Nalu Concepcion

CSC630, 7th Period Dr. Zufelt

1.13.17

<div align="center">double revenue != 0.00</div>

      A conundrum that companies which develop open source software are often faced with is how to go about generating revenue. Since open source code is — by definition — freely available, OSS companies are given less control to manipulate the laws of supply/demand.[1] As such, OSS companies have strategized new business methods as a means of generating revenue. Some of the following business models more strictly uphold the tenets of OSS, while others tend more towards the capitalistic world of proprietary software. We must accordingly consider how this spectrum plays a part in the OSS economy; is it possible for companies in any segment of the spectrum to maximize profit whilst upholding the tenets of open source programming?

      One business model is one which was first conceived by The Apache software foundation. Apache's Hadoop framework is open source, but it is complex and difficult to implement without any prior training. Apache, in an endeavor to remedy this, offered (for profit) assistance with installation of their program, as well training of any employees hired by the company seeking to utilize Hadoop.[2] Apache sought to profit by offering paid customer support for their products. This proved to be an unprofitable endeavor, as initially, those who did

---

[1] David Gerwitz, "Nothing Good Is Free: How Linux and Open Source Companies Make Money," ZD Net (blog), entry posted November 18, 2016, accessed January 8, 2018, http://www.zdnet.com/article/how-do-linux-and-open-source-companies-make-money-from-free-software/.

[2] Arun Kumar, "How Do Open Source Companies and Programmers Make Money?," The Windows Club (blog), entry posted 2017, accessed January 4, 2018, http://www.thewindowsclub.com/open-source-companies-programmers-make-money.

purchase customer support eventually became accustomed to the software and found that they no longer needed the support.[3] In general, revenue from services is minimally lucrative with only a 20-30% gross profit margin.[4] Furthermore, since clients will likely only purchase the service once, services revenues eventually stagnate.[5] This model strictly adheres to the tenets of open source software, but unfortunately fails to serve as a reliable or steady means of profit.

Erring on the stricter side of the spectrum — but slightly more lenient than Apache's method — lies what is known as the "service method". Companies which implement the service method as their primary business model often target organizations which seek commercialized support for their software.[6] They offer support to companies which seek to facilitate the use of an open source software. For instance, RedHat, an OSS company which develops mostly for the enterprise community[7], might offer a secure means of customer support for banks using the Linux operating system. This business model is most effective and beneficial if one particular piece of open source software is widely adopted.[8] It decreases a company's reliance on the open source community as well as upon any internal support team.[9] Companies using the service method also attempt to generate profits by tempting clients with with a free version of a product. The paid version would offer extra security or added features which the free version would not support. As David Gerwitz observes, "The marketing benefit to [the community edition of

[3] Gerwitz, "Nothing Good," ZD Net (blog).

[4] Ibid.

[5] Ibid.

[6] Thomas Prowse, "What Business Models Are Currently Used with Open Source Software?," Technology Innovation Management Review (Ottawa), July 2010, accessed January 16, 2018, http://www.timreview.ca/article/366.

[7] "The World's Open Source Leaders," RedHat, last modified 2018, accessed January 19, 2018, https://www.redhat.com/en.

[8] Prowse, "What Business".

[9] Ibid.

software is] that a community edition [is], in a lot of ways, a free trial. A lot of users will test a free download. A subset of those users will convert to paying customers."[10] An extension to the tempting free version of the service method of doing business is the Software as a Service (SaaS) model. In essence, OSS companies which implement this model offer full access to their software on a subscription basis — but still retains the free version.[11]

A convenient and relatively lucrative medium between the business models presented above is the Hybrid business model of open source software. This model attempts to trace out the line between commercially licensing a product *and* binding clients to that commercial license while fulfilling the tenets of the open source movement (and thus granting the users the right to both modify and use the source code).[12] Companies implementing this business method combine proprietary and OS software, generating revenues from licensing fees, services associated with the software, and the software itself.[13] The hybridization model presents itself to be the most supportable of those previously discussed. Its lenience lends favor to the free will of companies to choose their place on the aforementioned freeware spectrum. They are provided the opportunity to prioritize either minimization of the cost of labor or promoting the ideologies of OSS.

It appears that when it comes to OSS, profit is maximized in the middle of the freeware spectrum — at the point when idealism meets pragmatism. As Andrea Bonnacorsi puts it, "While the ideological commitment of the founders towards the OS movement has some effect on the

---

[10] Gerwitz, "Nothing Good," ZD Net (blog).

[11] Max Schierson and Dharmesh Thakker, "The Money in Open-Source Software," TechCrunch (blog), accessed January 15, 2018, https://techcrunch.com/2016/02/09/the-money-in-open-source-software/.

[12] Schierson and Thakker, "The Money," TechCrunch (blog).

[13] Andrea Bonnacorsi, "Entry Strategies under Competing Standards: Hybrid Business Models in the Open Source Software Industry," Management Science 52, no. 7 (July 2006): 1085, http://www.jstor.org/stable/20110582.

adoption of a more OS-oriented [business] model, the effect of current involvement in community projects is much stronger. In a word, beliefs matter, but experience matters more."[14] The middle ground of the spectrum abounds with opportunities — profit serves to incentivize developers to continue to write and update software; partial freeware facilitates codesharing between developers. Summarily, it is optimal for businesses to remain committed to the principles of open source programming so long as they are ready to work at the intersection of proprietary and free software. It would be abhorrently wasteful to abandon the opportunities of this hybridization on only the grounds of a Richard Stallman-like fierce — and senseless — devotion to a set of rules.

---

[14] Bonnacorsi, "Entry Strategies," 1088.

Bibliography

Bonnacorsi, Andrea. "Entry Strategies under Competing Standards: Hybrid Business Models in the Open Source Software Industry." Management Science 52, no. 7 (July 2006): 1085-98. http://www.jstor.org/stable/20110582.

Gerwitz, David. "Nothing Good Is Free: How Linux and Open Source Companies Make Money." ZD Net (blog). Entry posted November 18, 2016. Accessed January 8, 2018. http://www.zdnet.com/article/how-do-linux-and-open-source-companies-make-money-from-free-software/.

Kumar, Arun. "How Do Open Source Companies and Programmers Make Money?" The Windows Club (blog). Entry posted 2017. Accessed January 4, 2018. http://www.thewindowsclub.com/open-source-companies-programmers-make-money.

Lerner, Josh, and Jean Tirole. "Some Simple Economics of Open Source." WILEY 50, no. 2 (June 2002): 197-234. http://www.jstor.org/stable/3569837.

Prowse, Thomas. "What Business Models Are Currently Used with Open Source Software?" Technology Innovation Management Review (Ottawa), July 2010. Accessed January 16, 2018. http://www.timreview.ca/article/366.

QNX (Subsidiary of Blackberry). Blackberry: QNX. Accessed January 19, 2018. http://www.qnx.com/company/.

Schierson, Max, and Dharmesh Thakker. "The Money in Open-Source Software." TechCrunch (blog). Accessed January 15, 2018. https://techcrunch.com/2016/02/09/the-money-in-open-source-software/.

Shelley, Ed. "Adobe's $4.2B ARR Pivot to SaaS: The Strategy behind the Numbers." Chartmogul (blog). Entry posted April 13, 2017. Accessed January 16, 2018. https://blog.chartmogul.com/adobe-saas-pivot-strategy/.

"The World's Open Source Leaders." RedHat. Last modified 2018. Accessed January 19, 2018. https://www.redhat.com/en.