# **Open Source Development and Distribution of Digital Information: Economic, Legal, and Social Perspectives**

INFOSYS 296A-2 | University of California at Berkeley | Fall 2005

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#### **Course Description**

Substantial investments are being made by many individuals and firms in the development and distribution of open source software and other information artifacts. This seminar will consider economic and business rationales for adoption of open source modes of production and dissemination and will consider how open source projects might be made sustainable. The seminar will examine licensing models widely used by open source developers, which generally grant rights to use and modify licensed information on condition that users agree to carry over to derivative works the same license restrictions imposed by the open source developer. For software, this includes free publication of source code. Open source licensing models are being adapted to apply to more than just computer software, such as databases of scientific information, certain biotechnology innovations, and music. Whether the metaphor of open source has wider social ramifications as a modality of community governance will also be considered.

# **SYLLABUS**

#### Aug. 29 - An Introduction to Open Source

- Tim O'Reilly, *Open Source Paradigm Shift*, available at: <u>http://tim.oreilly.com/articles/paradigmshift\_0504.html</u>
- Yochai Benkler, *Coase's Penguin, or, Linux and The Nature of the Firm*, 112 Yale Law Journal (2002-03) available at: http://www.benkler.org/CoasesPenguin.html

## Sept. 12 - Open Source Software in Practice

Guest Lecturer: Brian Behlendorf (CollabNet)

- Richard Stallman, *GNU Manifesto*, available at: <u>http://www.gnu.org/gnu/manifesto.html</u>
- Eric Raymond, *The Cathedral and the Bazaar*, available at: http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar/

## Sept. 19 - Economics of Open Source

- Josh Lerner and Jean Tirole, *The Simple Economics of Open Source*, available at: <u>http://www.people.hbs.edu/jlerner/simple.pdf</u>
- Rishab Aiyer Ghosh, Cooking Pot Markets: An Economic Model for the Trade in Free Goods and Services over the Internet, First Monday 3, 1998, at: <u>http://www.firstmonday.org/issues/issue3\_3/ghosh/</u>

# Sept. 26 - Open Source Business Models (Part I)

- FREDERICK P. BROOKS JR, THE MYTHICAL MAN-MONTH: ESSAYS ON SOFTWARE ENGINEERING, Chapters 2 -7 (1977)
- The "Halloween Document" (Internal Microsoft Memo by Vinod Vallopillil, 1998) annotated by Erik Raymond at: <u>http://www.opensource.org/halloween/halloween1.php</u>

# Oct. 3 - Open Source Business Models (Part II)

• ROBERT YOUNG AND WENDY GOLDMAN ROHM, UNDER THE RADAR: HOW RED HAT CHANGED THE SOFTWARE BUSINESS AND TOOK MICROSOFT BY SURPRISE, Chapters 4 and 5

Chris Rasch, *The Wall Street Performer Protocol: Using Software Completion Bonds to Fund Open Source Software Development*, First Monday 6, at: <a href="http://www.firstmonday.org/issues/issue6\_6/rasch/index.html">http://www.firstmonday.org/issues/issue6\_6/rasch/index.html</a>

#### **Oct. 10 - Roles of Open Source & Proprietary Software in the Private Sector**

Guest Lecturer: TBD

- Eben Moglen, Anarchism Triumphant: Free Software and the Death of Copyright, in THE COMMODIFICATION OF INFORMATION 107 (Niva Elkin-Koren & Neil Weinstock Netanel, eds. 2002), available at: http://emoglen.law.columbia.edu/my\_pubs/anarchism.html
- Speech by Craig Mundie, Microsoft Senior Vice President, at NYU Stern School of Business, 3 May 2001, at: <u>http://www.microsoft.com/presspass/exec/craig/05-03sharedsource.mspx</u>
- David Lancashire, Code, Culture, and Cash: The Fading Altruism of Open Source Development, First Monday 6, at: <u>http://www.firstmonday.org/issues/issue6\_12/lancashire/index.html</u>

# **Oct. 17 - Government Policy About Open Source**

- David S. Evans, Politics And Programming: Government Preferences for Promoting Open Source Software, in GOVERNMENT POLICY TOWARDS OPEN SOURCE SOFTWARE (Robert Hahn ed., 2002) at: http://www.aei.brookings.org/admin/authorpdfs/page.php?id=213
- Rishab Aiyer Ghosh et. al, Free/Libre Software and Open Source Software, Survey and Study, Final Report, Part 2B, Open Source Software in the Public Sector: Policy within the European Union (2002), at: <u>http://www.infonomics.nl/FLOSS/report/FLOSSFinal\_2b.pdf</u>

# **Oct. 24 - Regulability of Open Source/Open Source as a Global Phenomenon**

- Lawrence Lessig, *The Limits in Open Code: Regulatory Standards & the Future of the Net,* 14 Berk. Tech. L. J. 759 (1999), available at: http://www.law.berkeley.edu/journals/btlj/articles/vol14/Lessig/html/text.html
- Stephen M. McJohn, *The Paradoxes of Free Software*, 9 Geo. Mason L. Rev. 25 (2000)

#### **Oct. 31 - Conceptual Underpinnings of Free and Open Source Licenses: Property, Contract, or Something Else?**

Guest Lecturer: Margaret Radin (Stanford Law School)

• Michael Madison, *Reconstructing the Software License*, 35 Loy.-Chi. L.J. 275 (2003) available at: <u>http://ssrn.com/abstract=502102</u>

Recommended:

• Glen O. Robinson, *Personal Property Servitudes*, 71 U. Chi. L. Rev. 1449 (2004) available at: <u>http://ssrn.com/abstract=477541</u>

# Nov. 7 - Enforceability of Open Source Licenses

Guest Lecturer: Molly van Houweling (UC Berkeley, Boalt Hall School of Law)

- GNU General Public License (GPL), available at: <u>http://www.gnu.org/copyleft/gpl.html</u>
- David McGowan, Legal Implications of Open Source Software, Parts II, III-B, & III-C, 2001 U. Ill. L. Rev. 241 (2001), available at: http://ssrn.com/abstract=243237

#### Nov. 14 - Adapting the Open Source Concept to Biotech Innovations

- Sara Boettiger & Dan L. Burk, *Open Source Patenting*, 1 J. Biotech. L. 221 (2004), available at: <u>http://ssrn.com/abstract=645182</u>
- Arti Rai, Open and Collaborative Research: A New Model for Biomedicine, in INTELLECTUAL PROPERTY RIGHTS IN FRONTIER INDUSTRIES 131 (Robert W. Hahn ed., AEI-Brookings Press 2005), available at: http://ssrn.com/abstract=574863

#### Nov. 21 - Adapting the Open Source Concept to Other Digital Content: Creative Commons and Public Library of Science

Guest Lecturer: Michael Eisen (PLOS)

- Patrick O. Brown, Michael B. Eisen, Harold E. Varmus, *Why PLoS Became a Publisher*, available at <u>http://biology.plosjournals.org/</u> perlserv/?request=get-document&doi=10.1371/journal.pbio.0000036
- http://en.wikipedia.org/wiki/Wikipedia
- http://en.wikipedia.org/wiki/Wikipedia:Policies and guidelines
- http://en.wikipedia.org/wiki/NPOV
- http://meta.wikimedia.org/wiki/The\_Wikipedia\_Community
- http://meta.wikimedia.org/wiki/Power\_structure
- <u>http://meta.wikimedia.org/wiki/Foundation\_issues</u>

#### Nov. 28 - Adapting the Open Source Concept to Other Content: Reports on Other Experiments

Students to post readings on course website/blog

## Dec. 5 - Adapting the Open Source Concept to Principles of Democratic Governance

- Charles Sabel, Work and Politics: The Division of Labor in Industry, Chapter 1.
- Steven Weber, *What if Open Source Principles of Governance Find Their Way into Communities of Knowledge and Practice in Politics?*, in OPEN SOURCES: VOICES FROM THE OPEN SOURCE REVOLUTION (2d Ed. Forthcoming 2005)