

On-premise to On-demand The Software as a Service Opportunity for Independent Software Vendors

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REPORT NOTE:

This report has been written by Quocirca in conjunction with IBM to address certain issues faced by independent software vendors (ISVs). The report draws on Quocirca's knowledge of the technology and business issues faced by ISVs and their customers and suppliers, and provides advice on the approach these organisations should take to create a more effective and efficient environment for future growth.

During the preparation of this report, Quocirca has spoken to a number of ISVs, IT vendors and service companies involved in software as a service. We are grateful for their time and insights.

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Predictions of the death of software are over-stated and the reality is that all businesses are becoming ever more reliant on it. What is changing are the number of options available for how the software applications that businesses rely on are managed, delivered and paid for. Many independent software vendors (ISVs) are recognising the benefits of offering software as a service (SaaS) as an alternative for their customers and once the teething problems have been overcome there are a number of long term benefits for both parties.

- **There are a number of reasons for businesses to consider SaaS, but they all come down to three things; managing business costs, reducing business risk and creating business value**
Most SaaS installations are co-located in secure data centres with levels of security and management that even enterprise IT departments find hard to achieve. The SaaS delivery model allows business application and infrastructure costs to be spread over a period of time rather than paid for upfront. It also eases remote access to business applications and interaction between different organisations, both of which are increasingly required for many business processes.
- **Most ISVs are not starting from scratch and need to develop a SaaS business model alongside their existing one of on-premise delivery**
Almost any business application has the potential to be adapted for SaaS, but it needs to be introduced carefully alongside existing business models. It is the financial and cultural issues that need to be addressed as much as, if not more than, the technical ones.
- **SaaS can be implemented in a number of ways, but to achieve the full benefits and the economies of scale that can be realised it is likely to require a considerable software re-write**
Early SaaS implementations were based on the 1-to-1 hosting of servers for each customer. But the real benefits come from managing many customers on the same base infrastructure. Here, the challenge is not just that the software needs to be adapted for multi-tenancy deployments, but for many ISVs it will involve a move from supporting numerous small implementations to a single enterprise SaaS deployment.
- **The SaaS model can, and should, be adaptable to suit the way the end user organisation conducts its business**
Many SaaS applications are paid for on a per-user per-month subscription basis, but this is not the only way. For some application types and customer needs other models suit, such as transaction or volume based pricing. The managed service providers that many ISVs turn to for infrastructure provision are themselves coming up with new and innovative ways to support and finance ISVs in order to reflect these different business models. Many software platform vendors also provide special pricing models for ISVs moving to SaaS.
- **The businesses challenges for the ISV moving to SaaS include pricing, service level agreements, cash flow and managing the expectation of sales staff and resellers**
Funding SaaS is different, because unlike the on-premise model where the bulk of fees are paid upfront, customer value is now realised over a number of years. On top of this the ISV, rather than the customer, now has to cover infrastructure costs. There are long term benefits to making the move but there will be short term issues with cash flow, sales staff compensation and ensuring existing on-premise customers do not feel disenfranchised.

Conclusions

ISVs that have adopted the SaaS model are not looking back. Their customers like it, their suppliers are supporting them and there are long term business gains on all sides. But making the initial moves can be disruptive and there is an upfront cost for the ISV. However the IT industry, including both hardware and software vendors and service providers, are embracing the opportunity and providing plenty of assistance for the willing ISV. Now is the time for ISVs to review their business and consider making the move.

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1. Introduction

There are those in the software industry that predict *the death of software*. Such talk is of course nonsense, at least while man strives to make ever increasing use of technology. Software is everywhere, from the cars on our streets to the phones in our pockets. The actual mortality being predicted is the business model by which the software applications that are critical to the every day operation of many businesses are being deployed and managed in-house (on-premise if you prefer) by IT departments.

The alternative to this – that the same people predict will prevail in the long term – is for these applications to become a service, available on demand, managed by experts in a central location. This is often referred to as software as a service (SaaS). So, even this is not the death of even part of the software industry but a transfer of the responsibility for managing the software and required infrastructure that drives business applications.

For the entire transfer to reach completion – which is by no means a given and often the subject of fierce debate – would take a very long time. In the data centres and computer rooms of businesses everywhere there are billions of lines of code and millions of applications which have already been paid for and for which the return on investment is still being realised.

What is true is that SaaS is increasingly being offered as an alternative delivery model for new software investments and that it is proving very popular for certain deployments of particular types of applications.

The loudest advocates of SaaS are those software vendors who are fully committed to the model. These are relatively new companies that eschew the old way of on-premise delivery for their applications by only making them available on-demand. These vendors, which include the likes of salesforce.com and NetSuite, are bullish because they feel they are going with the tide. They are committed to the direction the tide is flowing and if it were to turn they would be in trouble. But it would be hard to find someone predicting that.

However, these vendors are a small minority. The overwhelming majority of business applications are delivered and managed by more established vendors who have historically delivered software in the traditional way – on-premise. For them there is a dilemma – how to protect their existing business model and at the same time consider if they should embrace SaaS. That choice is not a simple one to make; SaaS undermines existing business models, changing the basis of the relationship between the supplier and user of the software.

Case Study – Aspiren

Aspiren, a London based ISV, is a leading provider of performance and information management software to the UK's local and central government organisations.

Aspiren was founded in 2001 and chose the SaaS route from the start over the more usual on-premise delivery for performance management software. It believed this would be more cost effective and provide it with a competitive edge. Today, Aspiren has over 300 customers with 1,000s of users and has been able to use the economies of scale offered by SaaS to serve local government organisations that would otherwise have been uneconomic.

Initially Aspiren hosted the servers itself, but soon realised this was a distraction from its core competency and turned to a managed service provider – NTT Europe Online – which provides Aspiren with a reliable and secure fully managed software infrastructure based on IBM System-x servers running Microsoft Windows Server 2003 and SQL Server.

That said, many of the tens of thousands of independent software vendors (ISVs) are starting to embrace SaaS, to the extent that arguably they now represent the bulk of SaaS delivery. The change they are making to do this is not easy, and supporting their on-premise model along side an on-demand one is challenging.

This paper is aimed at those ISVs who are in the early stages of making the move to SaaS or are yet to embrace it at all. The paper will examine the challenges involved and how these can be overcome. The total transfer of on-premise to on-demand delivery of business applications – if it ever happens – will only occur if in the coming years all the ISVs and businesses they serve see fit to embrace it.

2. ISVs defined

Spats between the high profile proponents of SaaS and the traditional software industry are widely reported by the IT industry press, sometimes even making the mainstream business press. Whatever position the largest vendors of business software applications (SAP, Oracle, Sage, Microsoft etc.) have taken on SaaS in the past, they are all now embracing it to some extent.

This report is not aimed directly at these organisations, however strong their commitment to SaaS, but at the thousands of smaller software vendors that serve businesses, usually referred to as independent software vendors or ISVs. Their products are often aimed at particular industry sectors to aid specific activities; ticketing for airlines, procurement for retailers, property management for housing associations etc. Many of these ISVs specialise in areas that are beyond the scope of the large global vendors, their applications often sitting alongside and interfacing to the likes of mySAP ERM, Oracle E-Business Suite, Sage CRM, Microsoft Dynamics etc.

Some of the global software vendors have a vested interest in the activities of ISVs because they also provide the platform on which the ISVs' applications are deployed. This includes Microsoft, IBM, Oracle, BEA and Linux distributors like Red Hat and Novell, all of which provide deployment platforms. And, of course the hardware vendors, who provide the physical boxes to run the software, have a vested interest too.

When an ISV sells its application to be run on-premise the customer will usually buy its own hardware and infrastructure software (there are exceptions, when the whole lot is provided packaged as an appliance or certain infrastructure components are embedded by the ISV, for example a database). With the SaaS model this all changes, as the ISV itself needs to procure the infrastructure on behalf of its customers. If ISVs are going to make that commitment they need to be able to scale up or down to meet demand once it has been tested and ensure a return on investment. So what is the motivation for the customers and prospects to move towards the SaaS model and make the ISV's investment worthwhile?

3. The business motivation for SaaS

SaaS was pretty much irrelevant 10 years ago. There was no widely available mechanism for businesses to access software applications in remote locations over a standardised network. Today it is easy: most business are linked by the Internet and communicate over that using a standard protocol – IP. Web services standards provide a common interface to the applications which can be linked together as part of business processes, which can include on-premise and off-premise components. In theory, it should be straight forward to deploy SaaS.

There are, of course, concerns around security and network availability – these can be overcome, but to motivate businesses to switch to SaaS it also needs to be demonstrated that there are solid business reasons for doing so. There are three key drivers: managing business cost, increasing business value and decreasing business risk.

Managing business cost

It is not a given, as is some times suggested, that SaaS is cheaper than an on-premise deployment. There are a number of ways of paying for SaaS that will be discussed, but one of the more common is to pay a monthly subscription per user. Using this as an example, for a 100 user deployment of SaaS at £50 per user per month the 5 year cost of ownership is £300,000. Some IT professionals would balk at this and say they could get it up and running in house, the entire infrastructure paid for, at a fraction of the cost.

IT professionals are notorious for underestimating the cost of deploying and running IT applications, but even taking that in to account they may be able to make the cost of ownership of an on-premise deployment sound compelling. However, the financial department is likely to take a different view – £5,000 of operational expenditure a month, which can be stopped at any time, might sound a better bet than say £100,000 upfront capital expenditure with £15,000 per year maintenance fees and the cost of the resources to keep it all running. If the on-premise deployment fails to deliver the money is lost. The financial risk is less with SaaS.

Of course for small deployments, the arithmetic changes. For a 3 users system, using the same example, the 5 year cost of ownership is only £9,000. So, the case for small business is easier to make on financial grounds. There is another big motivator for small businesses which is a lack of IT skills to manage such applications in-house. But this can also be a motivator for bigger businesses, which might have abundant IT skills overall but not the particular skills to provide the resilience required for 21st century business applications.

Reducing business risk

Many business applications are considered critical to operations and no down time is acceptable. For many this now extends not just to supply chain management or credit management systems but to utilities like email and instant messaging. All applications need regular maintenance as does the infrastructure they run on, but with current technology this should all be achievable without taking the applications out of service.

But there are other external vulnerabilities that can cause application outage – power failure, hardware failure and other disasters like fire and flood. All this can be mitigated by constructing robust data centres with fully redundant backup systems in separate locations and emergency back up power supplies that may need to last for many hours or even days. Such resilience can be achieved by larger business at great cost but is unaffordable for the vast majority. And even the largest business may not see investing in the facilities and skills to provide all this as a capability they want in-house.

More and more businesses are working with co-location companies that provide secure shared data centres with all the fault tolerance required. It is in these same facilities that you will find most ISV deployments of SaaS. So there is a lot more behind the £5,000 monthly subscription in our example than first meets the eye. Add the arguments about reducing business risk to cost of ownership and SaaS starts to look a lot more compelling.

Creating business value

Most businesses don't generate their own power or clean their own windows. These are not core skills, power is purchased as a utility and window cleaning is outsourced to a specialist with the right equipment. The business is then free to focus on lending money, delivering parcels, providing healthcare or whatever else its core competence happens to be.

For businesses, managing IT systems can also become a distraction and therefore many engage 3rd parties to help with the task. The whole problem is exacerbated by the fact that no business operates its IT in isolation any more, but is constantly communicating with 3rd parties. Of course there are good reasons for this; the efficient sharing of data between businesses enables the slick operation of inter-company business processes which can give the participants a competitive edge. The same business processes can also be made more efficient if employees working in remote locations are able to participate.

Providing secure remote access is another burden for IT departments. But business applications provided as a service in secure 3rd party locations are by their very nature designed for this. No one party in a supply chain or financial transaction needs to own or maintain the application. Add in this creation of business value and in many situations the case for SaaS becomes overwhelming.

4. The challenges of SaaS for the ISV

Most ISVs considering SaaS are not starting from scratch but have to take into account their existing investment in software code and how it will affect their current customers and business model. It is the business challenges that usually turn out to be more problematic when introducing SaaS rather than the technology ones: in effect the ISV has to run two parallel business models and needs to make sure its existing on-premise customers do not feel disenfranchised by what is on offer to those taking up the new SaaS offering.

Case Study – Digital Union

Digital Union is a UK based ISV whose ezMarket range of products assists its customers with e-sourcing and e-procurement. Given that such activities, by their very nature involve open communications between multiple organisations, Digital Union's products were well suited to the SaaS model.

3 years ago, ezMarket was only available as an on-premise delivery product, but Digital Union decided the time was right to introduce a SaaS option for its customers. Today, more than 50% of its new customer contracts are for SaaS.

Digital Union took an early hit on profits as the change bedded in and it switched from a largely cash up-front for perpetual licences model, but now that lost profit has been more than recouped.

Digital Union uses Pasporte as a co-location provider to provide it with data centre facilities, but owns and manages its own infrastructure which is based on IBM System-x and System-p hardware running Microsoft Windows and IBM AIX respectively along with IBM's WebSphere application server.

This means that a direct comparison between the average ISV moving to SaaS and high profile, SaaS only vendors is not valid. For the latter there is no legacy to deal with, but in another way their customers lack choice – they have only one: SaaS – whereas the ISV with a dual business model can offer customers both. To some, this choice makes good commercial sense allowing them to use SaaS as a trial or interim deployment before moving to a full on-premise deployment at a later stage, confident that the ISV's application fulfils their business requirements. Some even choose a hybrid approach using on-premise for sensitive internal transactions and SaaS for interacting with 3rd parties.

With the ubiquity of the Internet, the massive amounts of bandwidth available (a legacy from the over investment of the late 1990s) and the standardisation of communications, almost any

application has the potential to be enabled for SaaS delivery. This paper will remain focussed primarily on specialist business applications, but SaaS is already being used to deliver more generalised applications including word processors and spreadsheets as well as utilities like voice over IP and online conferencing. And it is not just software that is available on-demand but other utility services such as backup and raw compute power, such as IBM's *Big Computing Capability On-Demand* (BCCOD).

The limits are defined more by the customers than the ISV. Certain organisations still consider data being stored off site as a security step too far. Such organisations are becoming fewer and farther between, being largely certain secretive central government agencies and the like. But these days, even banks recognise that the co-location facilities used by many ISVs to provide SaaS are more secure than some of their own.

5. Technical considerations for moving to SaaS

There was an early buzz around the idea of SaaS in the late 1990s and early 2000s, delivered by what were then called ASPs (Applications Service Providers). But it faltered for three reasons: first the co-location companies over invested and many collapsed, second the internet was still immature and unable to provide the performance or establish the trust needed for SaaS to succeed. Thirdly, many ISVs that took the initial plunge failed to make the transformations to their technology and business models required before implementing SaaS.

Many early SaaS deliveries were the simplest type of implementation. Put a server in a data centre, install the software infrastructure and the application and rent it to the customer. With such 1-to-1 hosting there is not the same scope for achieving economies of scale as there is with other models, although the customer has mitigated a lot of business risk and freed itself from the requirement of needing certain in-house skills.

Such 1-to-1 deployment requires little adaptation of code. Tweak the infrastructure with virtualisation software and multiple customers can start to share the same resources, through a virtualised 1-to-1 where multiple instances of applications run on the same server for different customers. But obtaining the best economies of scales means adapting code for full multi-tenancy usage.

Multi-tenancy is where the same application can support multiple different customers, allowing them to share all resources including databases. Sharing infrastructure between hundreds of small customers allows huge economy of scale and allows ISVs to target small scale deployments that might previously have been unfeasible.

Achieving full multi-tenancy is likely to involve a considerable rewrite of code by the ISV. As well as this there are two other major considerations to address at the code level.

First, whereas previously an ISV might have delivered its application for use by a small number of users on-premise, it is now building a single installation to serve hundreds or many thousands of users. This is an enterprise deployment which will need to remain reliable under much greater stress than might previously have been the case.

Second is application security. The physical security of data centres and the security of the software and hardware infrastructure are in many cases mitigated by 3rd parties, as will be discussed. But an application originally built for internal use may have vulnerabilities that can be exploited by hackers when it is put in a SaaS environment. This needs to be addressed during any rewrite, or may be mitigated through use of an application firewall.

For a secure, online, enterprise deployment the ISV needs to choose the platform carefully, it needs the right technology; it needs to be affordable, resilient and well managed.

6. Choosing and managing a SaaS platform

For the end user, the SaaS platform is almost irrelevant. By going to SaaS the customer no longer needs to worry about having the in-house skills to manage Windows or Linux, Oracle or DB2, J2EE or .NET. All this will be done for them transparently. These are now choices for the ISV alone. Fortunately, there is plenty of help at hand.

The ISV may choose to go it alone. Here, the main financial burden from an infrastructure point of view is to purchase the hardware and software platforms for an enterprise deployment, costs that would previously have been the burden of its customer. The software vendors recognise this and have developed support schemes for ISVs to purchase infrastructure products for SaaS.

What's on offer from the software infrastructure vendors?

Microsoft's Service Provider Licencing Agreement (SPLA) is a program that allows for monthly subscription-based pricing or payment on a consumption basis for core products like Windows Server 2003 and SQL Server. There are further reductions under its On-Ramp Program specifically for ISVs moving to SaaS. These are limited to 8 CPUs for Windows Server 2003 and 2 CPUs for SQL Server and currently the special On-Ramp pricing is set to expire in April 2008, so either through exceeding usage requirements (i.e. the ISV is having a level of success) or hitting the expiry date, the ISV will revert to standard SPLA licencing.

IBM imposes no time limits with the Community Edition of WebSphere it makes available for ISVs. The product has limitations, for example around clustering, but is free for deployments of up to 4 CPU cores, although there are some charges for support. Once you need to go above the 4 CPU limit, then full charges apply, but again this is recognising a degree of success by the ISV. IBM also offers its stripped down DB2 Express-C (which still includes its pureXML engine) for free deployments by ISVs with the same 4 CPU limit. Once you have hit the 4 CPU limits, in theory, full product licences need to be purchased although IBM is working on formal subscription and consumption based licencing and can already offer this in effect through financing programmes. IBM also offers free resources at its Innovation Centre in Hursley (and elsewhere) for application testing.

Oracle has an On Demand program for supporting ISVs use of its database and application server. Under the program its ISV partners can spread licence payments over a time period of up to 5 years, paying a percentage of the perpetual licence fees plus product support.

Novell will provide its SuSE Linux Enterprise Server (SLES) operating system and some other infrastructure components on a pay per-use basis for ISVs. Novell is also planning to create a per-instance pricing for SLES that will count the number of running installations and price its software accordingly.

Red Hat all Red Hat products, included Red Hat Enterprise Linux (RHEL) and the JBoss application server are provided on an annual subscription basis. Pricing is fully inclusive with unlimited incident support and all patches and upgrades are covered.

For the ISVs that want to go it alone, they will also need to buy or lease hardware, but many ISVs turn to managed services providers (MSPs) that provide and manage the platform for them for a monthly subscription. To provide that platform in a secure and resilient location requires another party, the co-location facility or data centre partner.

MSPs use co-location facilities because they offer the level of security, resilience and network availability that is required to underpin a successful SaaS implementation. There are many such co-location providers including IBM, BT, Telehouse Europe, Teleticity Redbus etc. Even the high profile vendors like salesforce.com and NetSuite house their offerings in such facilities rather than running their own data centres.

MSP Case Study - NTT Europe Online

Formally known as Verio, NTT Europe Online is an established managed service provider. It came to realise over the last few years that a number of its existing UK based customers were actually ISVs offering SaaS.

To capitalise on this and attract more ISVs it decided to create its own *On-demand ISV Enablement Programme* based on its existing products and services, the programme aims to address the commercial challenges faced by ISVs moving to SaaS.

It includes the implementation of a bespoke platform for each ISV – recognising that no two are the same – and renting it back to the ISV using one of 3 pricing options.

1. *A monthly fee over the term of the contract*
2. *Deferred billing – akin to a mortgage holiday, allowing the ISV's business plan to start producing revenue*
3. *Pay per usage – for example, pay per seat for an email user or per transaction for an airline ticket sale*

On top of this, NTT Europe Online is able to offer a level of security and compliance that an ISV would find hard to achieve on its own even if using a co-location facility. It has achieved ISO27001 certification, which means it has a level of IT and physical security that allows it to host confidential data and transactions, such as credit card payments.

The degree of support offered by co-location providers varies, but with many it is just what the name implies – a location, so in most cases until some hardware and software have been purchased and deployed, they are just providing secure space with resilient connectivity, power and cooling. So even working with a co-location provider, the aspiring SaaS provider still has to invest in the application platform and the offerings from the infrastructure vendors are just as relevant.

This is where the MSP comes in; it provides and manages the infrastructure. Some co-location providers provide their own managed services, but others partner with specialists such as NTT Europe Online (see box) that provide both the hardware and software infrastructure for the ISV.

Through doing this they are able to provide economies of scale across multiple ISVs (and other customers), whether this is bulk discounts for purchasing of servers or leveraging per-usage licencing with software vendors.

Through working with co-location providers, MSPs are able to offer security and availability guarantees that would be almost impossible for a small ISV to achieve all on its own.

There are other options too; it is possible for an ISV to have its application hosted on an established SaaS platform such as salesforce.com's APEX or NetSuite's SuiteFlex. This is particularly useful if your product is complementary to either vendor's core application as they can help promote it to their existing customers. Another option is internal hosting; the ISV with an established SaaS platform may find that it makes sense to provide an in-house installation for large customers managed in the same ways as other SaaS platforms but for that customer's exclusive use. This could suit customers with particularly sensitive security requirements or those with network access concerns.

7. The business and cultural challenges of SaaS

Establishing a secure and reliable SaaS platform, with or without the help of partners, is only the start. To make SaaS succeed involves facing up to a number of other financial and cultural issues within the ISV's business. For many ISVs, having a SaaS platform is an alternative route to market which will need a separate business model. But this can lead to conflicts and there is a danger of revenue cannibalisation with both models being undermined and existing customers feeling disfranchised. There are a number of issues that need to be addressed.

SaaS Pricing

There are many different ways that SaaS can be priced (see box on next page), but they are all based around operational expenditure (opex) relating to the on-going activities of the end user organisation rather than requiring upfront capital expenditure (capex), which has been the most usual way of paying for the hardware and licences around business applications in the past. The model used will depend on the objectives of the customer and many ISVs choose to offer multiple pricing options to suit different clients.

Discounts can be offered for larger numbers of users or transactions. It is important to build flexibility into the billing process to avoid the danger that customers could be cut off at a critical time. For example, if an airline ticket issuing

process stopped because the user had exceeded agreed volumes for the current period. The customers can be charged for their unexpected success retrospectively and the charges reviewed for subsequent periods.

Alignment of on-premise and SaaS pricing

One danger is that existing on-premise customers will feel disenfranchised if the SaaS offering appears cheaper than what they have paid. Pricing set for SaaS should be aligned with that for on-premise so there is no apparent disparity. This might seem hard to achieve as the infrastructure and management costs have to be taken into account for SaaS, which would be borne by the customer on-premise, but actually it is relatively straightforward.

Some ISVs with experience of both models have turned to flat rate subscription based pricing regardless of whether the customers want SaaS or on-premise. An example is the CRM vendor, RightNow Technologies. The economies of scale of SaaS mean that the infrastructure costs can be amortised across the subscriptions paid by many thousands of users. Because of this, the management and support costs to the ISV are so much lower for a SaaS user than they are for an on-premise user which means making the prices the same makes financial sense. Others set SaaS pricing so that a 2 or 3 years subscription adds up to about the same as it would cost to buy licences for an on-premise deployment.

Pricing levels may also be adjusted to suit different service level agreements, for example, a user wanting 9-5 access 5 days a week will not pay as much as the user requiring 24 hour access 7 days a week. For localised deployment of SaaS it may also make sense to offer lower prices for off peak usage, encouraging certain types of users to delay their activity to less busy times. This is not much use for business applications with day-time users and would not suit global deployments where it will always be a peak period somewhere in the world.

Service level agreements

One of the key motivators for moving to SaaS is the reduction of business risk. This is quantified by the service level agreement (SLA) which defines the availability, minimum performance levels, backup guarantees etc. that the SaaS provider will provide and the penalties for failing to do so.

To provide the high levels of availability expected, most ISVs work with co-location providers and/or managed service providers (MSPs) who provide the secure location and highly available platform respectively. With the right infrastructure, there should be no need to take systems down on a regular basis for maintenance and new hardware can even be provisioned without interruption. But there will always be unexpected failures, and MSPs will be in the best position to spot these as – or even before they are about to – happen and fix them in a timely fashion as they will be running operations on a scale where it makes sense to have backup resources on stand-by.

For MSPs, this is bread and butter, and many will only work with the hardware and software infrastructure with which they are highly confident they have the ability to provide the highest SLAs. For the ISV who is not planning to go it alone, this means identifying and working with an MSP from an early stage in the SaaS planning process.

Cash flow

Moving to SaaS will involve some investment in rewriting applications and setting up new infrastructure and relationships. Doing this is a normal process for any business addressing a new opportunity and the way cash is raised will vary. But, for ISVs moving to SaaS there will be an additional cash flow hit due to the change of business model which will make funding it using ongoing profits even harder.

Software for on-premise use is most commonly sold by charging up front for perpetual or multi-year licences. For the ISV, this means realising much of the value for each customer at the start of the relationship (although there are usually ongoing maintenance fees of between 10% and 20% a year of the original licence costs). With SaaS, the value of the

SaaS Pricing Options

User subscriptions – this is where charge is made for each user of the application for a given time period, usually monthly. There is no restriction on the volume of data or the number of transactions allowed. This is common for business applications like CRM and in a modified way for hosted email, where rather than charging per user it is per mail box.

Pay by usage – this is where each transaction is charged for and is especially suited for trading applications where transactions can be initiated from a range of sources and accounting for users is not easy. This could include applications for selling and issuing tickets where the actual user may be a travel agent or a member of the general public buying online.

By data volume – certain applications deal with high volumes of data and it is this that needs to be charged for. The most obvious example is off-site backup but it could also include business intelligence applications that process and analyse huge volumes of data

Free usage paid for by advertising – this is the model behind Google's office applications for consumers: they get to use them for free in return for tolerating some advertising. We are all used to this with search engines but it is not that suitable for the commercial world, so Google is looking to annual subscriptions for its commercial offering of online office tools.

customer is recognised over many months. This can mean a huge difference in income at the start of a new relationship; the new customer will pay a few thousand for the first month's subscription rather than hundreds of thousands for perpetual licences. It can take a few years before the cash flow position recovers, but eventually, if the SaaS offering is successful, it will overtake that of the old model and in the long term, if there is no customer churn, will exceed revenues that would have been produced by licences paid for upfront.

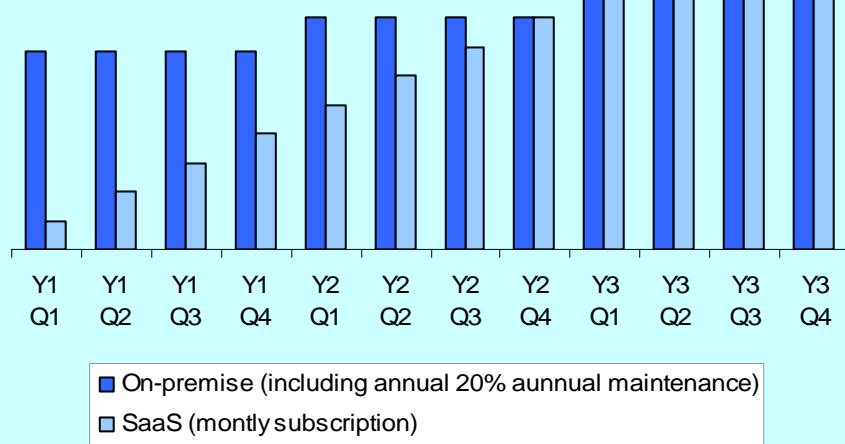
One way around this problem is to provide 3rd party financing where the ISVs get a few years subscription upfront and the customers pay the financing company the monthly fee. The finance company obviously takes its cut, which will

have to be allowed for in the cost model. Alternatively, managed service providers may share some of the cost and risk through deferred payments for infrastructure or transaction based charges which only cut in when sales pickup (see box on NTT Europe Online).

ISVs who can afford it may choose to take a short term hit, so their profits may drop as they introduce SaaS, but as the new SaaS based customer base builds up then so does the guaranteed monthly income. After a year or two that regular revenue stream will lead to much more secure business than existed when all customers paid up front and the ISV was reliant on new business to keep going. That change will also affect the sales staff used to receiving the handsome commission cheques that go with closing up large deals where all is paid upfront.

On-premise versus SaaS cash flow

Assumes that a two year SaaS subscription is equal to the cost of an on premise licence plus two years maintenance at 20% per annum. It also does not take account of the high levels of discount often offered by vendors to close on-premise deals at quarter end.



Compensation of sales staff and reseller margins

Whether an ISV relies on its own direct sales staff or the efforts of third parties to sell its software, the impact SaaS has on the sales process and compensating the individual or organisations involved has to be taken into account.

ISVs deal with this in different ways. Some offer resellers an ongoing cut of the regular fee paid for the SaaS offering. Some also allow resellers and other third parties to embed or re-badge the SaaS offering. This is particularly common for security services like content filtering which many internet service providers resell as part of their own service. Other ISVs pay referral fees to resellers; here the reseller has less ongoing interest in the success of the SaaS deployment, acting more as a lead generator.

Many direct sales staff will not be enthralled by the idea of their commission being paid over a multi-year period rather than upfront. If financing is used this may not be a problem. But, if the ISV wants SaaS to be a success the issue of remuneration has to be faced. The ISV's sales people have to be motivated to sell SaaS as an alternative to on-demand, which may even mean offering them better rewards for SaaS sales than they would get for on-premise.

But this too is a problem, for there is no guarantee about the longevity of the SaaS customer, and paying the sales staff upfront for the expected long term value of the customer, may mean that they receive commission for business that is never realised if the SaaS subscription is terminated early. Some sales people might be attracted by the longer term financial security of being paid commission on regular monthly subscriptions, but many do not take such a long term view of their employment.

Either way a radical rethink of the way sales staff are motivated and compensated may be required. One of the long term benefits that SaaS will bring to the software industry is a different type of selling process and a longer term relationship between sales people and their customers. Maybe SaaS means the days of the hard nosed sales person getting the deal, taking the money and running are over: surely an additional hidden benefit for customers adopting SaaS?

8. Conclusions

The SaaS model of delivering business applications is here to stay and real business value is being realised by the ISVs that adopt it and the customers that they serve. But it is not a trivial move for any ISV to make, especially when it has an established business model and customers based around on-premise delivery. But introducing SaaS is an opportunity for those existing customers and for the ISV itself, opening up new business potential that was previously uneconomic to target.

The move involves careful planning, it is financially disruptive, affecting cash flow, profits and the way sales staff and reseller partners are compensated. There are technical considerations too, as the ISV moves from the delivery of many small scale installations to managing multiple customers in a single enterprise SaaS installation. Many ISVs will work with managed service providers to achieve this and it is their experience – along with those of the co-location data centre facilities they use – that provide many of the benefits that end users are looking for from SaaS; the secure and reliable delivery of business applications, reducing overall cost, decreasing business risk and adding business value through the support offered by SaaS to inter-company business processes and remote workers.

Some of the challenges of making the move seem daunting, but there is plenty of help on offer from software infrastructure vendors and managed service providers. The cost of their services can be built into the SaaS business model reducing the upfront hit on the ISV. Those that have already made the move are not looking back, the benefits after a number of years are manifold. For those ISVs whose business is based purely on on-premise delivery, 2007 may well be the time to take a look at SaaS, whilst there is still a chance to be ahead of the game.

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About Quocirca

Quocirca is a primary research and analysis company specialising in the business impact of information technology and communications (ITC). With world-wide, native language reach, Quocirca provides in-depth insights into the views of buyers and influencers in large, mid-sized and small organisations. Its analyst team is made up of real-world practitioners with first hand experience of ITC delivery who continuously research and track the industry in the following key areas:

- Business process evolution and enablement
- Enterprise solutions and integration
- Business intelligence and reporting
- Communications, collaboration and mobility
- Infrastructure and IT systems management
- Systems security and end-point management
- Utility computing and delivery of IT as a service
- IT delivery channels and practices
- IT investment activity, behaviour and planning
- Public sector technology adoption and issues
- Integrated print management

Through researching perceptions, Quocirca uncovers the real hurdles to technology adoption – the personal and political aspects of an organisation's environment and the pressures of the need for demonstrable business value in any implementation. This capability to uncover and report back on the end-user perceptions in the market enables Quocirca to advise on the realities of technology adoption, not the promises.

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The logo for Quocirca, featuring the word "quocirca" in a lowercase, sans-serif font. The letters "qu" are in blue, "o" is in red, "c" is in black, "i" is in red, "r" is in black, "c" is in black, and "a" is in black.