

SDI Research Challenges: Technology, Law, Ethics, Economics and Society

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PhD Student Workshop: Sharing SDI Research Approaches

Singapore

Solutions to most
pressing societal
problems are:

highly complex.

There are:

no legal solutions

no economic solutions

no technological
solutions

no political solutions

RATHER

comprehensive
solutions require
drawing knowledge
advancements from
multiple domains

Interdisciplinary
research is key

Multiple research
methodologies
required

... suited to the
questions addressed

What are some of
the problems
researchers could
help address?

Privacy

What's the
problem?

... pervasive location
tracking

Intellectual Property

What's the
problem?

... technology has
changed everything

Copyright laws are
failing to achieve their
intended results in
digital environments

Prior economic models
based on protecting
intellectual property
are failing

Digital rights
managements systems
have been rejected by
consumers

Access to Government's Spatial Data

What's the
problem?

Question:

How can we realign
the global system for
sharing geographic
data and services?

Example:

Global Earth
Observation System of
Systems (GEOSS)

Pooled resource of
data contributions
from 79 national
governments and 56
international
organizations

Technical challenges:

- not a problem

Legal, political, and bureaucratic challenges:

- huge problem

What's the
problem?

Developing Nations: Enabling Use of Spatial Technologies for the Other 90%

Natural Capitalism and Green Economies:

**Use of geo data in
achieving sustainability
objectives**

Ethics Driven Information Systems Design

Participatory GIS and Volunteered Geographic Data

All are issues of
societal interest

... defining the problems

... asking the right questions

Myriad problems that
you or I might choose
to address over the
next several years of
our lives

Need a well-defined
achievable thesis topic

however

Don't be afraid to
address large societal
challenges

One person can make
a difference

Your research
contribution may be
that one link that
allows all of us to
jump forward