15.567 Reading Guide Session 16: Open Source and Innovation

Digital goods like software, information, music, video, e-books, etc. can be reproduced almost costlessly. While this is provides obvious economic benefits, it also poses special challenges for providing incentives for innovation. Randy Davis discusses some of these challenges in his article on the "Digital Dilemma", while Eric Raymond describes one solution, the open source approach. Understanding these issues will become increasingly important for entrepreneurs, managers, policymakers and innovators of all types.

Readings

Required:

Raymond, "The Magic Cauldron"

Davis, Randall "The Digital Dilemma" Communications of the ACM, February, 2001.

Optional:

Shapiro & Varian, Ch. 4

Brynjolfsson and Saunders, Ch. 6.

Richard Stallman, "Why software should not have owners" in *Free Software*, *Free Society: The Selected Essays of Richard M. Stallman*.

Summary of the Digital Millennium Copyright Act by U.S. Copyright office

Besen and Raskind. (1991). An Introduction to the Law and Economics of Intellectual Property. *Journal of Economic Perspectives*, Vol. 5 (No. 1), pp.3-27.

Lessig, L., Free Culture: How Big Media Uses Technology and the Law to Lock Down Creativity, (2004), Penguin Press.

URLs:

http://www.socialtext.com/blog/author/eugene-lee/

http://en.wikipedia.org/wiki/Open_source

http://www.fsf.org

http://www.redhat.com/

Study Questions

Please think about the following questions as you do the readings.

- 1) What are the strengths and weaknesses of the open source approach, including the business models described by Eric Raymond in "The Magic Cauldron"? Where does he argue that it works best? Do you agree?
- 2) Give your answer to question one, do you think the Open Source approach, is likely to dominate software development in the next 20 years, to fade away, or to stay where it is? Provide specific examples, preferably from your first-hand experience.
- 3) What does Randy Davis mean by the "Digital Dilemma"? What are the trade-offs he discusses? Do you agree with his assessment? Are there other factors that should be considered?
- 4) Should the current laws regarding intellectual property rights, including patents and copyrights be fundamentally revised for software and other digital goods, along the lines suggested by Randall Davis?
- 5) What do you think the best way is to provide incentives for innovation in digital goods like software and media? If had a magic wand, how would you design the "rules of the game" in our economy to maximize welfare in this area?

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