

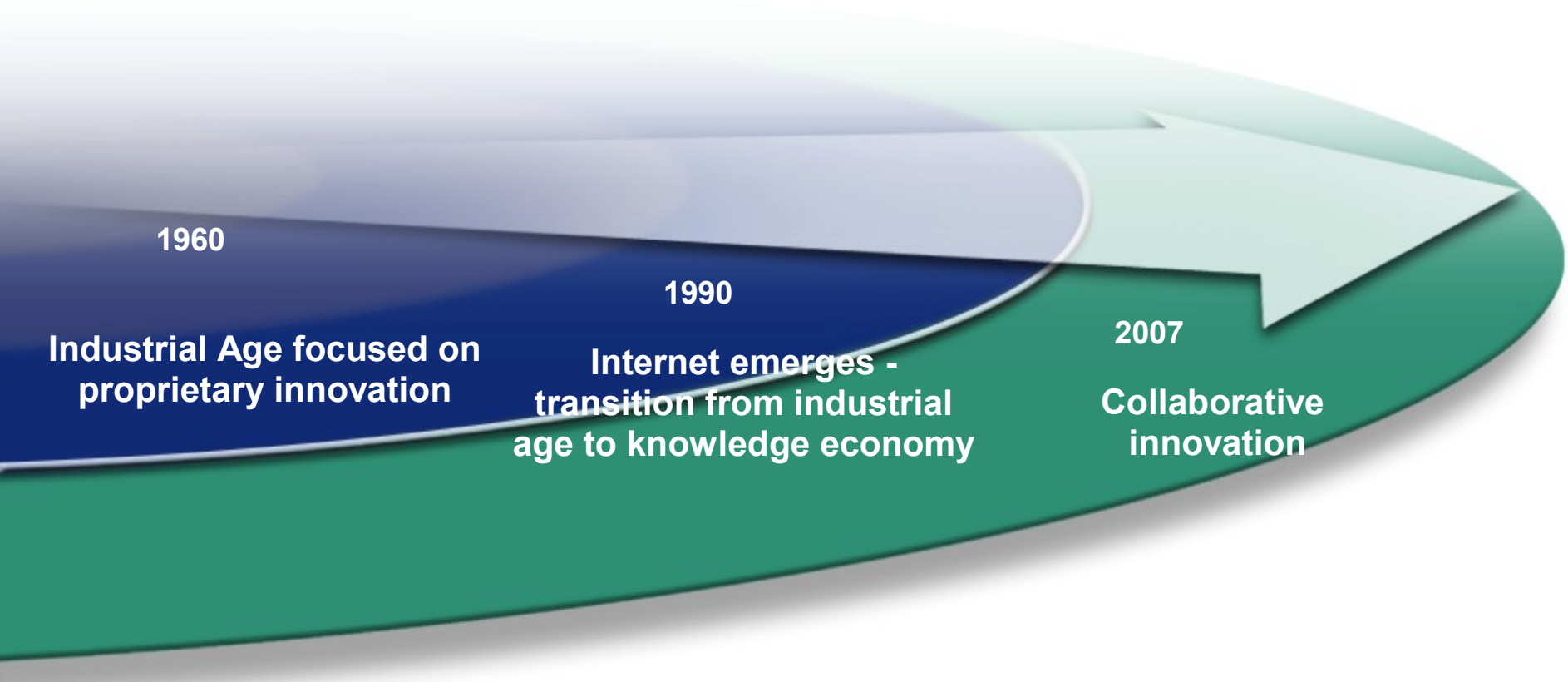
Intellectual Property Strategy in the 21 Century

Balancing Open & Proprietary Innovation



Roger Burt & Jonathan Sage
IBM Europe

The Innovation Landscape



IP Value for Emerging Technologies - Historical Pattern

Example: The Telegraph

1774: Lesage builds first telegraph

1798: Salva's Human Telegraph

1800: Volta's battery

1820: Ampere electro-dynamics

1840: Morse patents his code

1840: Wheatstone & Cook patent pointing telegraph

1844: U.S. Government experimental telegraph line between Washington D.C. & Baltimore. Morse sends the first message

1845: Cornel patents Telegraph wire

1846 – 1865: U.S. Government, Army & Railroads build telegraph infrastructure

1865: The International Telegraph Union is founded to set rules and standards for the telegraph industry

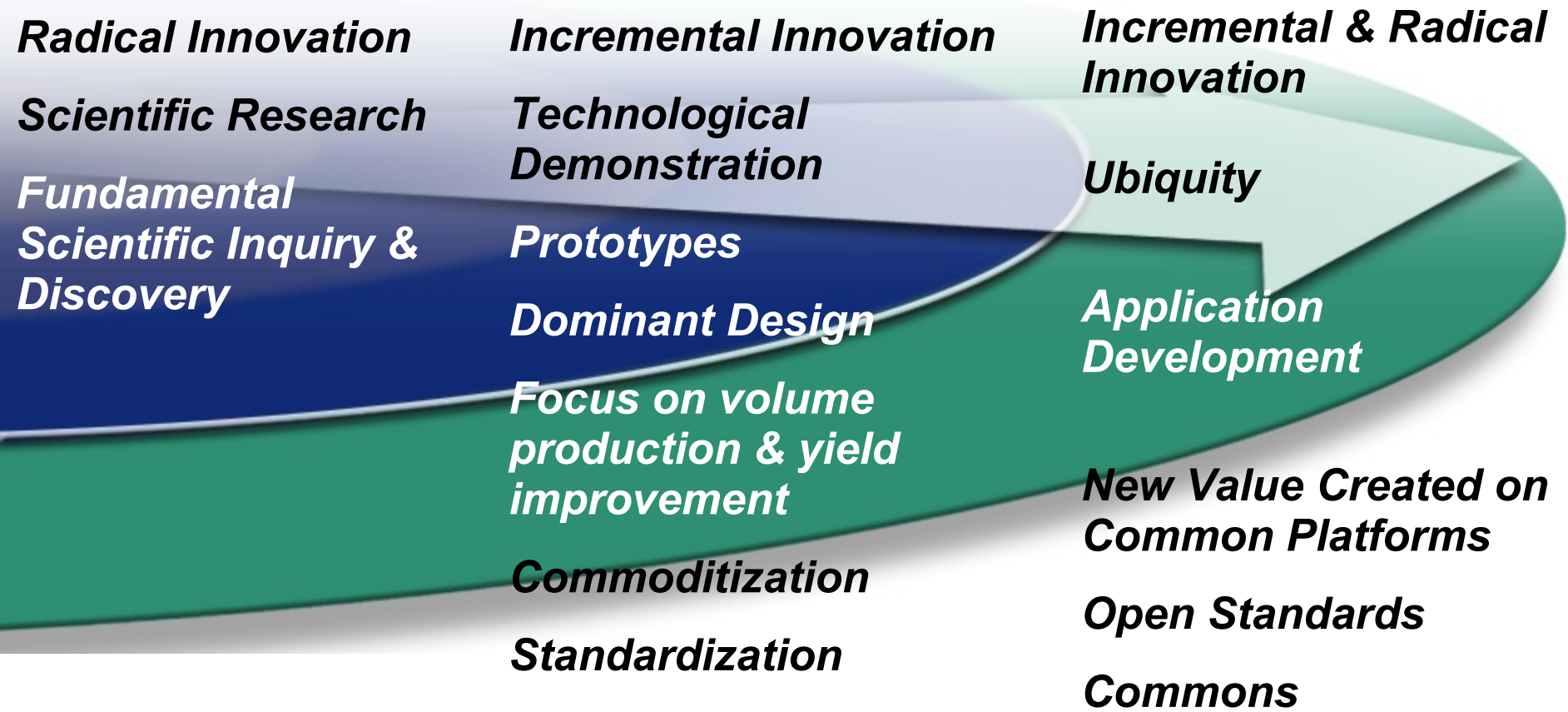
1867 – 1886: Patenting doubles, Thomas Edison and others develop & patent improvements new applications (e.g., sending pictures over a telegraph, controlling devices via telegraphy)

Samuel Morse

THE MOST IMPORTANT BIOGRAPHY of the NEW YEAR
THOMAS ALVA EDISON
SIXTY YEARS OF AN INVENTOR'S LIFE
BY FRANCIS ARTHUR JONES

THIS volume will at once commend itself as one of the few necessary books to librarians and readers alike. Edison's name and fame are known around the world. His life story reads like a romance, from the time he published a newspaper on board a train at fourteen, and later was an out-at-the-elbows "tramp" telegraph operator, till his electrical inventions caused the formation of a fifteen million dollar stock company. No recent life of Edison is in print, a fact which makes this book doubly valuable. It is the result of close acquaintance with, and study of the i...

- Other Examples:**
- Automobiles
 - Fixed Wing Flight
 - Electrical Utilities
 - Semiconductors
 - Networking

Discovery**Adoption****Application**

The Changing IP Landscape

For a Knowledge-Based Economy

- Proprietary Innovation
- Income and Royalties

- Collaborative Innovation
- Interoperability

Proprietary

Open

A Spectrum of Collaboration and Competition

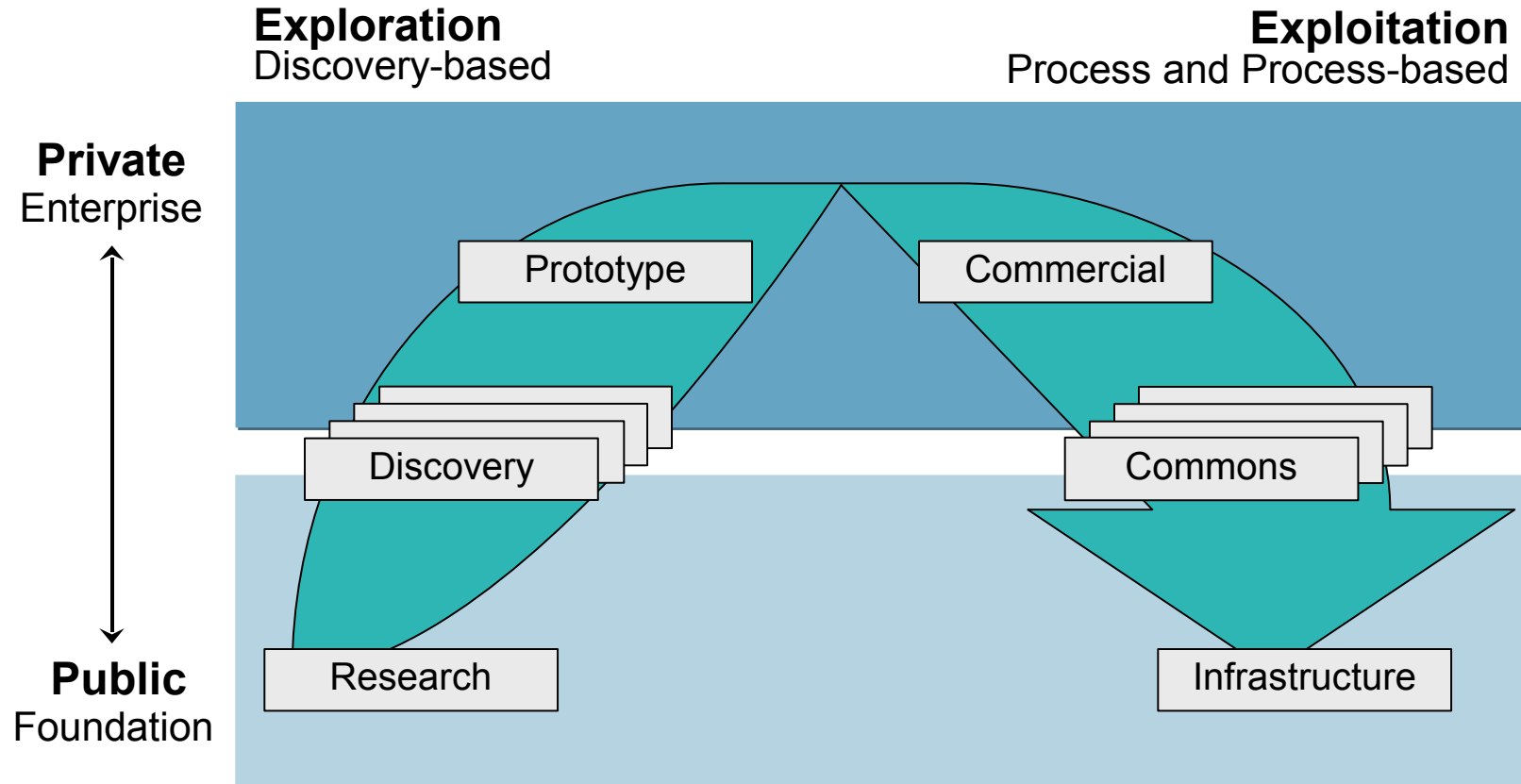
**Patent
Trolls**

**Patent
Licenses &
Assignments**

**Patent Pledges
and Commons**

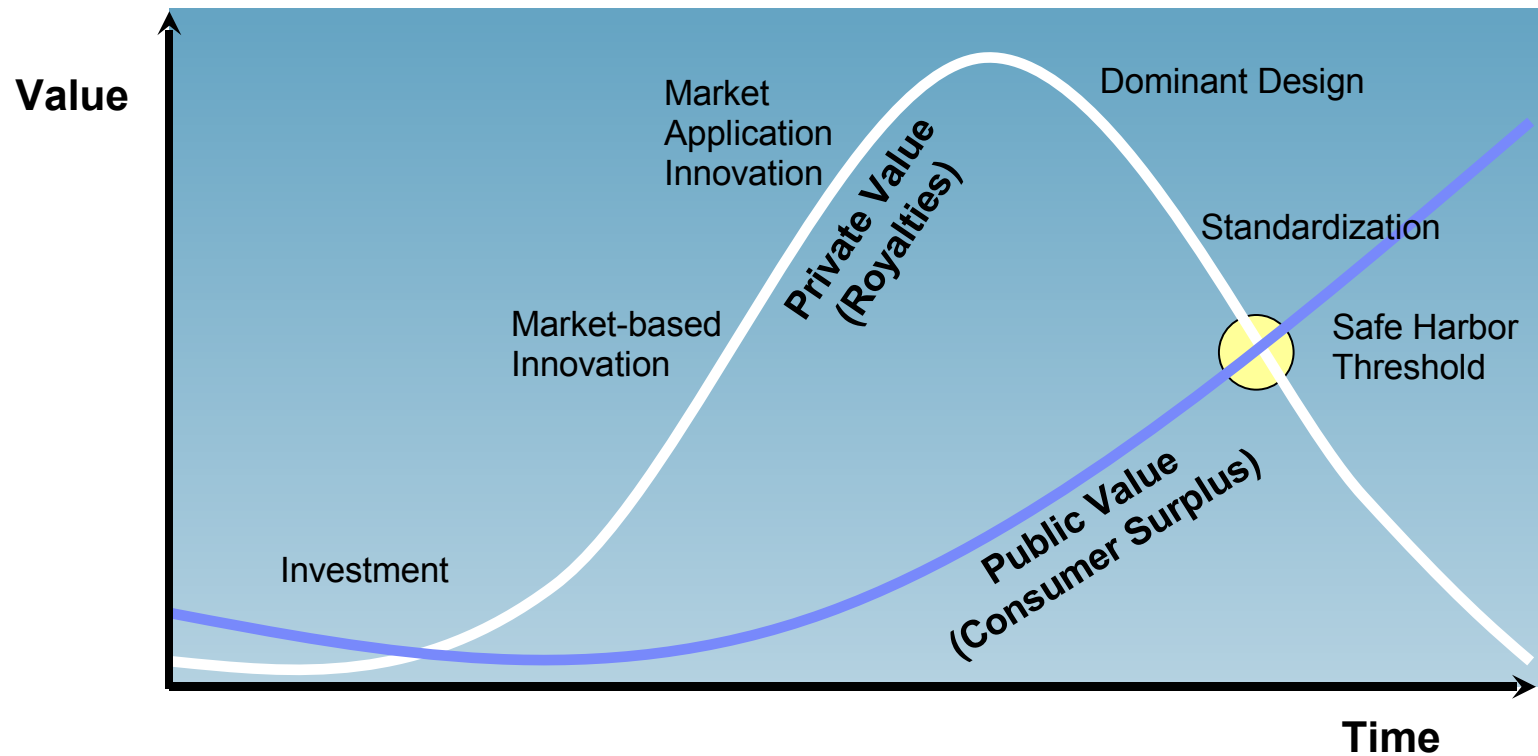
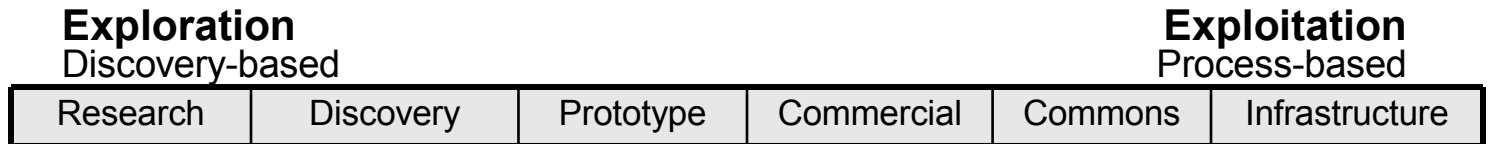
**Open Source
Software**

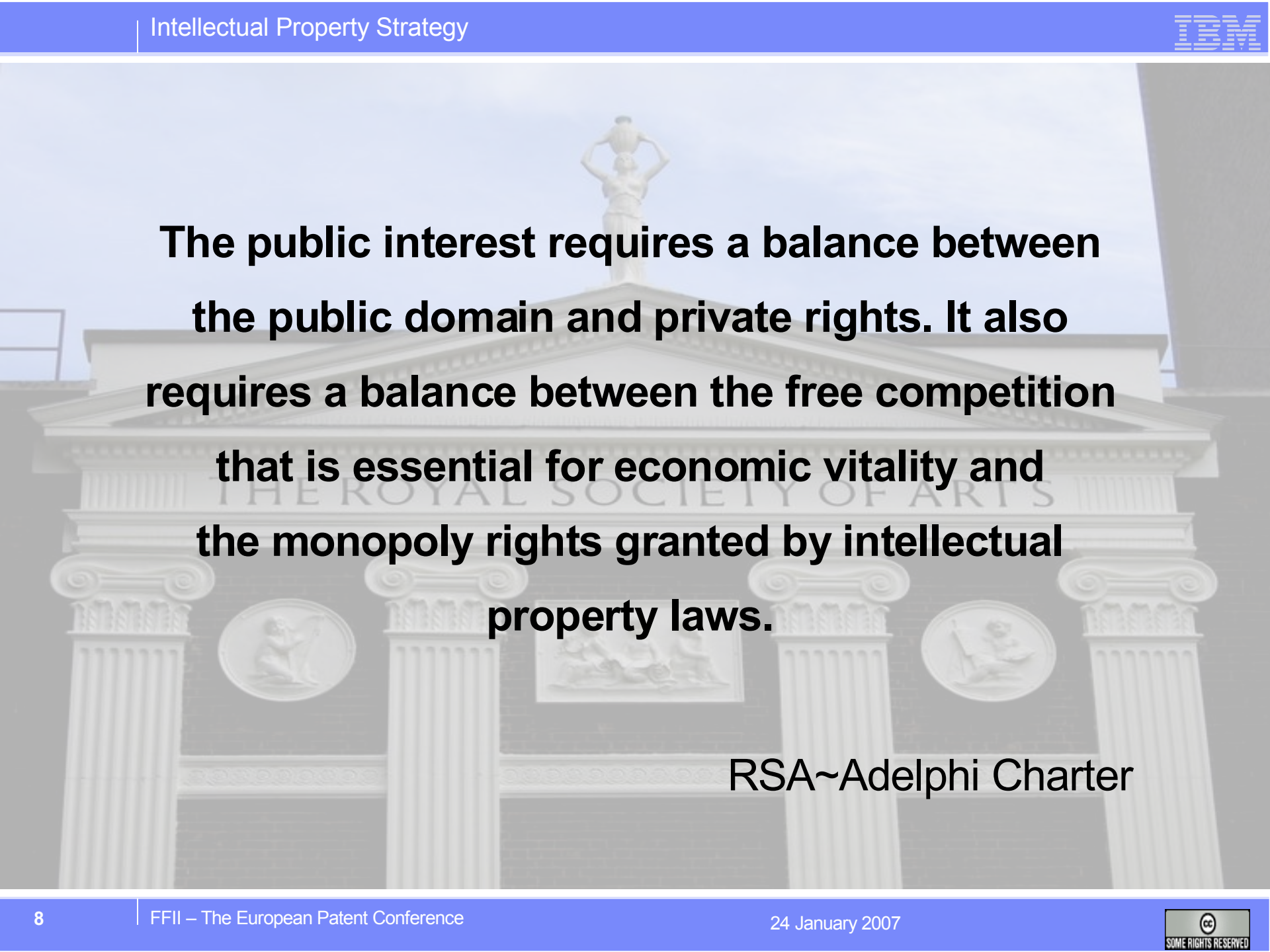
Innovation exhibits a natural progression with distinct phases



Movement can be accelerated or slowed by factors such as increasing or decreasing investment, market demand, standardization and regulation.

When public value surpasses private value, optimal markets should move assets to the public domain





The public interest requires a balance between the public domain and private rights. It also requires a balance between the free competition that is essential for economic vitality and the monopoly rights granted by intellectual property laws.

RSA~Adelphi Charter

Enabling Collaborative Innovation

IBM Alliances

On Demand Innovation Services
Engineering & Technology Services

Patents

Patent quality Initiatives
Legislative Reform
Amicus Activity

Universities

University Innovation Summit

- RPI, Georgetown, CMU, Georgia Tech, Stanford, University of Texas, University of California-Berkeley, University of Illinois, Cisco, HP, Intel, Kauffman Foundation

Standards

Standards Leadership

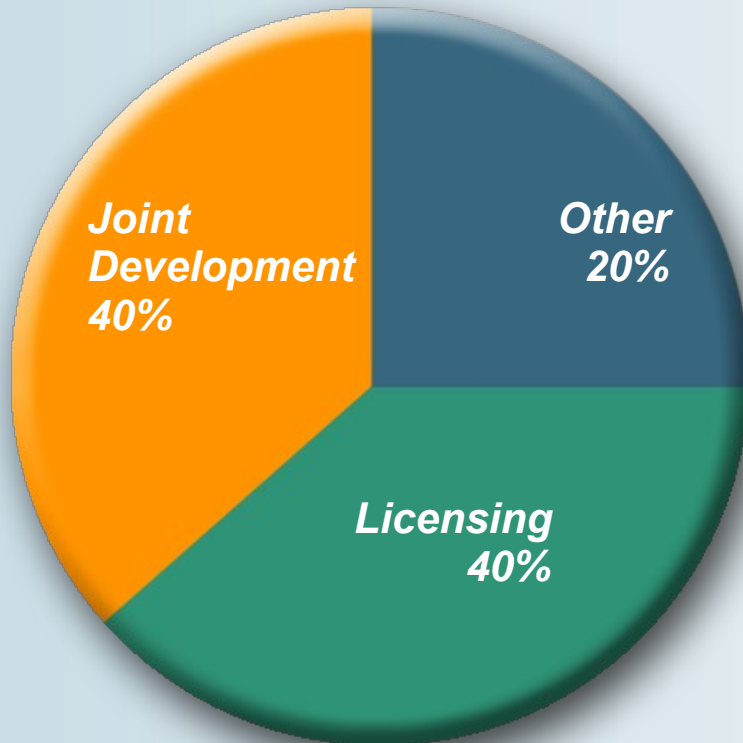
- Open Technologies to Drive Standards
- China Open Standards Focus
- Emerging Market RFID Workshops

Patent Pledges

IP as a business – sharing know-how



IBM's IP Business – 2006



Patent Licensing

- Over 1,100 active licenses
 - Income,
 - Freedom of Action

Joint Development

- Sony
- Toshiba
- AMD
- Infineon
- Samsung
- Chartered

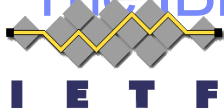
Know How Licensing

Open Source Contributions

Patents Pledges

Open Invention Network

The IBM Open Participation Report Card up to 2006/2007

**1998 / 1999****Java, XML**

- Co-led XML4J, W3C DOM, XSL
- Led Apache XML projects Xalan Xerces, SOAP
- Founder XML.org
- Elected OASIS Board of Directors

2000**Web Services & UDDI**

- Co-author WSDL, SOAP 1.1
- Cofounder UDDI.org
- Author UDDI specification

2001**Web Services and Tools**

- Led submission of WSDL to W3C
- Founder Eclipse.org
- Co-author W3C XML Schema
- Chair OASIS WS-Remote Portlets TCs
- IBM Web Services Toolkit released on alphaWorks
- Participation in Mozilla

2002**WS-I, OMA and WS-Security**

- Founder WS-I.org
- Founder OMA
- Co-author BPEL, WS-TX, WS-TC
- Co-author WS-Security
- Co-chair UDDI TC
- Linux contributions to scalability

2003**Web Services Interoperability**

- Co-chair OASIS WS-Security 1.0
- Submitted BPEL to OASIS
- Co-chair OASIS WS-DM TC
- Submitted CBE to OASIS
- Submitted WS-Manageability to OASIS

2004**Web Services Management**

- Chair WS-I Basic Profile 1.1
- Co-chair OASIS WS-Notification TC
- Co-chair WS-Resource Framework TC
- Chair OASIS DITA
- Submitted WS-Addressing to W3C
- Contributed UML2 to Eclipse

2005**Web Services Reliability**

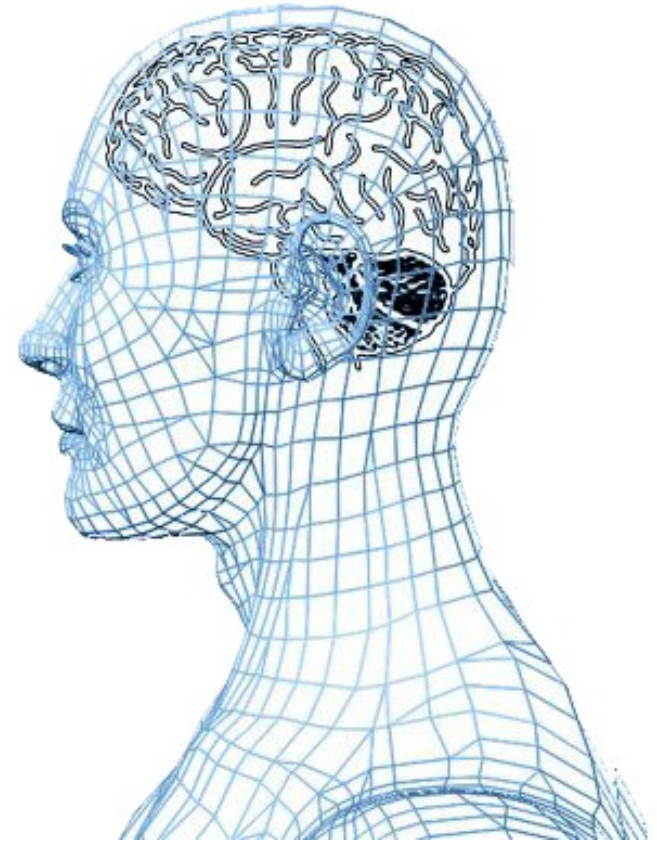
- IBM named chair IETF
- IBM commitment to RF in OASIS
- Co-author & submitted WS-RM to OASIS
- Led OASIS WS-DM and DITA to Standards status
- Database extensions to PHP
- Pledged 500 US patents to OSS
- Purchase of Gluecode



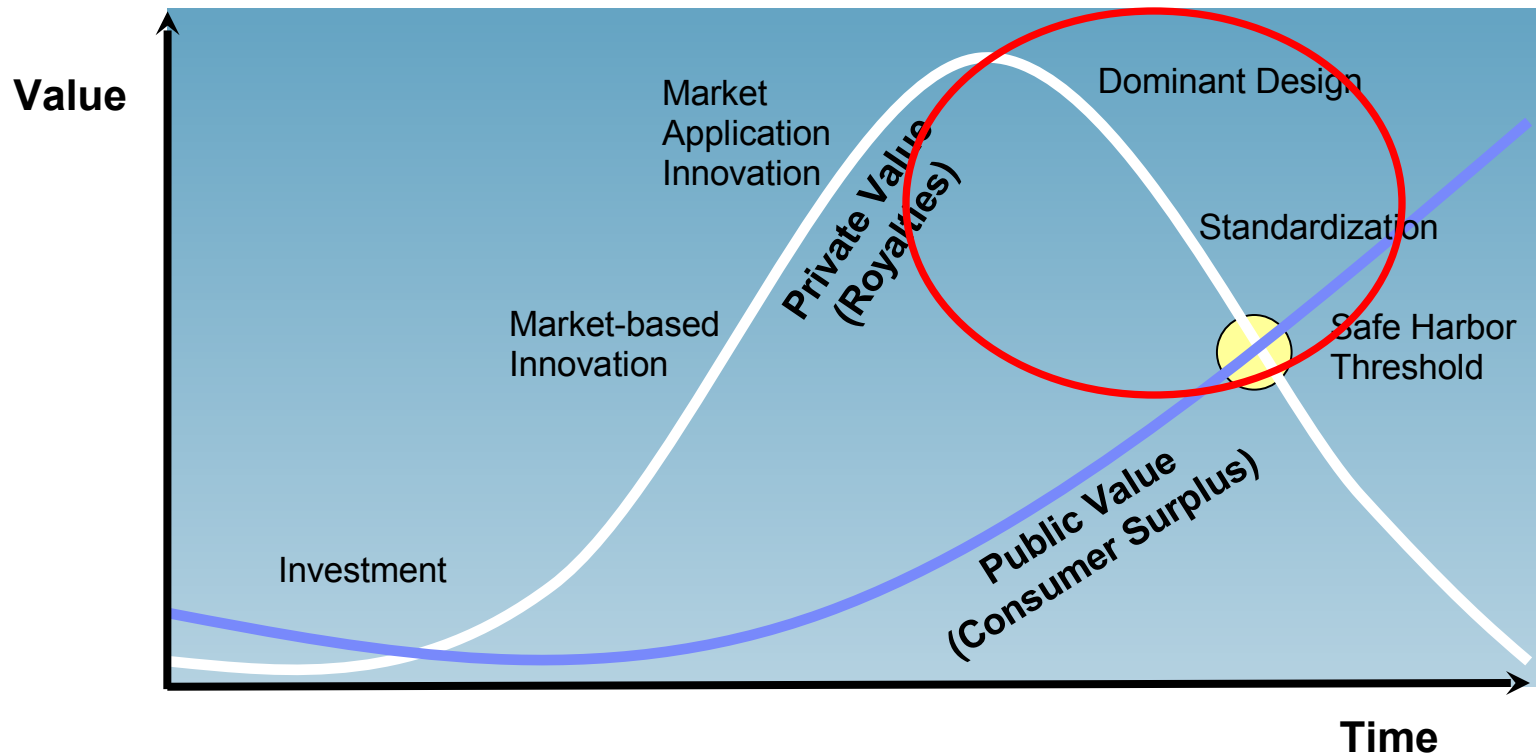
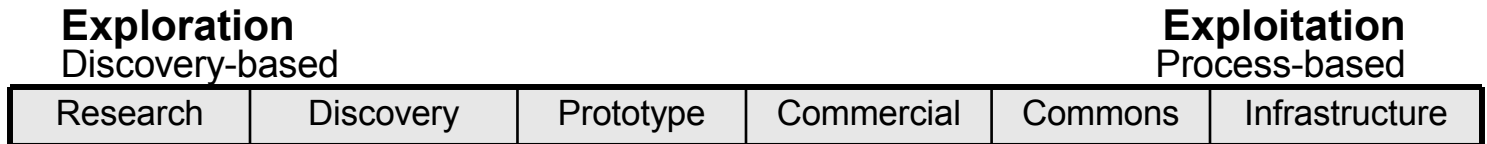
Questions in European context

How do you balance public interest with innovation and economic vitality?

How can we improve the European patent system, in terms of making sure that patents reflect real invention, are transparent in the process of granting and ownership – while keeping costs at a reasonable level?

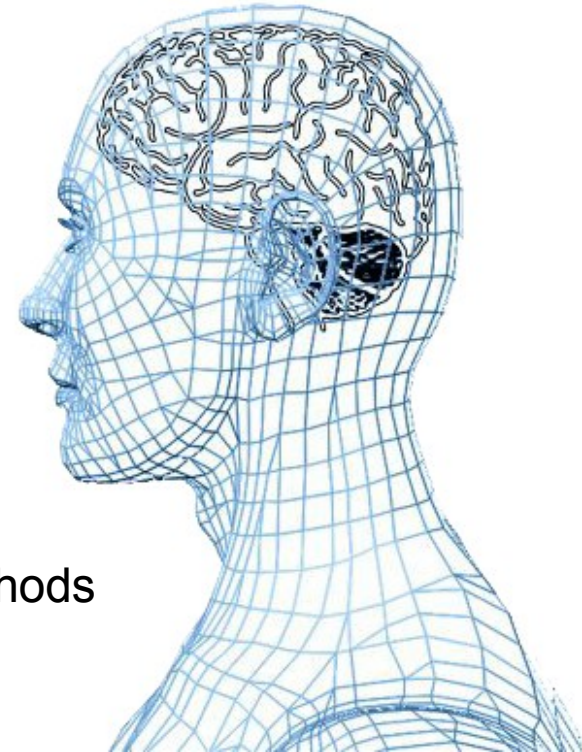


Ex ante disclosure of patents – legal requirement



Improving patent quality & reducing uncertainty

- **Patent Quality Initiatives happening globally**
 - Community Patent Review
 - Open Source As Prior Art
 - Patent Quality Index
- **Amicus (friend of the court) Activity**
 - Phillips – precision in claim interpretation
 - eBay – balance in awarding injunctions
 - Metabollite – technicity requirement for business methods
 - KSR – raising the bar on non-obviousness
- **Patent Holder's Code of Conduct**
 - Upholding the patentee's side of the shared responsibility



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