41

Yochai Benkler, “Coases Penguin, or Linux and The Nature of the Firm”

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Background

Yochai Benkler’s “Coase’s Penguin, or, Linux and The Nature of the Firm” was written at the beginning of the Web 2.0 age and has provided very accurate frameworks for viewing the expansion of peer-driven projects in the internet atmosphere. By applying fundamental economic thought to these projects, Benkler shows that that they actually can grow out of our current models and should be as fundamental as the models we use right now. Coase, an influential economists, introduced a model of firm formation in 1960. The model worked well until the rise of the internet showed instances where individuals and structures (like Linus and the Linux project) defied the model. Through examining these modern exceptions with the same framework of assumptions as Coase used writing The Nature of the Firm, Benkler extends the model to form an additional model of peer production, which could be help society understand whether to use free markets, firms, or peer-production structures to efficiently optimize production.

Key Points

Despite models and theory that would say that individuals won’t expend large efforts on work on projects in which they receive no (monetary) reward, we see that quite a few do, e.g GNU, NASA click worker, Wikipedia, Project Gutenberg, academia etc.

Part I illustrates the “phenomenon of large- and medium scale collaborations among individuals that are organized without markets or managerial hierarchies” that are “emerging everywhere in the information and cultural production system.”

Part II is the framework for explaining this phenomenon. Many individuals independently search the available information and opportunities to participate. They self-identify their tasks for various reasons. Individuals choose their own tasks, which makes them more viable. This requires a review system so that people don’t take on something they can’t do. Also part II explains the advantages of “commons-based peer production” over markets or firms. They have improved identification and allocation of creative/capable people to achieve certain tasks. Commons-based peer production has a distinct advantage, drawing upon the creativity of many.

Part III is about motivation. Nobody will invest if they can’t benefit from it so motivation plays an important role. There are diverse types of motivation and each will attract different people.

Open Projects should be:

- modular – divided into components that can be produced by an independent individual
- size – the modules should be small – many people can help, even if they have small amounts of motivation to contribute. It is good to have many levels of granularity to match levels of motivation.
- low-cost integration that includes quality control and a mechanism for putting the modules into the final product. A project needs to defend against bad contributions or be cheaply assembled.

Peer Production examples – how each component of the information-production chain is covered using a peer-based model online.

- Content
  - Clickworkers – crowd sourcing mapping craters on Mars. Projects that would take months of time for a few professionals can be done with a few minutes of effort each contributed by a different volunteers. The budget for the project goes to coordination, people contribute for fun.
  - Wikipedia – users adapt to the norms that wikipedia has set up.
- Relevance/Accreditation
  - Amazon – other people liked what you liked and X – so yes, with enough people/ data points it can make suggestions to individuals
  - Google – using links to other sites in the ranking algorithms
  - Slashdot (/reddit) – up voting and down voting systems
- Value-added Distribution
  - Napster – thousands of individuals share their hard drive space instead of one central server
  - Project Gutenberg/Distributed Proofreaders – people proofread books so they can be available digitally. Books are read multiple times to look for errors.

There are diverse motivations for why people contribute to open projects. There are three main types of rewards, the combination of which shapes motivation: monetary, hedonic, and social-psychological. These rewards can be positive or negative. The amount of motivations that a contributor needs is connected to the modularity and granularity of the project. “Peer production is limited not by the total cost or complexity of a project, but by its modularity, granularity, and the cost of integration.” Modularity is the extent to which a project can be broken down to parts that can be done independently by individuals. Granularity is the size of the modules. More people will be attracted to the project the smaller the modules are.

Discussion Questions

1. How can we make educational resources more modular, granular, and easy to integrate?
2. How does “Commons-based peer production” improve upon market or firm-based production strategies?
3. What are the advantages of “commons-based peer production” over markets or firms?
4. What has the Wikipedia phenomenon shown us since the writing of this article in 2002?
5. How does motivation, project modularity and granularity, and the presence or absence of intellectual property rights play in to the success or non-success of commons-based peer production?