



# “Harmonizing Technology with Society”

From Real to Cyber World:  
A Law and Economics Analysis

September 30, 2009

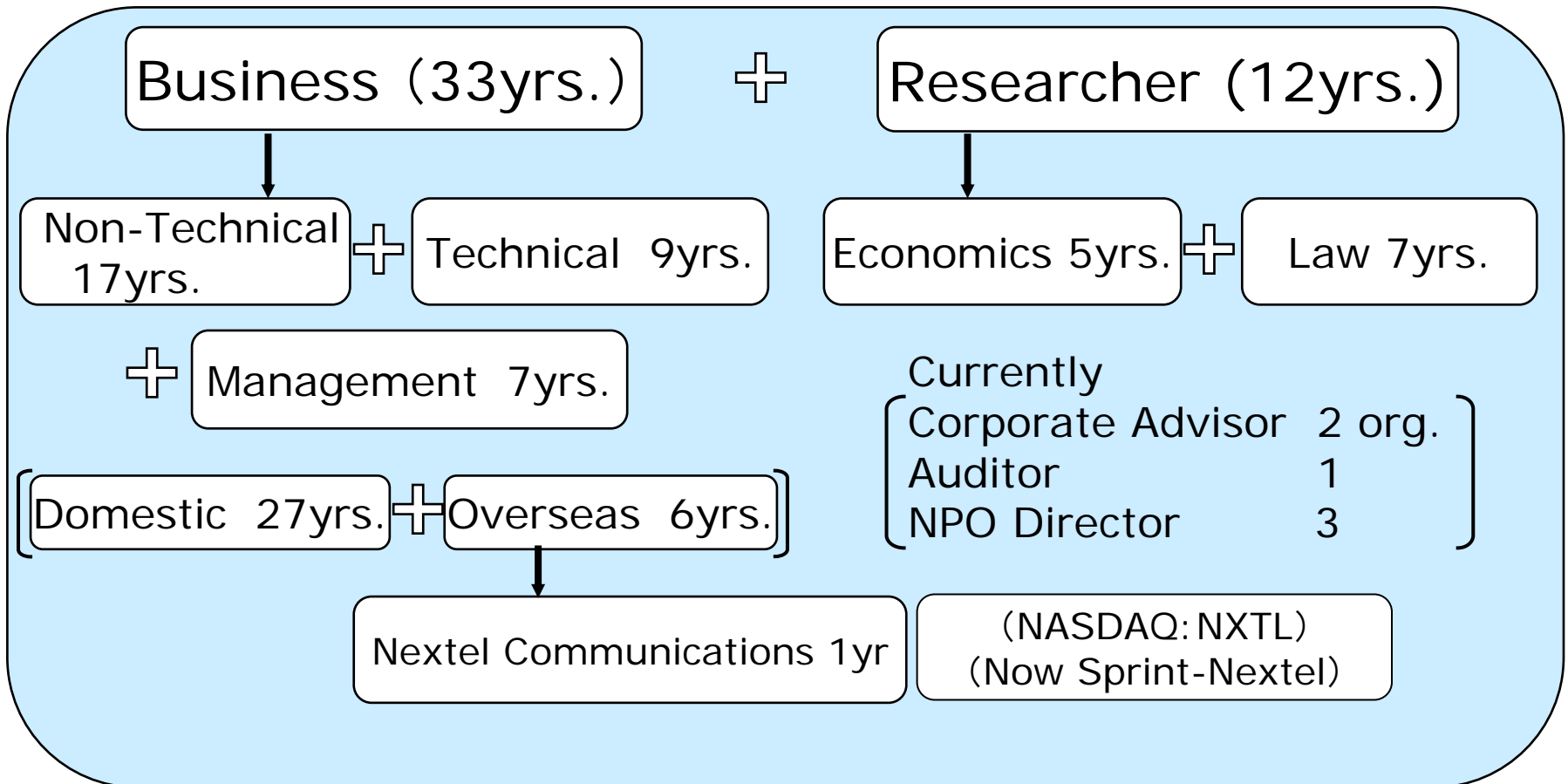
Presented to ISSI

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# Institute of Information Security

- Established 2004
- First and only Graduate School specializing in InfoSec.
- Both Academic and Practical
- Comprehensive Study of InfoSec.
- 80%+ Students from Business
- WWW: <http://www.iisec.ac.jp>

# Personal Career



# Law in the Real World

- Tangible Goods: Excludable, Rivalry, Recoverable
- Alienable v. Inalienable
- Property, Contract and Liability Rules for Alienable Goods
- Freedom of Speech, Self-Decision and Privacy for Inalienable Objects
- Remedy and Sanction by Litigation, Injunction and Prosecution effective
- One Right for One Thing

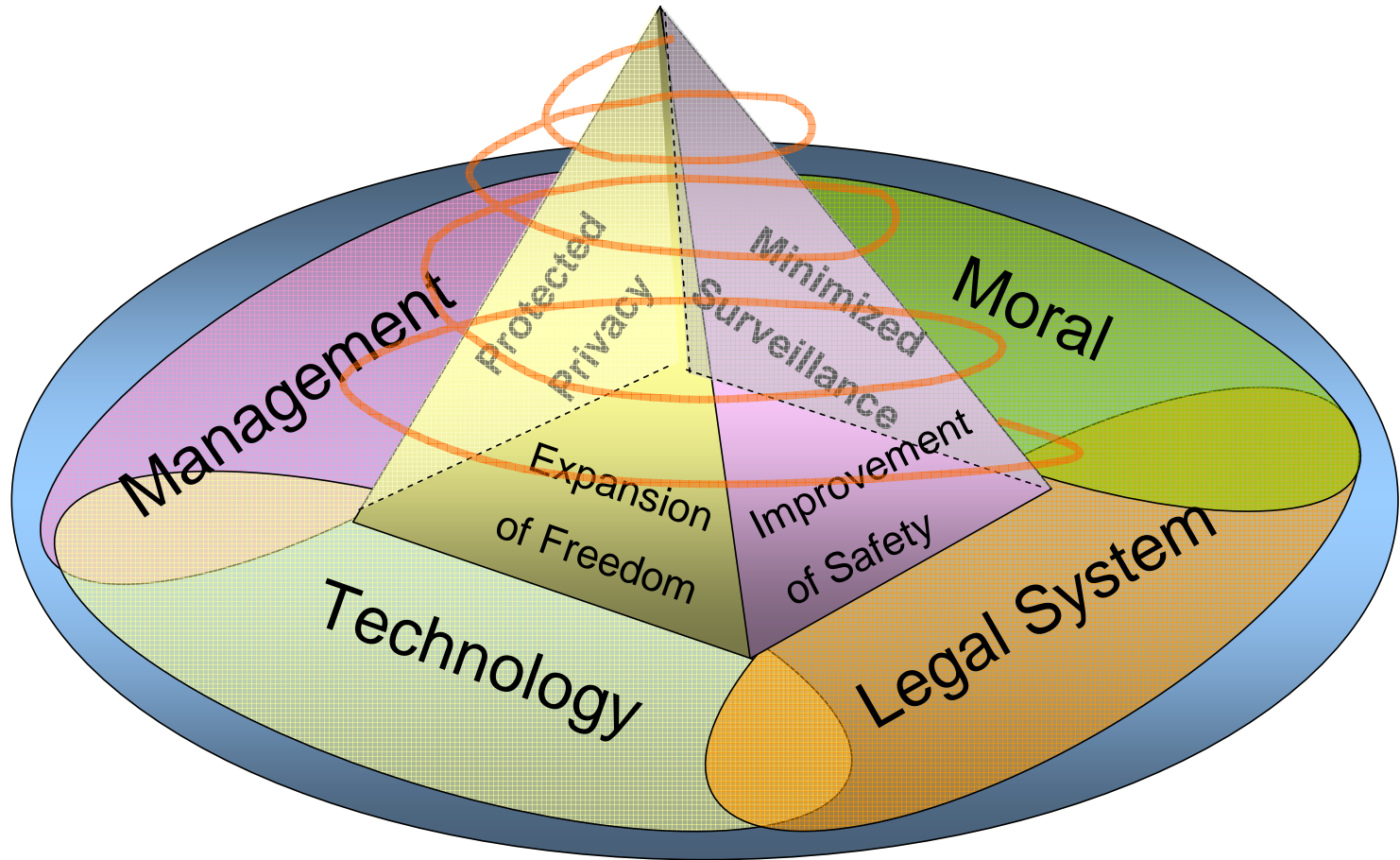
# Fluctuating Law in Cyberworld

- Intangible Goods: Non-excludable, Non-rivalry, Irreversible
- Only two types of Information protected: Secret Information (SI) and Intellectual Property (IP)
- SI Protection neither comprehensive nor well-balanced
- IP Protection (especially Copyright) challenged by Digital Technology
- Personal Data as the third type?
- Multiple Rights for One Object
- CODE is Law? (Lessig [1999])

# Real v. Cyber

	Real	Cyber
Subject (Actor)	Natural Person, Legal Person	+ Computer
Object	Tangible Goods	+ Intangibles
Action	Own, Exploit and Transfer	+ Attribute, Hold and License
Enforcement	Damages, Prosecution etc.	+ Injunction or Recovering Tech?
Alienability	One Right for One Thing	Multiple Rights for One Object

# How to Generate a Balanced View



Original idea comes from Lessig [1999] & Tsujii [2003]

# Questions

- Question-1:

What do you think is the most important factor, if you are asked to develop or deploy a new information system for social innovation?

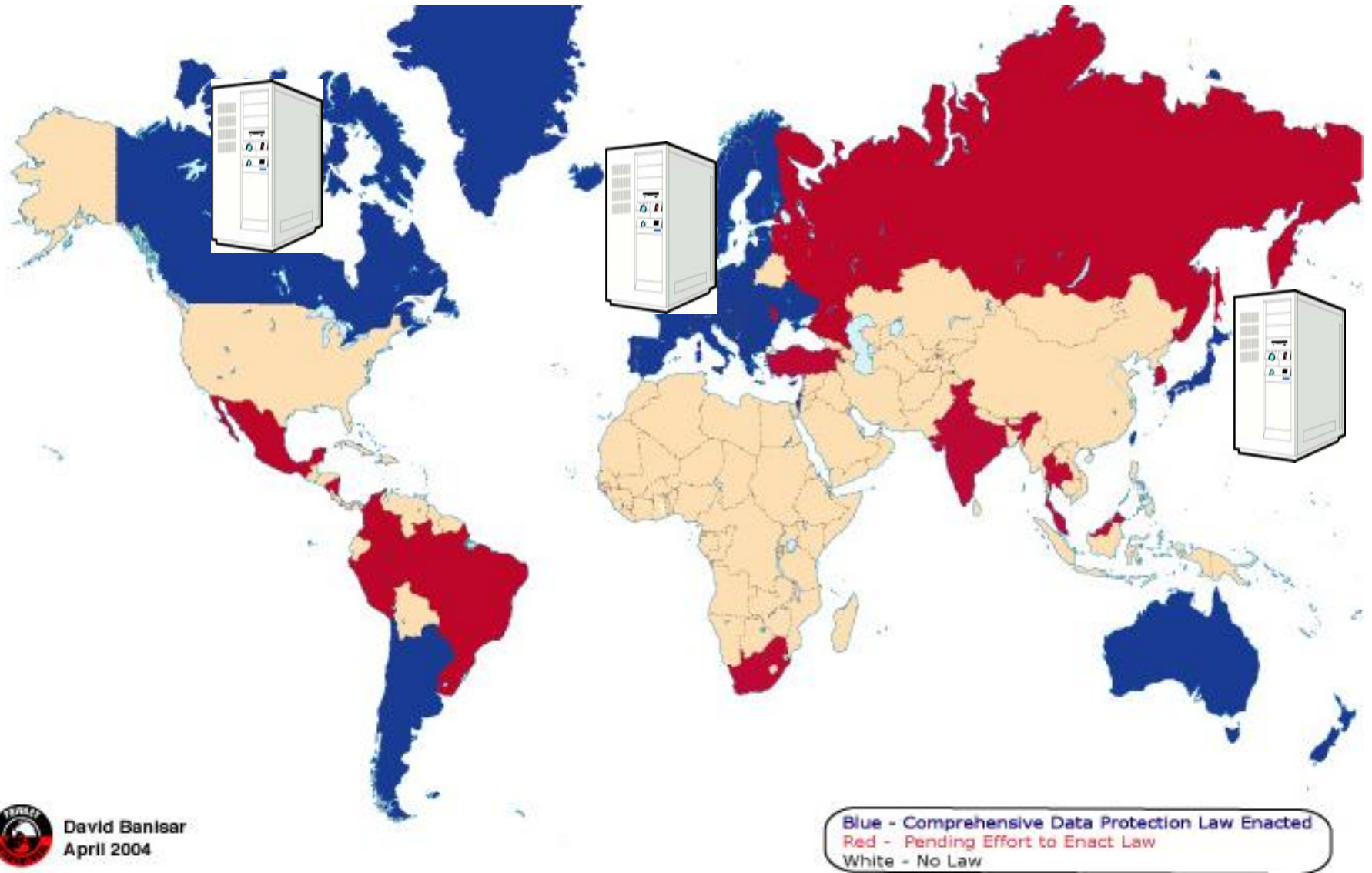
- Legal System?
- Management?
- Moral?
- Technology?
- ...?

- Question-2:

What kind of role do you expect on social scientist, when you do above?



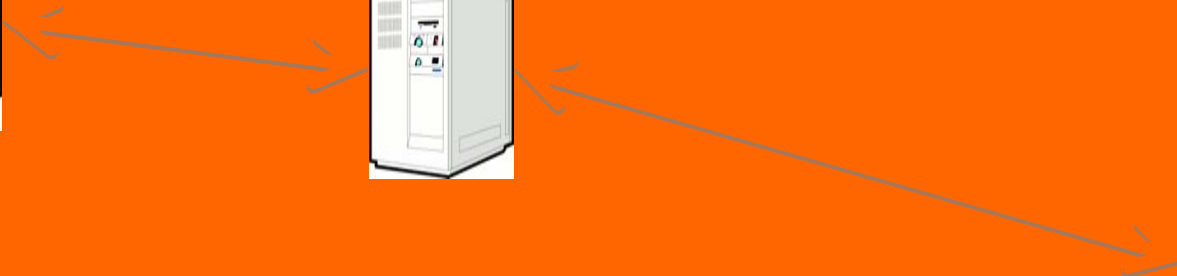
# Example: Data Protection Regulations in the World



David Banisar  
April 2004

# Social Innovation by cross-state Composition of Services

## Composition of Services (e.g. Web 2.0)



David Banisar  
April 2004

Blue - Comprehensive Data Protection Law Enacted  
Red - Pending Effort to Enact Law  
White - No Law

**Challenge:** Application of different regulations