



Should business consider Open-Source Software?

What is Open-Source Software?

Open-Source Software programs are programs whose licenses give users the freedom to use the program for any purpose, to study and modify the program, and to redistribute copies of either the original or modified program (without having to pay royalties to previous developers).

Mention "Open-Source" and most people think of the various Linux distributions and application software developed for the Linux environment (such as the Apache Web Server, SmoothWall firewall, or MySQL Database Server just to name a few) but the Open-Source approach is not confined to the Linux platform, Open-Source Software (OSS) exists for the Windows platform as well.

I should note that while we at ZEN are users of a number of OSS products, we're not narrow-minded advocates; we use both OSS and proprietary products. The purpose of this article is to examine some of the myths of OSS and show that in many instances OSS is a viable alternative to proprietary software and should be considered when evaluating software to address specific needs.

Myth 1 – The savings aren't real

Open-Source Software is "free" in the sense that there are no license fees. You do not need to purchase a license for OSS when you download via the Internet or if you purchase a distribution on CD (in this case the price of the distribution is justified by the costs of producing a CD and associated documentation). The price of an OSS distribution does not include licensing fees.

That means even if you purchase an OSS distribution – you can legally install OSS on any number of computers. As you don't need to purchase additional licenses for each installation - the question of pirated copies does not arise. This is a key attraction of OSS.

However the absence of software licensing fees does need to be considered in context, as there are other costs associated with using software that still apply to OSS software: training, support and maintenance.

In our experience, if you want to use OSS for "free" (i.e. no cash outlay) then you will need to be prepared to invest your own time and effort in understanding the product documentation and referring to newsgroups (public support databases) from time to time to implement the OSS application to meet your specific needs. Alternatively, if you don't want that "hassle", then you can choose to engage a services organisation to deploy and support the OSS product for you, either way there is a support "cost".

So OSS isn't really free as there are associated support costs just as there is for proprietary software, but nonetheless there are significant licensing savings to be had. The big attraction of open source is that OSS doesn't require additional licenses as an installation grows. This means that once you find a product that meets your needs, and you understand how to implement that product, the incremental costs are negligible. (This is one of the reasons why there have been large scale deployments of Linux on the desktop – but more on that later).



Myth 2 – There's no support

The risk of inadequate technical support is potentially an open-source user's primary concern, "Who do you call when something goes wrong?" - You can't log a call with a vendor when there is no vendor.

In practice the technical support situation generally is more involved with OSS than with proprietary software, as problem resolution often requires a more "hands on" involvement on the part of the OSS user.

The good news is that most open-source projects have a group of developers, Internet newsgroups, archives and support databases – all available at no cost. The not-so-good news is that there is no single source of information; a support question may result in multiple conflicting answers with no authoritative source.

However multiple sources of support can be better than being tied to one vendor - especially if that vendor provides bad support or refuses to continue supporting software of a certain vintage (i.e. imposing "forced" upgrades to continue receiving support).

For an example of the type of support you can expect from a well-liked OSS project, visit the SmoothWall (firewall) forum:

<http://community.smoothwall.org/forum/>

With OSS there generally is more onus on the end-user being proactively involved in resolving any implementation issues that arise, but in practice existing users of OSS appear happy with the open-source support arrangements.

Of course there is another other option to address on-going support requirements, if you prefer being able to contact a "vendor" when an issue arises. You can engage an IT services organisation with the requisite skills in the OSS product you have chosen, or alternatively open-source applications that are aimed at the business-user increasingly are offering commercial support arrangements backed by the open-source developers.

Myth 3 – Open Source = Linux

It is understandable that many people associate the open-source with Linux, as the Linux operating system is open-source while of course Microsoft's Windows operating system is not. Also there is a vast body of applications available for Linux that are distributed as open-source as well.

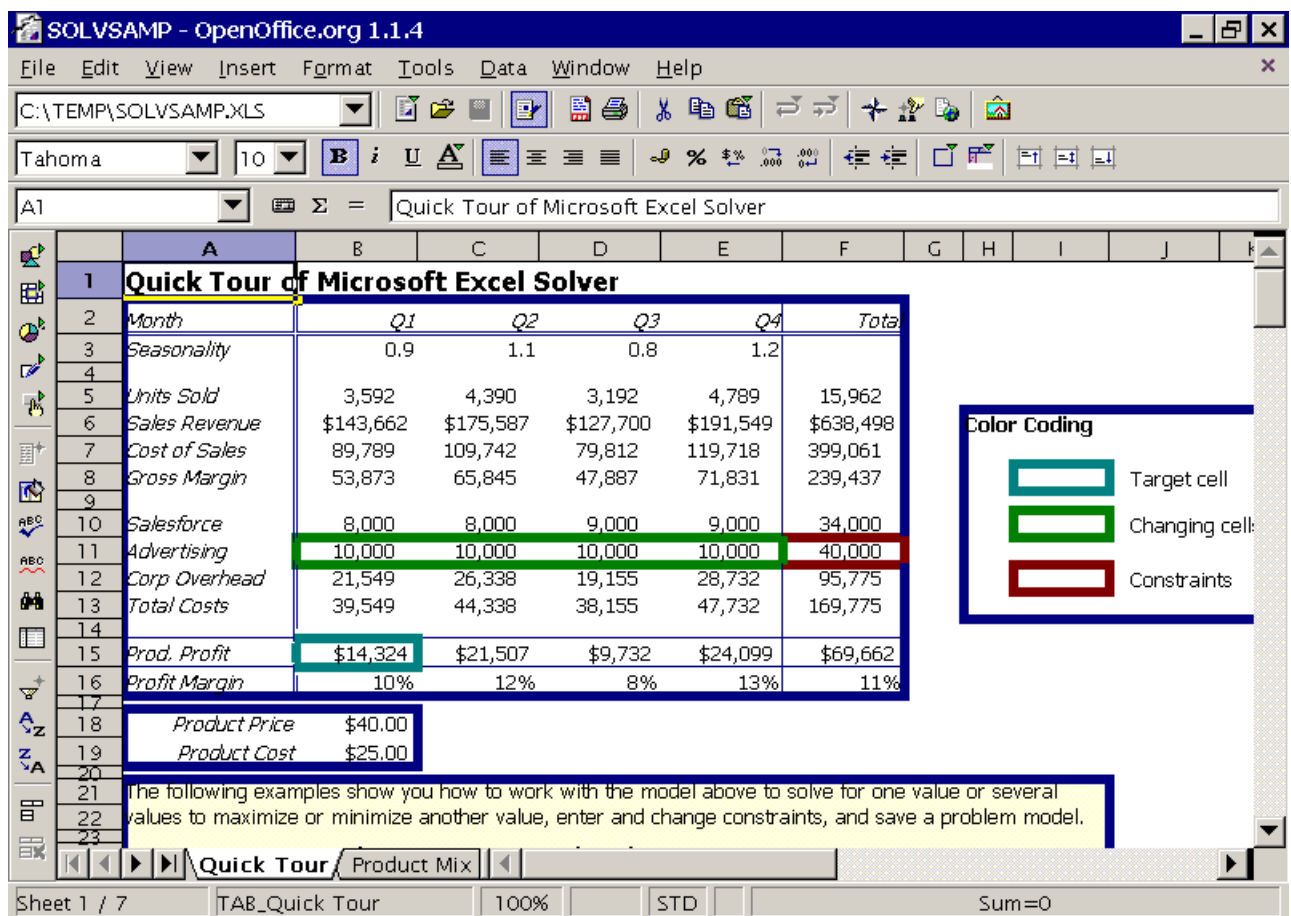
However open-source is not confined to the Linux platform, open-source applications exists for the Windows platform too. Here are some examples:

The OSSwin project: <http://osswin.sourceforge.net/>

Suggested OSS applications in a Windows environment:
<http://www.jairlie.com/oss/suggestedapplications.html>

Some OSS applications exist for both the Linux and Windows environment. An example is OpenOffice.org: <http://www.openoffice.org>

OpenOffice.org is a multi-platform office productivity suite. It includes the key desktop applications, such as a word processor, spreadsheet, presentation manager, and drawing program, with a user interface and feature set similar to other office suites. Sophisticated and flexible, OpenOffice.org also works transparently with a variety of file formats, including those of Microsoft Office.



Color Coding

- Target cell
- Changing cell
- Constraints

Month	Q1	Q2	Q3	Q4	Total
Seasonality	0.9	1.1	0.8	1.2	
Units Sold	3,592	4,390	3,192	4,789	15,962
Sales Revenue	\$143,662	\$175,587	\$127,700	\$191,549	\$638,498
Cost of Sales	89,789	109,742	79,812	119,718	399,061
Gross Margin	53,873	65,845	47,887	71,831	239,437
Salesforce	8,000	8,000	9,000	9,000	34,000
Advertising	10,000	10,000	10,000	10,000	40,000
Corp Overhead	21,549	26,338	19,155	28,732	95,775
Total Costs	39,549	44,338	38,155	47,732	169,775
Prod. Profit	\$14,324	\$21,507	\$9,732	\$24,099	\$69,662
Profit Margin	10%	12%	8%	13%	11%

Product Price \$40.00
Product Cost \$25.00

The following examples show you how to work with the model above to solve for one value or several values to maximize or minimize another value, enter and change constraints, and save a problem model.

Myth 4 – Open Source isn't ready for the Desktop

Generally when this statement is made, it is in the context that 'Open Source = Linux'. Thus the underlying question being asked, "Is Linux ready to replace Microsoft Windows on the desktop?"

In our view the answer is, "that it depends on your situation".

There have been some large-scale Linux desktop deployments (Novell, Siemens Business Services, Sabre Holdings, and the Chinese Government) to name just a few that demonstrate that Linux can replace Windows on the desktop in certain situations. However clearly these organisations had the capacity to invest significant technical resources to develop and deploy their operating environments.

Linux desktop deployments are particularly attractive when all of the software applications in the operating image are open-source 'native' Linux programs. This means that as your installation roll-out grows, there are no incremental software licensing costs. That's because in this scenario there are no proprietary Windows applications being used.

However for many organisations, removing all Windows applications from their desktop environment is not an option to be undertaken lightly. Users are familiar with the applications that they use every-day in their work, changing applications means learning new software (and that's once you've located a suitable alternative). Moreover, were the Windows applications to be replaced, there is also the potential time and effort to migrate the existing data from the old application to the new.

Fortunately there are options that allow you to continue to use your Windows software in a Linux environment.

The first option is Wine (<http://www.winehq.com/>). Think of Wine as a compatibility layer for running Windows programs. Wine does not require Microsoft Windows, as it is a completely free alternative implementation of the Windows API consisting of 100% non-Microsoft code. Sounds good? When it works, it is. Unfortunately not all Windows applications work with Wine "out-of-the-box", often additional configuration is involved. Depending on the Windows application, this is an area that can become quite technical.

Another option is a commercial implementation of Wine, CodeWeavers (<http://www.codeweavers.com/>) CrossOver Office. CodeWeavers is a corporate backer of the Wine Project. Their CrossOver products makes it a lot easier to run Windows applications in a Linux environment, but the catch is that CrossOver Office is *not* open-source (i.e. just like Microsoft Windows, you have to purchase licenses for the number of copies that you use).

Another alternative is to run your Windows applications on a Terminal Server, this means that you don't require Wine or CrossOver Office. However Terminal Server products (Microsoft or Citrix) are *not* opens-source either, so there will be licensing costs associated with this option too.



Conclusion

Although most people understand the need to compare proprietary products before using them, many people fail to even consider open-source software products, when evaluating software to address specific needs.

The purpose of this article was to examine some of the myths of OSS and show that in many instances OSS is a viable alternative to proprietary software and ought to be considered when evaluating software to address specific needs.

Zero Effort Networking (ZEN) is experienced in accurately identifying computer network problems and acting swiftly to fix them. Since 1996 we have helped clients implement stable, reliable computer networks that take the worry out of network management. For further information you are welcome to contact us.

Zero Effort Networking Pty Ltd
ABN: 38 082 434 446
Telephone: 02 9676 3541
Facsimile: 02 8569 2012
E-mail: info@zeroeffortnetworking.com.au
Web: www.zeroeffortnetworking.com.au
Office: Suite 15, 18 Third Avenue, Blacktown NSW 2148

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