

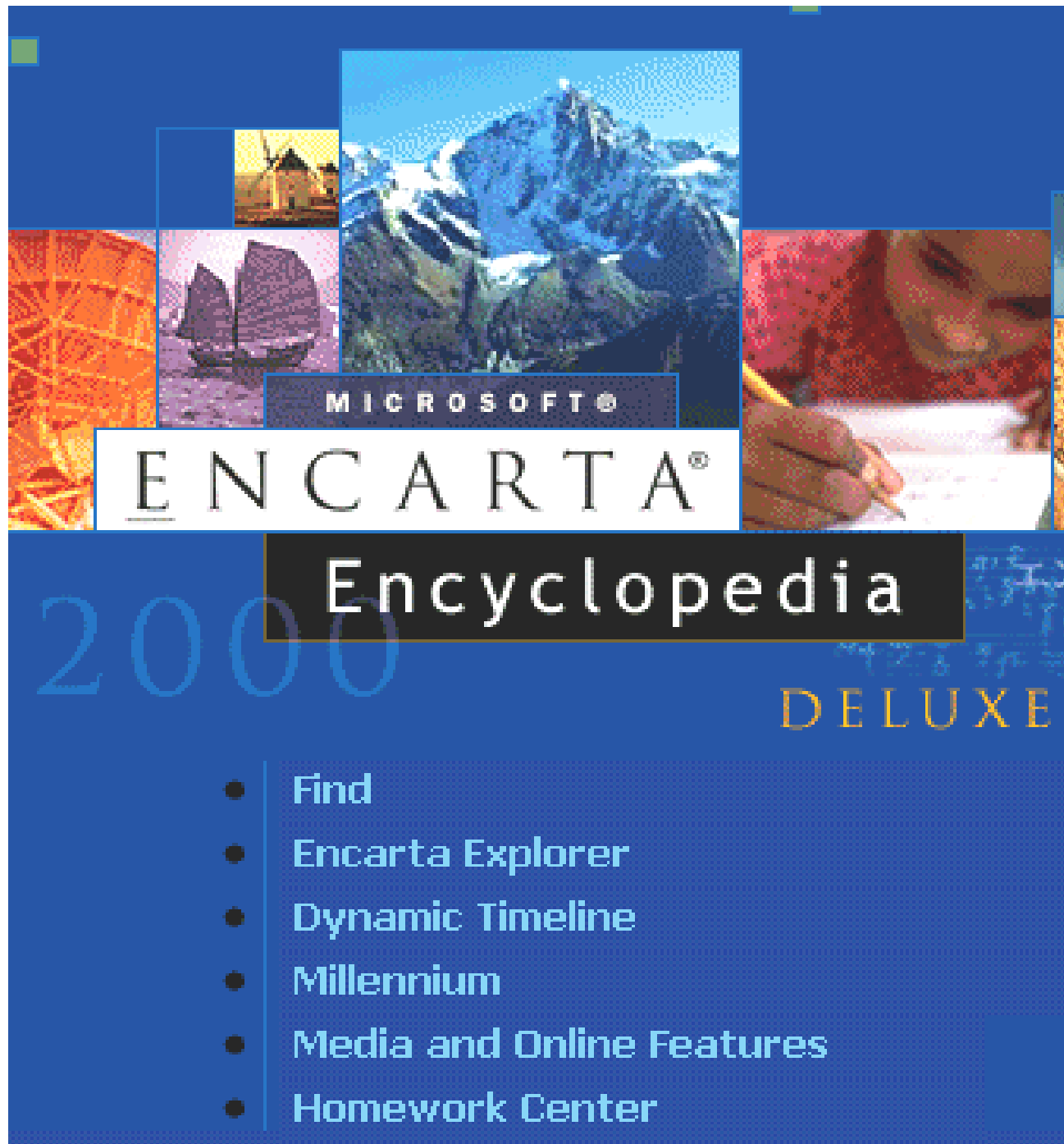


# **Open innovation in the Networked Information Environment**

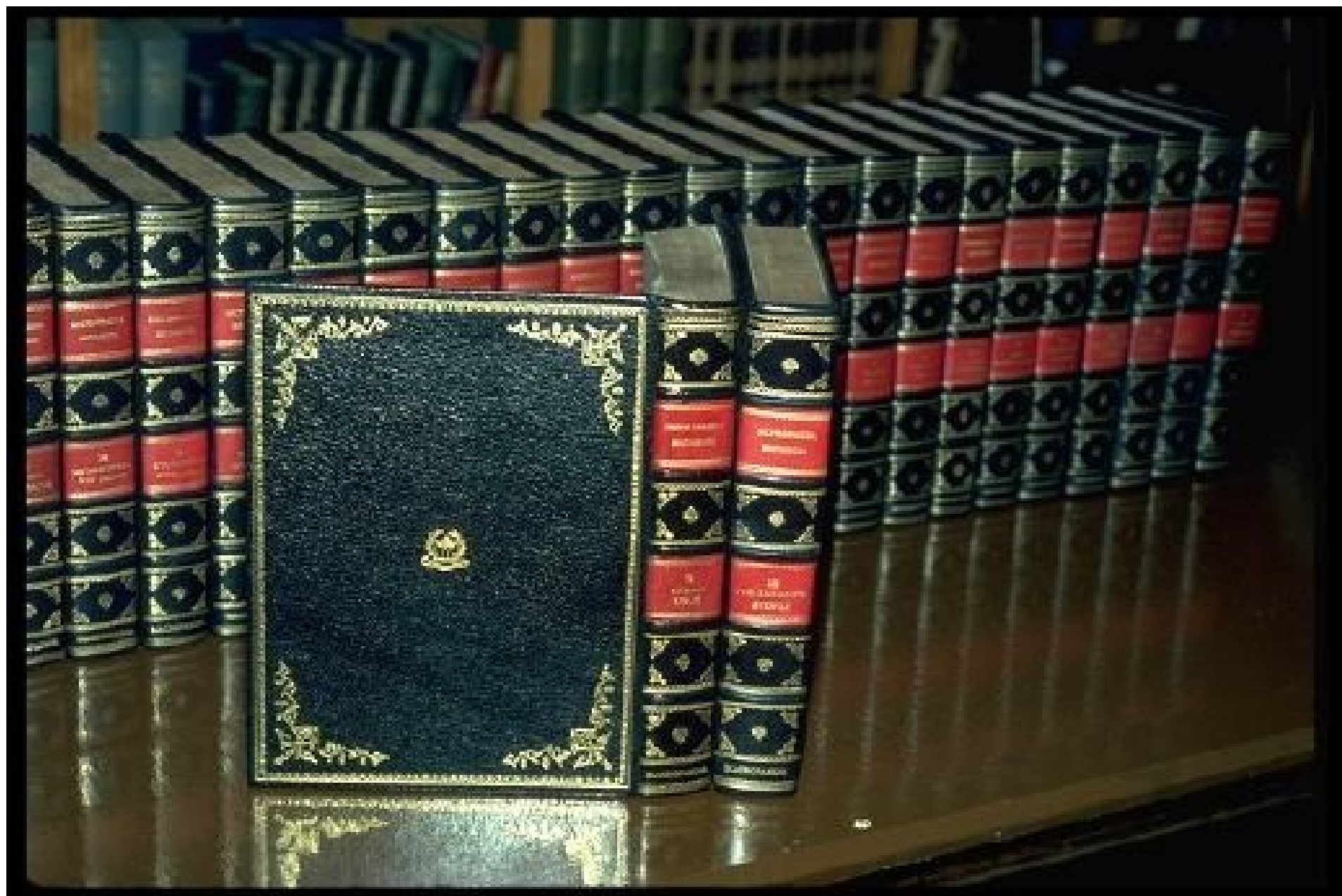
---

## **Constructing an open and dynamic core common infrastructure**

Yochai Benkler  
Berkman Professor of Entrepreneurial Legal Studies  
Harvard Law School  
Faculty Co-Director, Berkman Center for Internet and Society  
Harvard University



39.95 @ 2000



## Britannica Unveils Ready Reference Encyclopedia; 12-Volume Set Retail At Bookstores for Under \$500

[Business Wire](#), [June 1, 1998](#)

CHICAGO--(BUSINESS WIRE)--June 1, 1998--

New Product Demonstrates Company's Commitment To Print

Encyclopaedia Britannica, Inc. today announced that it will begin selling a popular-priced encyclopedia in bookstores across the country. Called Britannica Ready Reference(TM), the 12-volume set will be available in June at a suggested retail price of \$499.

Affordable Britannica(R) Quality

"We are enhancing our print encyclopedia line to offer consumers more choices, especially parents who previously may have passed up Britannica due to price," said John Hallberg, senior vice present, worldwide marketing. "The Britannica Ready Reference gives families the legendary Britannica quality at a price they can afford."

The Ready Reference set consists of the first 12 volumes of the full 32 -volume Encyclopaedia Britannica. Containing 64,000 articles organized from A to Z, the Ready Reference provides an unmatched breadth of information on a variety of topics. Contributors include many leading authorities and Nobel Prize winners, such as Albert Einstein, Sigmond Freud and Milton Friedman. The articles are enhanced by more than 16,000 illustrations, maps and photographs. Also included with the set is the Britannica Year Book(R) which features the important people, events, disasters, discoveries and achievements that changed our lives in the past year.

Room To Grow

The most frequently used part of the full Encyclopaedia Britannica, the Ready Reference is designed as a starter set for families who expect to expand their reference resources as their information needs grow over time. With the initial investment in the Ready Reference, parents can add other reference tools such as the remaining volumes of the print encyclopedia or Britannica's electronic products.

Add and save a link to Wikipedia on your Google homepage, free.  
[www.google.com/ig/](http://www.google.com/ig/)

### [Britannica](#)

Take A Free Trial Of Britannica.com Trusted By Students Worldwide!  
[Britannica.com](http://Britannica.com)

### [Telesales Marketing Svcs.](#)

Learn about the right solutions for your business & get free quotes.  
[CallCenterComparison.com/Tel](http://CallCenterComparison.com/Tel)

### [Britannica](#)

Browse a huge selection now. Find exactly what you want today.  
[www.eBay.com](http://www.eBay.com)

### [Improve Your Profit Now](#)

Perceived value pricing - quickest way to improve profits. Learn more  
[www.atenga.com](http://www.atenga.com)

**buycheapsoftware.com**  
Quality software for less



Home Page

Customer Service

Account Access

Information

search

find it

## Software

ACT! - By Sage  
Adobe  
Anti-Spy/Spam/Pop-up  
Apple  
AutoDesk  
Britannica  
Broderbund  
Business Objects  
Computer Associates  
Corel  
DeLorme  
Diskeeper  
FileMaker  
IBM  
IMSI Software  
InterVideo  
Intuit  
ISI Researchsoft  
McAfee  
Microsoft  
Nero  
Nuance  
Palo Alto  
Panda  
PeachTree  
Quark  
Roxio  
Stompsoft  
Symantec



## Encyclopedia Britannica 2007 Standard Full 2-CD for Win or Mac

**Our Price: ONLY \$29.95**

**Retail price: \$ 49.95 Save \$20.00(40%)**

**Shipping: Only \$5.00 FedEx Ground - Ships same or next working day!**

**Mfg. Part:** LBBRIEN7SJ

**Our SKU:** EBSD07CD

**Quantity:**  **buy**

**Version:** Retail 2-CD 2007 Win or Mac Version

**Description:** Encyclopedia Britannica 2007 Standard Edition for Windows 2000, XP Pro/Home and Macintosh OS X 10.4 or greater. Full Retail Version 2-CD-Set.

### Help and Information

[Recommend to a Friend](#)

[Search Britannica News](#)

[Search Tech Support](#)

[Ask a Question](#)

**All of our software is**

**Sales Support**  
LIVECHAT

online now



**or...**  
call free to order  
**888 999 2611**



Buycheapsoftware - A Women and Minority Owned Business

## Today's Deals

[Nero 7.2 Essentials Suite 1 Full oem CD/DVD Version for Windows](#)  
Our Price: **\$ 6.00**  
Retail Price \$19.00

[SAV 10.2 AntiVirus Corporate Edition Full Version \(100-249\) w/1-Year Basic Maintenance](#)  
Our Price: **\$ 32.36**  
Retail Price \$41.60

Done



Mail - Kontakt



Konqueror [4]



Gwenview [4]



2



3



4



4



4



4



4

12:46:08

New York

Adobe Reader - Oehel

OpenOffice.org 2.2

Firefox-bin [4]





navigation

- Main page
- Contents
- Featured content
- Current events
- Random article

search

Go Search

interaction

- About Wikipedia
- Community portal
- Recent changes
- Contact Wikipedia
- Donate to Wikipedia
- Help

toolbox

- What links here
- Related changes
- Upload file
- Special pages
- Printable version
- Permanent link
- Cite this page

languages

- Български
- Српски

Done

article discussion view source history

## Rorschach test

From Wikipedia, the free encyclopedia

"Rorschach Test" redirects here. For the band, see *Rorschach Test (band)*.

The **Rorschach test** (German pronunciation: [ˈʁœfʁax]; also known as the **Rorschach inkblot test** or simply the **Inkblot test**) is a [psychological test](#) in which subjects' perceptions of [inkblots](#) are recorded and then analyzed using [psychological](#) interpretation, complex scientifically derived [algorithms](#), or both. Some psychologists use this test to examine a person's personality characteristics and emotional functioning. It has been employed to detect an underlying [thought disorder](#), especially in cases where patients are reluctant to describe their thinking processes openly.<sup>[3]</sup> The test takes its name from that of its creator, Swiss psychologist [Hermann Rorschach](#).

In a national survey in the U.S., the Rorschach was ranked eighth among psychological tests used in outpatient mental health facilities.<sup>[4]</sup> It is the second most widely used test by members of the Society for Personality Assessment, and it is requested by psychiatrists in 25% of [forensic assessment](#) cases,<sup>[4]</sup> usually in a battery of tests that often include the [MMPI-2](#) and the [MCMI-III](#).<sup>[5]</sup> In surveys, the use of Rorschach ranges from a low of 20% by [correctional psychologists](#)<sup>[6]</sup> to a high of 80% by clinical psychologists engaged in assessment services, and 80% of [psychology](#) graduate programs surveyed teach it.<sup>[7]</sup>

Although the Exner Scoring System (developed since the 1960s) claims to have addressed and often refuted many criticisms of the original testing system with an extensive body of research,<sup>[8]</sup> some researchers have raised questions about the [objectivity](#) of psychologists administrating the test; [inter-rater reliability](#); the verifiability and general [validity](#) of the test; [bias](#) of the test's [pathology](#) scales towards greater numbers of responses; the limited number of psychological conditions which it accurately diagnoses; the inability to replicate the test's norms; its use in court-ordered evaluations; and the [proliferation of the ten inkblot images](#), potentially invalidating the test for those who have been exposed to them.<sup>[9]</sup>



The first of the ten cards in the Rorschach test, with the occurrence of the most statistically frequent details indicated.<sup>[1][2]</sup> The images themselves are only one component of the test, whose focus is the analysis of the perception of the images.

1 29% 2 18% 3 6%

### Contents [hide]

- History
- Method
  - Features or categories
    - Content
    - Location
    - Determinants
  - Exner scoring system
  - Cultural differences
  - Neurology
- The ten inkblots
- Prevalence
  - United States
- Controversy

ApplicationsPlacesSystem800 MHz63 °FMon Jun 8, 11:11 PMYochai Benkler

Encarta killed off - Management - Breaking Business and Technology News at silicon.com - Mozilla Firefox

FileEditViewHistoryBookmarksToolsHelp

http://management.silicon.com/itpro/0,39024675,39414188,00.htmencarta goes out of business

Most Visited



DRIVING BUSINESS THROUGH TECHNOLOGY

Anonymous user  
log in | register

Home

News

Comment

CIO Insights

Videos

White Papers

Resources

Jobs



INBOX  
OUTBOX 09

16/17 June 2009, Central London

Uncover The Changing Face  
of Email at Inbox/Outbox

Register  
now >>


Police drowning  
in CCTV  
data  
News



Reebok and iPhone  
let users design  
their own  
Photos



Mobile apps:  
Don't forget  
the BlackBerry  
News



You are here: [silicon.com](#) > [Management](#) > [IT Pro](#)

# IT Pro

## Encarta killed off

W is for Wikipedia

Tags: [encarta](#), [encyclopaedia](#), [wikipedia](#), [microsoft](#)

By [Ina Fried](#)

Published: 31 March 2009 11:25 BST

Microsoft has quietly confirmed that it is getting out of the encyclopaedia business, ending its long-standing Encarta product

Show related

In silicon.com

- Navigate this site -

Zones

Management

Software

Hardware

Networks

IT Services

Verticals

Public Sector

Financial Services

Retail & Leisure

Newsletters

RSS Feeds

Site map

DoneInbox ...[Ford ...Moab...Ford ...Ford ...Progr...First Y...Index ...Hartle...Yale S...Confe...Yale S...CTS 2...Encart...





craigslist



LIVEJOURNAL



Open Diary  
Read Life. Write Life.



a multilingual tree  
encyclopedia  
**Wiktionary**  
['wɪkʃənəri] n.,  
a wiki-based Open  
Content dictionary  
Wileo ['wi:lə kəri]



Innovation,  
social and market,  
comes from the  
edge

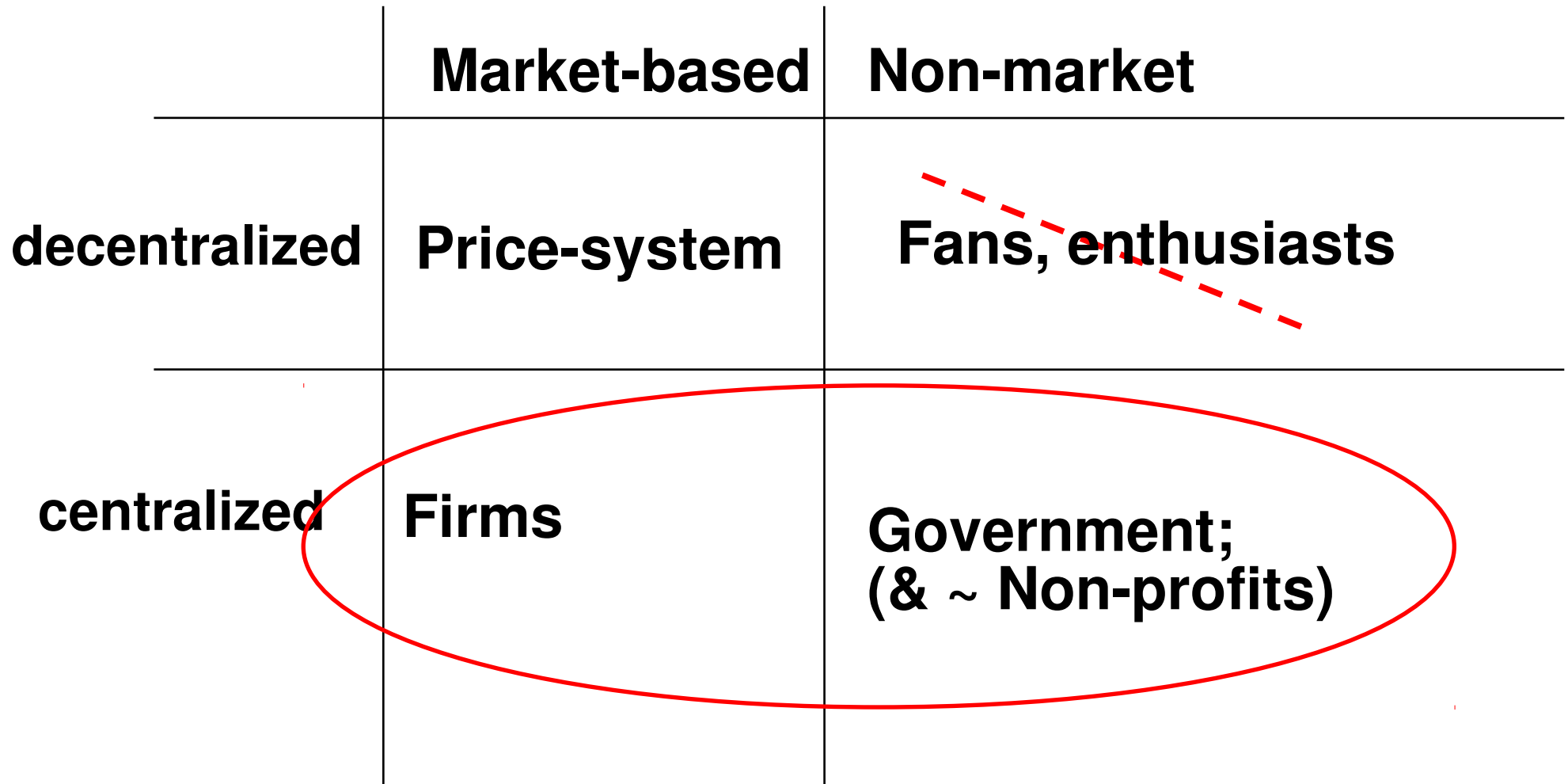


# Second Industrial Divide

---

---

	Market-based	Non-market
decentralized	Price-system	Fans, enthusiasts
centralized	Firms	Government; (& ~ Non-profits)



# **Networked Information Economy**

---

- **The most important inputs, into the core economic activities, of the most advanced economies, are widely distributed in the population**
  - **Material**
    - **Computation, sensing, storage, communications**
  - **Knowledge, information, insight**
    - **Creativity, intuition, experience**
  - **Social**
    - **foundation of new organizational forms**

# **Networked Information Economy**

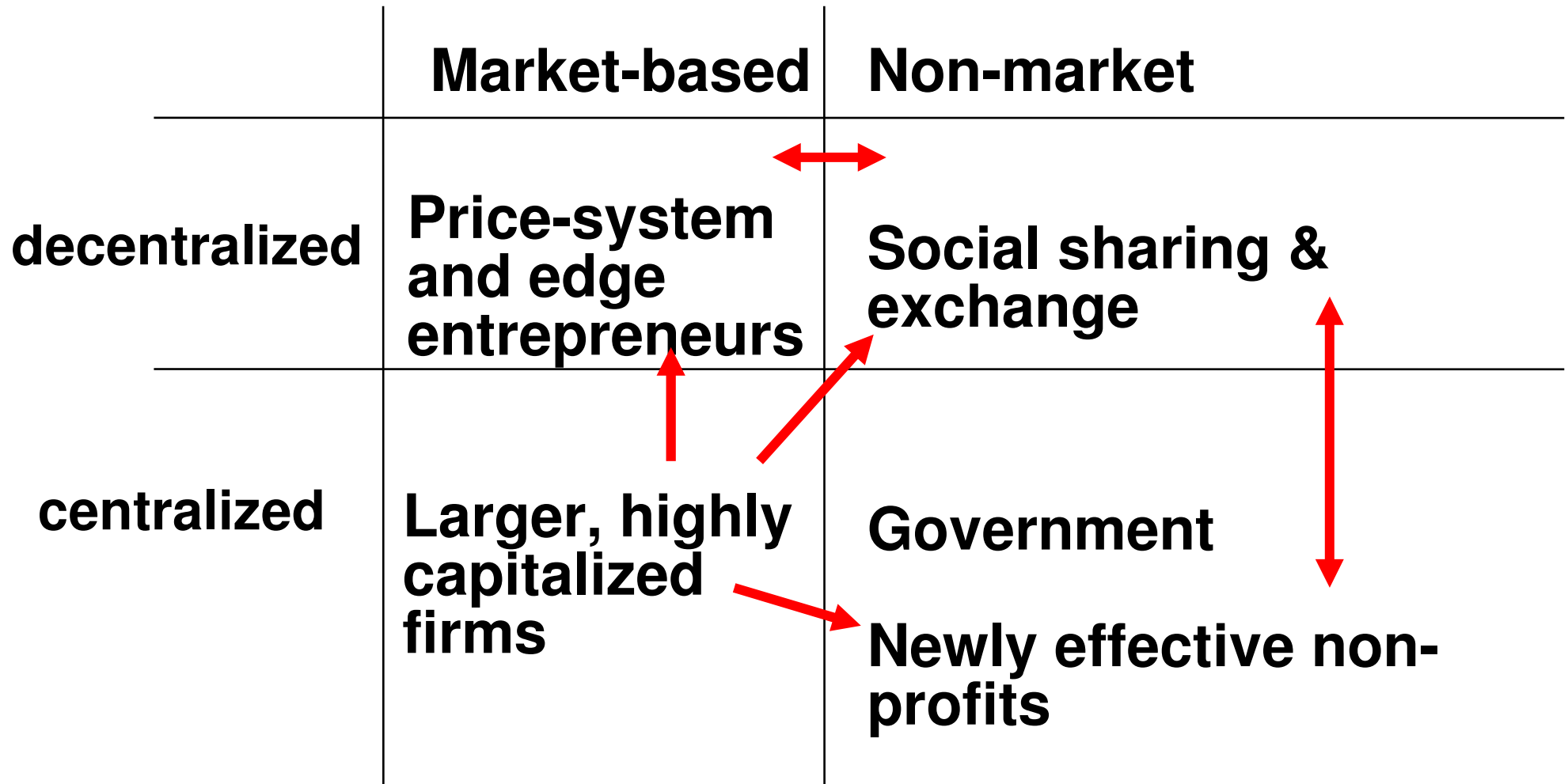
- The most important inputs, into the core economic activities, of the most advanced economies, are widely distributed in the population
- **Behaviors once on the periphery: social motivations, cooperation, friendship, decency, move to the very core of economic life in the most technically and economically advanced societies**
- **Low cost innovation, experimentation, rapid deployment, cheap failure make market innovation faster, more diverse**



# Networked information economy destabilized the Second Industrial Divide

---

---



# **Innovation, participation, culture**

---

---

- **A networked information economy**
  - **facilitating rapid innovation through edge experimentation over open systems**
  - **With a new significant role for commons-based and peer production**
    - **“Diversity gain” in types and focus**
- **A networked public sphere constructed through systems that harness diverse motivations and models**
- **A diverse and open system of cultural expression and meaning making**

# **Characteristics of the global, networked information economy**

---

- **Change and complexity vs. predictability and “well-behaved” change**
- **Innovation and growth vs. efficiency and optimization**
- **Flow vs. Stock**
- **“Scruffy,” adaptive, learning systems with late-binding design vs. tightly-coupled, slower moving, optimized systems**

# **Distributed innovation**

---

- **Low cost invention, prototyping, deployment, and experimentation**
- **Cheap failure; rapid learning**
- **Evolutionary process: high variation, selective pressure, adaptation**
- **Independent of & cumulative to mutualism with social production generally and peer production in particular**



Cost of getting to a  
deployed working  
prototype  
For adoption and  
testing

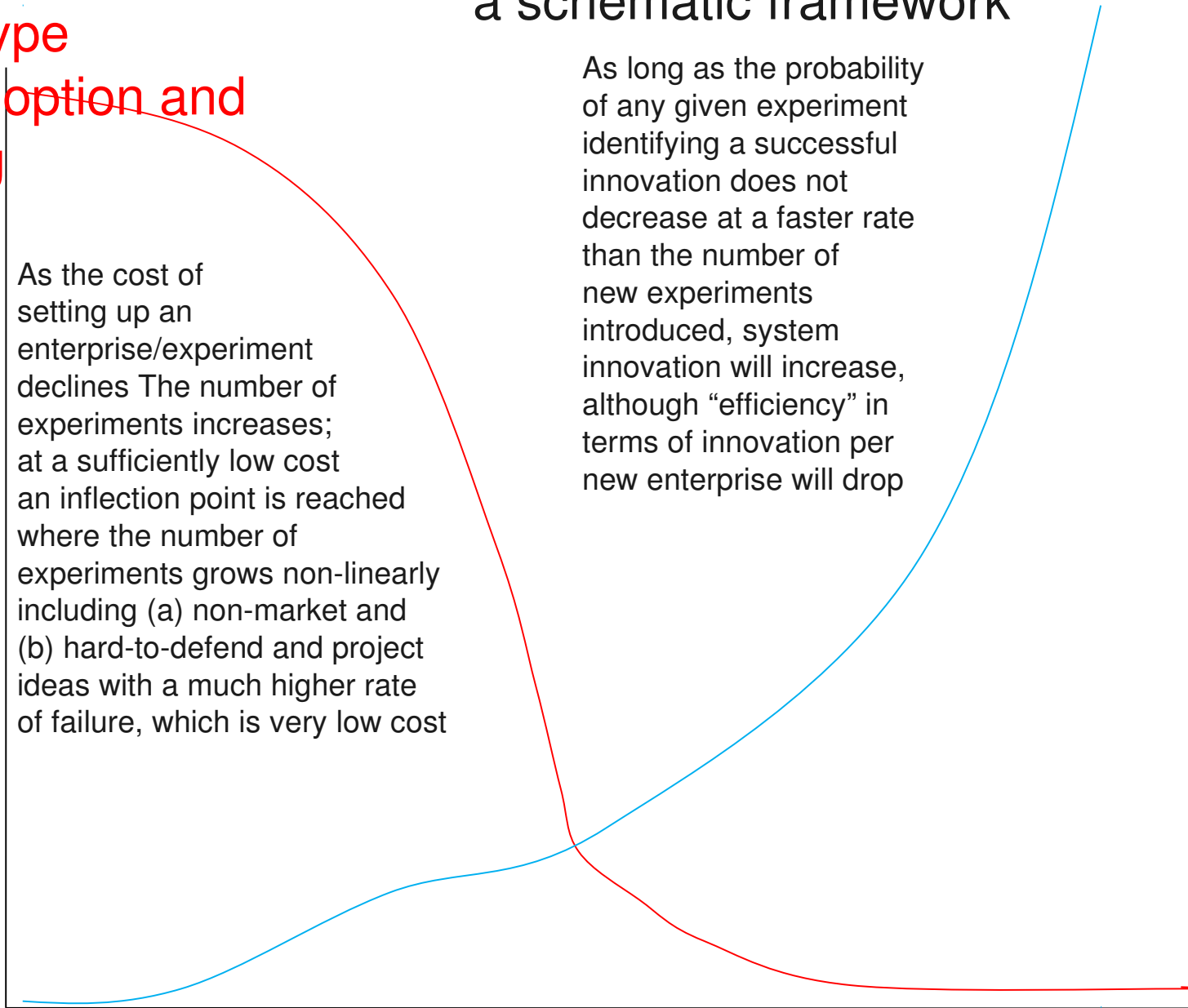
## NOT DATA!!! a schematic framework

Probability  
of breakthrough

As the cost of setting up an enterprise/experiment declines The number of experiments increases; at a sufficiently low cost an inflection point is reached where the number of experiments grows non-linearly including (a) non-market and (b) hard-to-defend and project ideas with a much higher rate of failure, which is very low cost

As long as the probability of any given experiment identifying a successful innovation does not decrease at a faster rate than the number of new experiments introduced, system innovation will increase, although “efficiency” in terms of innovation per new enterprise will drop

Number of enterprises in the space (market and social)



# **Institutional characteristics**

---

- **Freedom to operate more important than power to appropriate**
- **Commons: symmetrically available freedom to operate**
- **Open vs. closed**
  - **Institutional, technical, organizational**
  - **At all layers and instantiations of platforms, resources, and pathways**

# **Core common infrastructure**

---

- **Physical:**

- **Transport: wired**

**Structure**    • **Competitive/non-competitive**

**Behavior**    • **Discriminatory/non-discriminatory**

**Ownership** • **Private vs. municipal / public**

- **Transport: wireless**

**Structure**    • **Competitive / noncompetitive**

**Behavior**    • **Discriminatory / nondiscriminatory**

**Ownership** • **Proprietary / open wireless**

# **Core common infrastructure**

---

- **Physical:**
  - **Transport: wired**
    - **Competition primary structural constraint on control**
      - **Mixed facilities and open access**
      - **Highly divergent costs of DOCSIS 3.0 and FttH underscore need for shared facilities as part of the solution**
    - **Public/municipal plays significant role; likely larger for next generation**
    - **Behavioral controls: net neutrality**



# Core common infrastructure

---

---

- **Physical:**
  - **Transport: wireless**
    - **Competitive / noncompetitive**
      - **Fixed-mobile convergence creates new potential limits on competition**
    - **Discriminatory / nondiscriminatory**
    - **Proprietary / open wireless**
      - **Unlicensed wireless drives an equipment-market, instead of infrastructure market**
      - **Sole pathway to user-owned last mile**
        - **Potential to combine with ubiquitous open access fiber?**

# **Core common infrastructure**

---

- **Physical:**
  - **Device: PC evolutionary path**
    - **“Trusted systems” vs. general purpose devices:**
      - **demand in the market pushes against content-owner-driven regulation**
  - **Netbook vs. high-power processing in the hands of the user**
    - **Web 2.0 pushing away?**
    - **iPad as mobile passive display?**

# Core common infrastructure

---

- **Physical:**
  - **Device: PC evolutionary path**
  - **Device: Handheld evolutionary path**
    - **Newly important given ubiquity**
    - **Owned and controlled historical path**
    - **iPhone leads the way**
      - **App store license requirements;  
Apple's rights to reject; control**
  - **Behavioral regulation? In particular interoperability and portability?  
Competition regulation?**

# Core common infrastructure

---

- **Logical:**
  - **TCP/IP, IETF, HTML5: open standards**
  - **Software patents; E911-type regulations; business methods patents vs. FOSS; increasing business awareness of open business models; increased political awareness of FOSS developers**
  - **Heavy “reach through” regulation: DMCA, NET Act, toolmaker liability vs. increasing new models of open creativity; a culture that glorifies the hackers who circumvent DRM**



# Core common infrastructure

---

- **Platforms**
  - **Search?**
  - **Cloud services?**
    - **Cheaper incremental growth from idea to prototype to deployed systems**
    - **Currently no obvious bottlenecks**
    - **Need to monitor to see that there is no migration of new points of control into the cloud**

# Core common infrastructure

---

- **Human expression and communication:**
  - **Broader, deeper, more extensive copyright and neighboring rights vs. increasing market and social practices of sharing and open innovation/creativity**
- **Efforts to control “undesirable content” lead to development of control systems that can then be abused**
  - **E.g. Naïve Net Nanny type filters developed later deployed by censorial regimes**
  - **Security and spam concerns align with content industry concerns to push trusted systems**

# **Core common infrastructure**

---

- **Tension between models based on control, stabilization, optimization and models based on rapid evolution, experimentation, failure and adaptation**
  - **Twentieth century control-based business models, Hollywood/RIAA (& now journalism) lobbying vs. 21st century commercial players and social actors**
- **Tension between models based on pure self-interested rational actor model and models based on mixed social motivations**
- **Growth and innovation, individual freedom and democratization reinforce each other**
- **Require openness and policies of inclusion**

# **EU Digital Agenda**

---

---

- **Major new initiative; Much that is admirable; thoughtful**
- **Single online payment system**
- **eAuthentication and signature standards**
- **Pan-European spectrum framework**
- **Emphasis on consumer privacy (but transportable identity? Consumer rights to portable hosted data, including email, social contacts, reputation?)**
- **NGN, access; spectrum**
- **Public R&D investment sound basis**

# EU Digital Agenda

---

- **“Opening up access to content” subject to commitment to “preserve the contractual freedom of right holders”**
  - **Is rent seeking use of national proprietary levers part of the cause of failure?**
  - **Important to explore alternative, non-exclusion-based models**
    - **ISP-based charges and distribution**
    - **standardized terms**
    - **modified liability regimes on standardized share of revenue models**
    - **Non-Gov: Voluntary payment systems**

# EU Digital Agenda

---

- **Standards: disclosure of IP rights asserted in essential standards, but:**
  - What is “essential”?
  - What remedy for failure to disclose? Forfeiture? Estoppel as to use for interoperability/standards?
- **Cyber security need to also emphasize simultaneous commitment to openness and systems that preserve distributed, generative frameworks**
- **“Open access publication” good; but what about database protection per 2005 review?**