Is Open Source Software Commercially Viable?

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Richard Stallman, Open Source Advocate
Courtesy of Wikipedia

Recently, I downloaded SQLExpress—for free! SQLExpress has been available for free since 2005. This seems in stark contradiction to Microsoft's stance of strict licensing and copyright enforcement. The market pressure for freeware and freemiums has surely driven Microsoft to give away products. Although, these are limited products and the freeware promotes the purchase of other products. For example, limited freeware versions for small enterprises and developer versions, lead to the purchase and use of full enterprise versions. In addition, there are residual sales in training. Also, it has been studied and proven that students will use and work on the technologies that they have learned. So, giving students discounted software has long range promotional effects for products. If Microsoft is providing freeware options, it would stand to reason that the methodology is commercially viable. But is it? Or, is it just a lost leader?

A History of Software Licensing

Freeware

Initially, in the 1950s and 1960s, operating systems were distributed for free with the large mainframes of the era. Universities were large consumers of these computers and often modified or improved these operating systems. In concert with the academic approach to learning, these modifications were freely shared. But, this did not last. Companies like IBM started charging for operating systems. This culminated in an anti-trust lawsuit in 1969.

Then, in the 1970s, AT&T started distributing Unix and its source code for free but, under license that it could not be freely copied or redistributed. This was not open source in the true sense of the word.

Licensing Begins

A full turnabout came in 1974 when Congress passed legislation that incorporated software into material that could be copyrighted. Software producers started charging license fees for operating systems as well as application software. This trend was followed by software producers no longer distributing source code.

The Backlash to Licensing

Eventually, this resulted in a significant backlash in 1983. The backlash to the licensing of operating systems without source code came with the release of the GNU—GNU's Not Unix!--operating system. The impetus for this was when a printer could not be attached to a computer because the operating system did not support the printer and; source code for the operating system was not available to be modified to support the printer.

Thus, GNU was initiated by an MIT programmer, Richard Stallman, who also founded the Free Software Foundation (FSF). FSF also developed the General Purpose License (GPL), that GNU software is distributed under.

Concurrently, in the 1980s, free software with source code started appearing on BBS'es.

Open Source Starts

Subsequently, in the early 1990s, Linux was released with source code and made freely distributable under the GNU GPL. Many businesses and government agencies used Linux. Along with this popularity, Ubuntu has become very popular. As the 1990s and the dot com boom progressed, Apache server, MySQL and PHP—all freeware, became popular. Today, we see the prevalence of the LAMP (Linux, Apache, MySQL and PHP) stack.

Then, in 1997, Eric Raymond wrote (pause, what was it called?) The Cathedral and the Bazaar, an essay that became a book. The book promoted freeware and open source software. This led to development and distribution of Netscape, a free internet browser.

This was followed by the renaming of freeware to open source . While promoting his philosophy, Raymond realized that his approach was not viable for commercial software producers. The very name contradicts the essence of commerce. At a computer conference held in 1998 (?), freeware was renamed to open source. The name caught on and has remained ever since. The Open Source Initiative (OSI) was founded.

Following this, Sun Microsystems released (what was it called?) StarOffice as freeware under the GNU GPL. The free version has been renamed Open Office, which is quite popular today.

In 1989, Cygnus Support (founded by?) was started. The company was renamed to Cygnus Solutions. (Cygnus, initially called Cygnus Support and renamed to Cyngus Solutions) The company sold (a service of) support services for open source software. "Making open source software affordable," was the company's motto. This business model proved quite successful. So successful in fact, that in 1989, Red Hat acquired Cygnus. Red Hat Linux was an open source software founded in 1993. Red Hat has been so profitable that is was just acquired by IBM, on July 9, 2019.

Comparison and Analysis

From the turn of the 21st century on, many application packages as well as operating systems have been released as open source. Their profitability varies.

Operating systems such as Ubuntu, do not break even. Indeed, Ubuntu is made by the Ubuntu Foundation, which is owned and funded by a South African millionaire, Mark Shuttleworth and his concern, Canonical Ltd. Attempts to make Ubuntu profitable have not yet succeeded. Ubuntu is not commercially viable, yet.

PostGre, an open source database, receives revenue from those companies that use the product to develop commercial software. Profit statistics are not available. However, as PostGre is mainly produced by volunteers, the production costs are absorbed by the volunteers, which include contributing companies that use PostGree. PostGre is self funded and not commercially viable, even though it may be cost effective and

appropriate for commercial applications. In many regards it is a tool developed internally by a collective of companies company that happens to allow anyone to use it.

On the other hand, Oracle, a freeware database, has had steady rising profits. What makes Oracle profitable needs to be researched. The company sells many products, including training for Oracle and its other products. Whatever their corporate philosophy and game plan is, it is working. In fact, Oracle's profits after offering their database as freeware in 2012, jumped. For Oracle, offering their database as freeware has been very profitable.

While Microsoft's profits continue to rise, how making products like SQLExpress freeware affects profits is unclear from released financial records. The most often training provided by Microsoft certified training schools is for SQL server. Clearly, SQL server is the most sought after of all of Microsoft's products. Yet, Microsoft has given up selling it's most wanted product. I must assume that Microsoft would not simply give up a significant profit center. If the freeware itself is not profitable, it must offer a profitable trade off of some kind as in training.

Red hat Linux is quite profitable. The profits are solely derived from selling support services for open source software, specifically an operating system.

Conclusion

Large open source projects such as Ubuntu (an operating system) and PostGre (a database) are not viable without significant charitable donations. Ubuntu is an excellent open source operating system and is not commercially viable. Neither Microsoft nor Oracle, which are viably offering freeware databases, are offering open source products. IBM, which purchased Red Hat, is making money on training and support services for open source software that is a popular operating system. For the time being, open source does not appear to be commercially viable for application software but, is commercially viable for operating systems by selling support services.