

# Using Open Source Accounting Software in Small & Medium Businesses

Open Source  
Accounting Software  
White Paper



## Introduction

'Open Source' is a buzz phrase that has been used by analysts for the last 3-4 years. Reports from leading analysts like Gartner and Forrester will often list Open Source as the next big thing in technology along with SAAS (Software as a Service) and Virtualisation. If we believed all of these reports a lot of the technology we will be using in the near future will be based on open source and delivered as a service in a virtual environment, and maybe it will. For the moment all of these technologies are growing but are not mainstream in small and medium sized organisations.

Often a lot of the hype surrounding Open Source leaves people with more questions than answers and does not explain the benefits to an organisation. This white paper takes one area of Accounts Software and looks at the issues of open source and puts it in the context of the current business software market. Through the white paper we look at the history of accounting applications, try to explain open source and how it compares to traditional proprietary software. The aim of this white paper is to raise the understanding and awareness of Open Source and help get the full benefits and hopefully use it as a competitive weapon as some organisations already are.

## **A brief history of accounting hardware and software**

The history of accounting hardware and software can be traced back to 2400 BC to the Babylonian Abacus which later became the Roman Abacus. Since then there have been such notable inventions as double entry book keeping (1494), the slide rule (1622) and the mechanical calculator (1822). All of this was before the first accountancy firm was opened in 1845.

The digital era saw IBM create the all transistor calculator in 1954 which had to be housed in many cabinets and went on to be sold commercially for \$80,000. The speed at which the calculator evolved was relatively slow by today's standards. 18 years later in 1972 the four-function Sinclair Executive became the first slimline pocket calculator measuring 5.4×2.2×0.35 in (138×56×9 mm) and weighing 2.5 oz (70g). It retailed for around \$150 (£79 in the UK). By the end of the 1970's, similar calculators were priced at less than \$10 (£5).

More big changes were to come in the 1960's when IBM introduced the mainframe. Some of the first programs for mainframes were accounting software. Up until this time banks and large corporation were employing large amounts of people to maintain hand written ledgers. With the implementation of accounting software the core financial ledgers could be computerised saving time and money. Continuing into the 1970's accounts software continued to expand with many companies offering 'accounting packages' for mainframes but it was mostly still only the large corporations that could afford these systems due to the prohibitive costs of the mainframe hardware. With the advent of Personal Computers (PC's) in the late 1970's this was all about to change. In 1979 VisiCalc became the first spreadsheet program available for personal computers. Before VisiCalc a spreadsheet software program was unheard of and it revolutionised the way people handled numbers and impacted many areas.

**A brief history of accounting hardware and software continued**

For many people accounting software was the first program used on a Personal Computer (PC). 1984 saw Intuit, the creator of QuickBooks, founded in the US whilst in the UK Sage released their first accounting program on an AMSTRAD PCW word processor, which used the CP/M operating system. This was three years before Microsoft released Excel for Windows and over 10 years before Excel started to dominate popular spreadsheets like SuperCalc and Lotus 1-2-3. Accounting software is probably in the top three reasons for businesses buying a PC after a word processor and a spreadsheet. Spreadsheets have of course been used for financial information and accounting from the beginning, having effectively replaced accountants analysis paper.

**ERP and Accounting Software today**

Today accounting software is a lot more than just computerised ledgers. Even packages aimed at SME's could be called ERP's (Enterprise Resource Planning) they attempt to organise all the information of a business or organisation. Even basic accounting software packages now provide functionality for order processing, stock control, staff management, CRM (Customer Relationship Management) as well as the core accounting ledgers of Nominal/General Ledger, Sales/Customers Ledger and Suppliers/Vendors Ledger. Accounting software solutions are now available for all types and sizes of businesses from Sage Instant and QuickBooks for micro businesses to SAP R3 and Oracle for blue chip internationals.

### **Consolidation in the software market**

Business software has seen massive consolidation in the last few years and this can be clearly seen in the accounting software market with many of the independent software businesses being acquired by large PLC's and venture capital backed private companies. Sage is no longer a small company based in Newcastle-upon-Tyne but a massive worldwide brand with a collection of well over one hundred packages, which on the whole it has acquired. At the top end of the market acquisition has left just four major players

1. Oracle (acquired Peoplesoft and JD Edwards)
2. Microsoft (Acquired Great Plains, Navision, Solomon and Axapta)
3. Infor (acquired Sun Systems, Pegasus, BAAN and more)
4. SAP (acquired Business One)

### **New Revenue Models**

Some effects of the consolidations mentioned above has been the reduction in initial license costs and a more professional approach to sales, marketing and support. At the same time there has often been a reduction in development and innovation. It is also noticeable that there is now more of an emphasis on annual license fees, what was once an optional cost (being a small percentage of initial license cost) has become a compulsory item which increases in cost year on year. The sales model for accounting software is changing to a lower initial cost and a higher recurring cost. Although this can be better for cashflow this can also make the Total Cost of Ownership (TCO) greater over the average life cycle of a product which is about seven years.

With the change in annual licensing the software often becomes inoperable once out of license, even for viewing purposes. This can cause major issues for businesses that may experience changes and may no longer require the same access to their accounting software but would still like to have view access for many years to come.

### **Software as a Service**

At the same time, as a consolidation in the software market, there has been the emergence of accounting solutions being offered as SAAS (Software as a Service). SAAS is paid for as a rental service and can be web based or traditional installed software. Pioneered by the web based CRM software solutions like salesforce.com there are SAAS accounting solutions available from companies such as Aqilla, Netsuite and Pearl. Although the SAAS approach can be cost effective it has a perpetual payment model and an increased risk of loss of data access if circumstances change. This is due to the fact that once a subscription has finished access to the system is often prohibited.

### **Open Source Accounting Software**

As well as proprietary licensed software and SAAS there is also a third alternative that has been around for a long time, all be it without any marketing budget. Open Source Accounting Software is distributed freely and has no license costs or restrictions of how the software can be used unlike proprietary software and SAAS.

There are many Open Source Accounting Software Solutions from simple book-keeping products like GNUCash to complete ERP solutions like Openbravo. The majority of these solutions are platform independent and can run on Windows, Apple Mac and Linux (or other Unix variants).

Many people would change operating systems from Windows to Mac/Linux but say the barrier is not having their favourite accounting software (Quickbooks, Sage etc). There is a lot of good accounting software both open and closed source for all of these platforms so accounting software should not be the reason for not switching operating systems, if that is what someone wants to do.

## Reasons Why Adoption Has Been Slow

Open Source Enterprise/Business software has grown rapidly in the last five years especially in areas like CRM, Document Management and Business Intelligence see SugarCRM, Alfresco and Pentaho respectively. But accounting software, the most popular of all business software, has been slower than the others to expand, until recently, and there are probably a few reasons for this:

1. Many businesses and organisations have got accounting software and do not change it regularly (average is about 7 years).
2. Quite a few businesses, especially startups, are advised (and probably encouraged) by their accountants as to what software to use. Accountants are generally risk adverse and will go for what they already know (e.g. Quickbooks, MYOB, Sage Line 50 etc).
3. Some people may perceive reliability and security issues with open source software. This risk is often perceived greater when dealing with accounting data and ultimately with the taxation authorities of their country.
4. Open source projects can work well on a global scale, accounting software requires localisation for all countries for the local taxation and legislative differences. Localisations are now available for a lot of countries which are checked and can be supported but this takes longer than say a CRM system to localise which may only require a language pack.

A 5<sup>th</sup> very important point as well is;

5. Most businesses and organisations are not aware of open source accounting software and the benefits that it can bring.

## **Benefits of Open Source Accounting Software**

So what are the benefits of open source accounting software (of course these can apply to lots of different open source packages):

1. There are no compulsory software license costs either initial or annual.
2. You are not locked into to any company paying expensive ongoing licenses with often no way of getting your data out when required.
3. Generally, there are no restrictions on how you use the software (e.g. where you install the software, how many times you install it and how many users you have using it)
4. Choice - many open source business packages including accounts software offer web based solutions and allow users to have hosted versions but unlike some proprietary competitors you can also have a local install, have the software hosted locally or by a hosting partner of your choice.
5. Open source software is more secure and stable, this debate will run and run but when it comes to bugs all software has bugs it is just that Open Source software is more honest about it, indeed the community of users are encouraged to find bugs and even to fix them. Open source code being open allows many eyeballs to look at it so it has the potential to have many people making recommendations and submitting fixes.
6. Open source software is very customisable - the code is open and anyone with the correct security credentials and skills can customise it or it integrate with other software. This is not to say that any user of the system can start making changes. To a standard user the system can be as fixed as any proprietary software.
7. No fear of illegal software licenses and prosecution. Often companies through no deliberate action can find themselves illegally using or installing software which can leave them open to prosecution often by software license enforcement bodies rather than the software company themselves.

## Questions about Open Source

There are many questions about open source accounting software which are often relevant to open source in general. Three popular questions are?

Are they all software programmers hobbyists?

There certainly are lots of hobbyists who donate their time for free to open source projects not only technical people programming but also many others who test and write documentation. Open source accounting software projects generally do not have a large group of hobbyists as it is often perceived as not as interesting as other projects and most of the people involved usually have a vested interest in a project often a financial interest.

How do the software programmers get paid?

Just because there is not a license fee paid for the software does not mean that people are not charging for all of the other items around the software such as services, training, hosting, customisation and support. All of the people offering services around the product benefit from the software being reliable, stable and fit for purpose and as such contribute to the core product. In the case of LedgerSMB, a well known open source accounting package for small and medium sized businesses, one of the main contributors is a company offering services around the product. Often users of the software will contribute to the product for example Compiere, a popular open source ERP, was originally written for Goodyear in Germany and although it is open source it is controlled by Compiere a private company with venture capital investment.

If it is free do you not get what you pay for?

Some projects may not be as polished or pretty as proprietary equivalents as they have often not been developed to be 'sold' in a beauty pageant but functionality wise with many people relying on the software these open projects can be reliable and stable.

## Investment

In the last few years there has been a significant growth in 'Commercial Open Source'. This is where a software company develops a piece of software that they release as open source but at the same time release a commercial version (or have other paid for services) with an agenda for profit. Quite a few of these businesses, Openbravo a popular ERP being one, has significant venture capital investment. As with any investors they will look for a profit and return on their investment. The commercial open source model reduces the barrier to entry and allows many customers to download the free and open source version. The company then hopes that once a customer has tried the open source product they will see value in the commercial version or other services such as support and start paying.

In the case of Openbravo the free and open source version does not come with any guarantees or bug fix commitments that the company offers for the commercial version. This model is popular with Enterprise level products including ERP, CRM, Business Intelligence and Document Management where there is a large market and traditionally the products have been expensive. This way a company can look at the software and evaluate it without payment. Often enterprise may decide later to then take the commercial versions if they deploy the solution in a live environment.

There are advantages to the customer over the traditional model, not least is, that if they ever want to stop paying for the commercial version they could switch to the free and open source version, not a choice available from many traditional proprietary software companies.

## Conclusion

In summary there are many advantages to businesses looking at accounting and ERP software. Whether you would like the 'try before you buy' approach, feel that you could support yourselves indefinitely or just like the integration options, open source can offer many benefits to any size of organisation.

What Open Source does offer is a freedom of choice not often seen in the traditional proprietary software world. At the very least an Open Source solution should be considered when replacing or sourcing any new business software.



## About Outserve

Outserve is an Open Source Training and Consultancy company that can help any size of business or organisation take advantage of Open Source software. Don't think open source is just about Linux, there is great open source software available for Microsoft Windows and Apple Macs.

Open source is a development method for software that harnesses the power of distributed peer review and transparency of process. The promise of open source is better quality, higher reliability, more flexibility, lower cost, and an end to predatory vendor lock-in.

As open source has matured in the last decade more and more organisations are now considering open source software for a range of applications. Open source software offers savings in the form of reduced licensing costs but finding the right open source solution for your business or organisation though the maze of available software can be difficult. Sourceforge a well know directory of open source solutions has nearly 300,000 different projects listed with nearly 4,000 listed as 'Financial' alone. This is where Outserve can help organisations understand the options.


See our our services at <http://www.outserve.co.uk/services.html>.

If you would like any further information on Open Source Accounting and ERP or Open Source in general please contact us on any of the details below:

Outserve Limited

Creative Industries Centre  
Wolverhampton Science Park  
Wolverhampton  
WV10 9TG

 [info@outserve.co.uk](mailto:info@outserve.co.uk)

 0121 288 6778