

GSDI Demand for Information about SDI's

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Interested in detailed SDI information for:

First Priority

Support of communication among government agencies at all levels

- basic information by agencies, for agencies
- story telling to facilitate peer learning
- respondent self maintenance over time
- automatic publication to web
- create community - “club” incentive

Second Priority

Support academic community efforts to advance knowledge that has substantial potential to benefit respondents or society

Concerns:

- a. need well thought out objectives and germane inquiries to those objectives - which explicit research questions being addressed? ... hypotheses being tested?
- b. opportunity - which research questions could benefit from longitudinal data updated every x years
- c. protection of human subjects - sensitive info, risk to respondent ... restrict to researchers?
- d. labor burden on respondents - data amount needed to pursue multi-view complex adaptive system investigation will be too much? .. for a survey? 3Es
- e. one way street - no mention of data depository needs of data users

Prediction for Future of SDIs

A commons of geographic data for the typical scientist and lay user of geographic data soon will be deployed through the global university library network. It will be simple to contribute data.

- Create open access license for data file in < 5 min
- Create standards based metadata in < 10 min
- Automatic long-term archiving and backups
- Automatic conversion to interchange formats
- Automatic lineage tracking in all those interchange formats
- Efficient peer recommender system
 - everyone uses metadata because search uses
 - *parts not yet pulled together but soon - an SDI?*

GSDI 10

St. Augustine, Trinidad
February 25-29, 2008

Tenth International Conference for Spatial Data Infrastructure



THE UNIVERSITY OF THE WEST INDIES
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<http://gsdi.org/GSDI10>

Hypothesis: Incentivize the original creators

- they are the owners or most likely owners if there is an owner
- have access
- best able to provide accurate metadata

Data centers, individual scientists, or both?

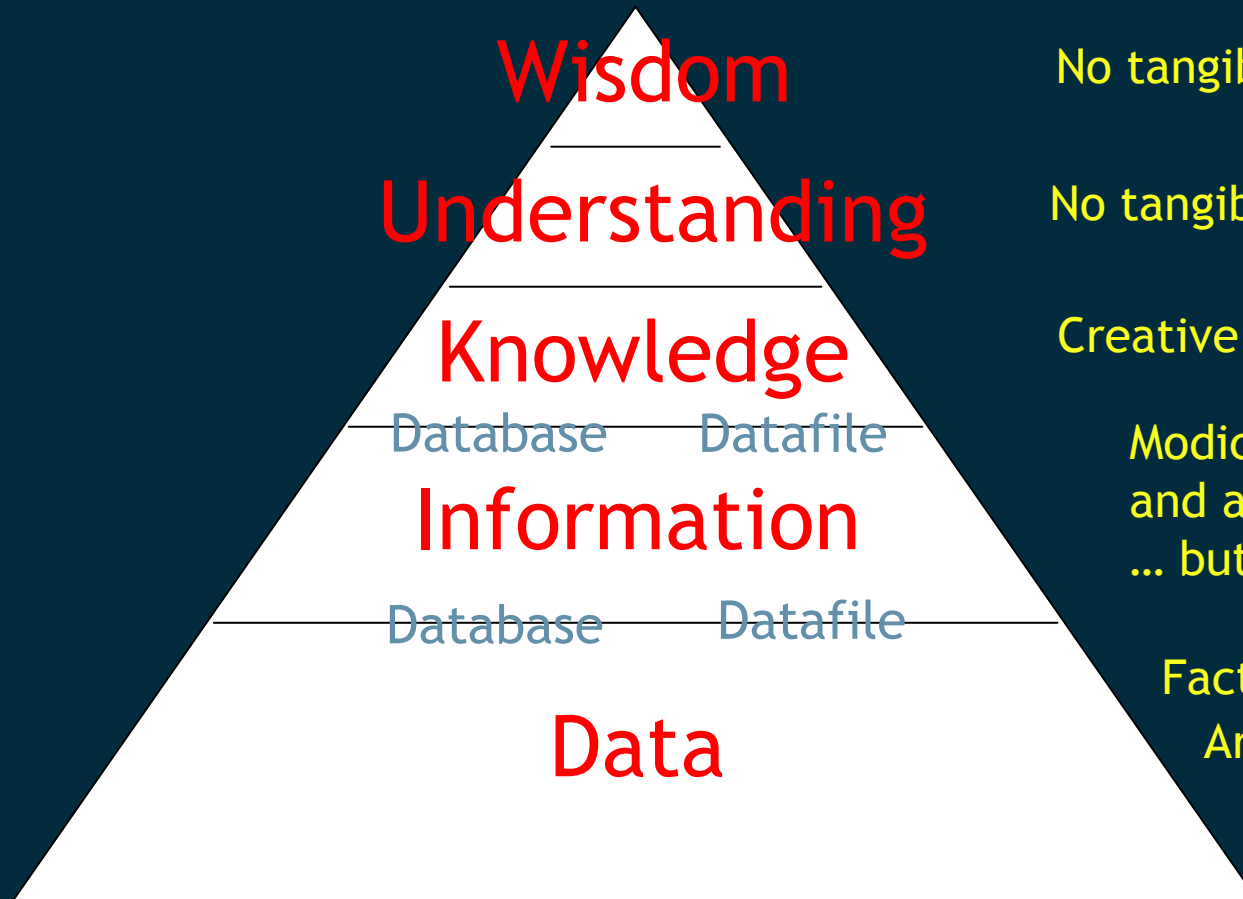
Hypothesis: Incentivize scientists and centers will follow.

- “small” vs. “big” science

Data to Wisdom (Crawford and Gorman 1995)

Librarian Terminology

Lawyer Terminology



No tangible medium, no ©

No tangible medium, no ©

Creative knowledge works clearly ©

Modicum of creativity in selection and arrangement is copyrightable ... but not standard arrangements.

Facts not copyrightable.

Are all data facts?

All empirical observations?

All measurements?

Query:

When are creators in science “owners”?

- Law assumes doodle upon creation is instantly copyrighted.
- Yet facts are not copyrighted.
- Often copy data file in entirety but extract only selected data from databases

Bottom Line:

As a scientist I can't know if my data file or database or segments of them are protected under copyright.

- only resolveable on case-by-case basis
- reasonable people might often disagree

Solution:

If scientists always license scholarly production to the public domain or commons, legal issue resolved in 95% of cases.

- avoidance of orphaned works problem for data

Can I license to you facts that are not copyrightable?

Certainly. But not controlling on third parties not a party to the license.

We can provide legal clarity

... but legal clarity is not enough!

How do we incentivize tens of thousands of individual scientists?

Need overwhelming benefits so scientists of course license and archive their data.

(2) Universities request researchers to list legal open access url (and closed publisher url)

Theory: Open access materials are of greater benefit to science and society since many more eyes are able to see and build from.

Institutionalize

- university promotion and award applications request listing first those articles/data sets with legal open access urls
- funding agencies request listing first those articles/data sets with legal open access urls

Unresolved in mind of typical scientist

Economic model of open access for data will enhance sharing and clearly advance science.

versus

Economic model of open access for data will destroy IP incentives to gather data and hinder the advancement of science.

Empirical evidence convinced most of us ...
but not on radar screen for most scientists