento. Attenzione quindi ad usarlo senza considerare il suo reale significato scientifico.</i>	
Ambiguità semantica Tecnica	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Questo termine ha significati differenti a seconda del contesto tecnico-scientifico di riferimento. Specificare e approfondire nell'utilizzo.	
Overall	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Ambiguità complessiva calcolata automaticamente sulla base dei singoli punteggi.	

Term innvendo alert

ARGOMENTI CORRELATI

ARGOMENTI NHW

Related Links by Contextly

**Terremoto profondo nella Piana di Gioia Tauro (RC), M4.4, 13 novembre ore 08.06**

**I terremoti in Italia**

**Dipartimento della Protezione Civile**

**Terremoto**

**Normativa edilizia anti-sismica**

**related term and links
(manually selected)**

Comments

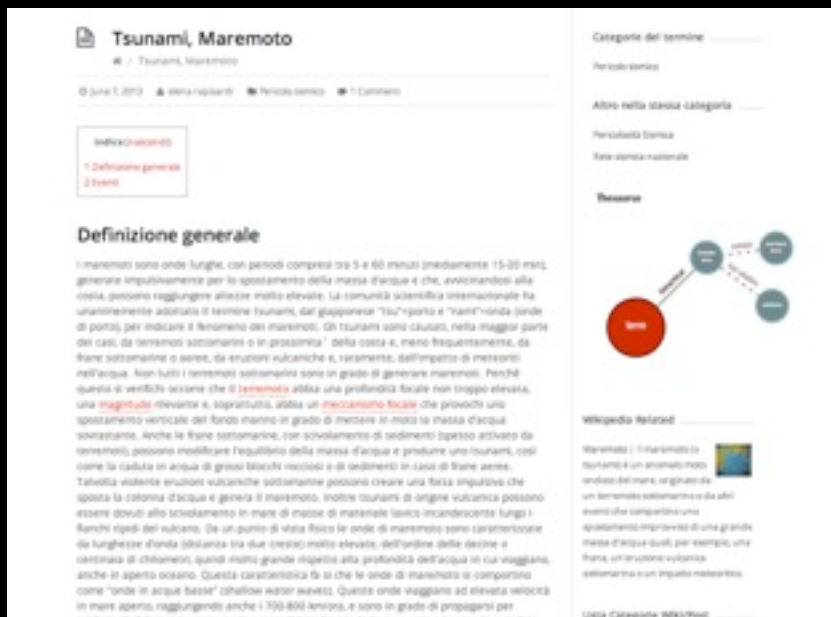
Pingback: **Terremoto** - HazardWiki

Leave a Reply

Comments

next steps

#A



Wikisaurus & EARTH Thesaurus
Wiki Term linked with the EARTHThesaurus Term; the related hierarchical map will be exposed in the sidebar

#B



Wikisaurus Semantic
Hydrological and Seismic Ontologies
(OS Platform)

#C



Engage and Commit the Community
Collaboration Campaign to involve key players to build a knowledge framework supporting disaster resilience