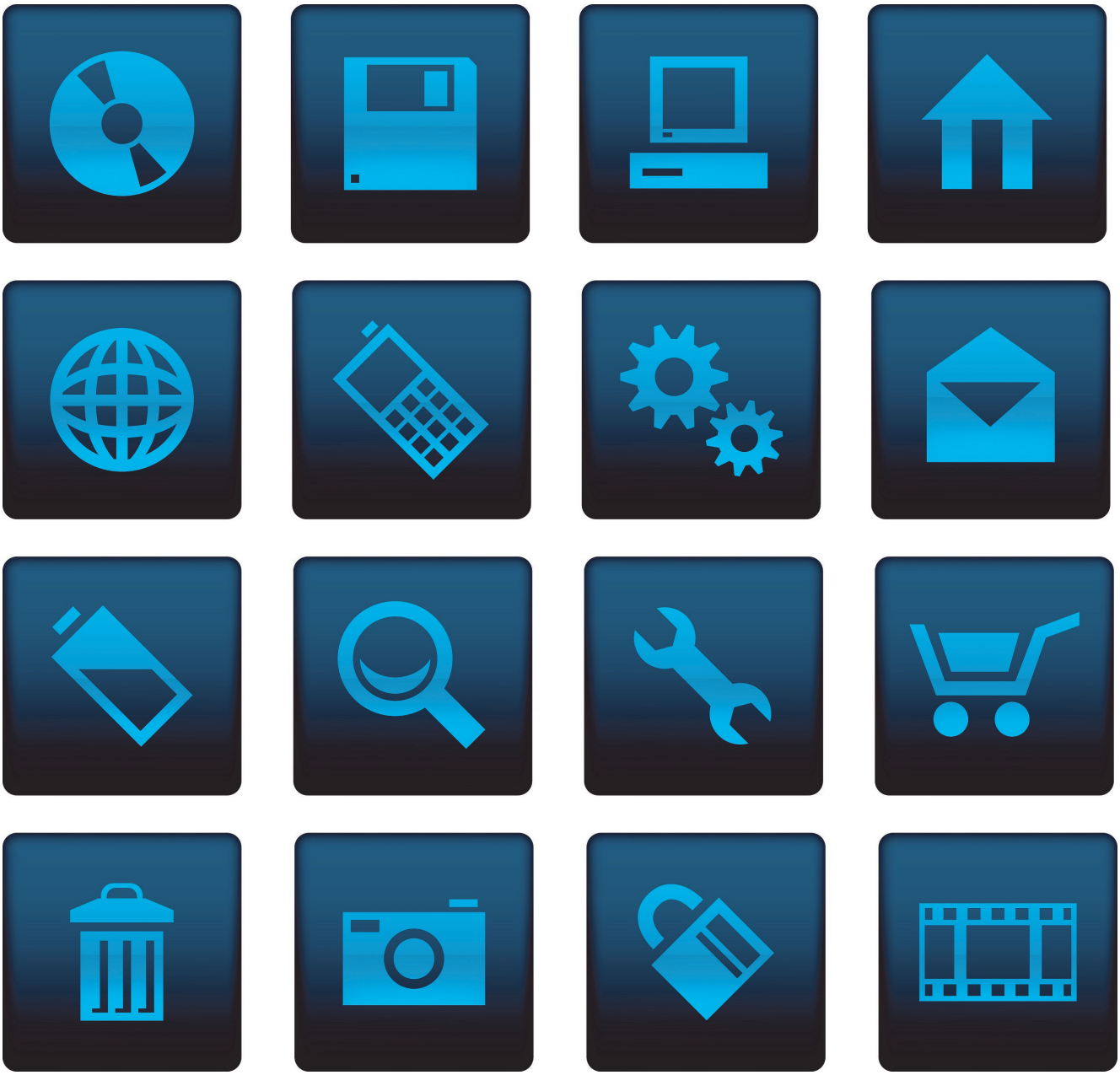
intellect
REPRESENTING THE UK TECHNOLOGY INDUSTRY

The business case for Software as a Service



Contents

Contributors

Alex Howe, **Getronics UK Limited**
Anders Bjornsbo, **e-conomic**
Dan Rhodes, **Pitney Bowes Business Insight**
David Turner, **FinancialForce.com**
David Terrar, **D2C**
Declan McGrath and Lawrence Knowles, **Midland HR**
Dr Richard Sykes, **"Dr Richard Sykes''**
Duane Jackson, **Kashflow**
Hamish Edwards, co-founder of **Xero**
Ian Capon, **SME Computer Services Ltd**
John Cowell, **Hardcat Limited**
John Dutton and Tim Magness, **Civica plc**
John Paterson, **Really Simple Systems Ltd**
Julian Heathcote Hobbins, **Federation Against Software Theft Ltd**
Mark Bailey, **Speechly Bircham**
Mark Davies, **Porthminster Rocks Solutions**
Marlon Bowser, **HTK Limited**
Neil O'Meara, **Four J's Development Tools**
Nigel Hartnell, **FFastFill Plc**
Pete Kenyon, **Vertex Law**
Chris Higgins, Max Feneck, Piper-Anna Shields
and Rob Thomson, **SunGard Availability Services (UK) Limited**
Prem Sundaravadanam, **Aspire Systems (India) Pvt Ltd**
Shashin Shah, **One Point Consulting Limited**
Steve Gooding, **The Bunker Secure Hosting Ltd**

Introduction

You are no doubt familiar with banking, booking trips or buying goods through an internet connection. In each case, the vendor is exposing its application to you as a web-based service. As long as the device you are using can run one of the popular browsers, it doesn't matter whether it's a Macintosh, a PC, a netbook or a mobile phone.

It's a short jump from such bespoke services to the idea of a standardised service which could be used by many companies or individuals. Among individuals, standardised services for photo sharing, blogging, social networking and many others are already very popular. You may have heard of Flickr, Wordpress and Facebook, for example. Users can tweak the way their pages are laid out and which options are activated but these services are essentially fixed in their scope, but subject to continuous improvement, usually in the light of user feedback.

You will find parallels and overlaps in the business world where the delivered services have a more professional intent, but they are more or less equal in philosophy. You may have heard of salesforce.com, one of the best known and most successful examples of what is called Software as a Service, or SaaS.

In this paper, the authors (a group of SaaS vendors, IT consultants and lawyers) have set out to illustrate why there is a growing interest in SaaS, why it is having such an impact on both the technology industry and its customers, and why it isn't really about the technology at all but about service to customer organisation.

This paper assumes that you are a board-level decision maker or purchaser of applications. It shows how and where you may derive benefits from deploying SaaS in your own organisation. It examines the commonly claimed benefits of SaaS such as lowering costs, reducing risk, providing flexibility and reducing reliance on IT. However, it also takes a hard look at the questions that need to be asked before considering SaaS for your own organisation.

What is Software as a Service?

SaaS is a proven and increasingly popular way of delivering software capabilities to organisations of all kinds. The SaaS provider remotely hosts and manages software and associated data on behalf of an organisation, thus removing the need for it to install and maintain business applications such as email, word processing and CRM. Because each organisation accesses its own instance of a single, centralised application, updates are instantly applicable to all and vendor support services are greatly simplified.

Organisations pay a fee either by periodic subscription, per transaction charge, or based on time of use. This eliminates the up-front licence fee associated with the traditional volume licensing model. The investment changes from capital expenditure for software and hardware to an operational expense and only those who benefit from the software and ongoing support are obliged to pay for it.

SaaS applications can be accessed through a web browser on any internet-connected PC, Mac or mobile device, anywhere in the world.

SaaS is generally regarded as well suited to the delivery of standardised software applications and platforms, like email, CRM, payroll and accounting. Initial analysis of possible markets for SaaS linked it to the sole trader and SME arena. However, the development of the SaaS business model has been rapid, and it is now being used to provide high performance, highly resilient and secure applications across a range of company sizes and industries including the capital markets and global banks.

The software and data is hosted on dedicated facilities managed by the SaaS vendor or by a third party hosting company. These facilities are typically housed in commercial grade data centre facilities, with all of the associated benefits that this brings in terms of security, environmental control and protection against interruption. In future, increased regulatory pressure may require some sectors of the economy to operate in this way.

Current popular examples of SaaS include CRM from salesforce.com, ERP from NetSuite, invoicing from Freshbooks, email like Microsoft Hotmail and office applications from Google. More esoteric, but no less useful, applications like computer-based design, (eg running simulations for wind turbine fields), could eliminate the requirement for engineering companies to install their own supercomputers because they could simply access computing resource as and when they need it.

What are the business benefits of Software as a Service?

By now you should be forming an idea of the potential benefits of SaaS. It's not suitable for all applications in all situations. In fact, for most of us, the future world of software is likely to be a hybrid one, but here's a list of the key potential business benefits of SaaS.

Total Cost of Ownership (TCO)

The total cost of ownership can be lower than a traditional installation, if you take into account infrastructure, on-going maintenance, support costs and implementation costs. The SaaS vendor shares the cost of hardware capacity, support and business continuity across the whole community of customers. Implementation costs are lower. The periodic payments mean lower or zero upfront investment, and the applications tend to be designed with ease of use and lower training requirements, so they are like consumer service providers such as Amazon or Flickr. This also reduces risk by allowing a low cost pilot implementation, moving to a full scale roll out only when satisfied.

No Capex

SaaS does not incur high upfront costs for software licenses and hardware. The 'pay-as-you-go' subscription model makes the typical SaaS implementation an operational expense item, not a capital investment.

Lower risk

Conventional software projects are often cost justified on a 3-5 year pay back. But with no upfront licence and infrastructure costs and the pay-as-you-go model, if circumstances or business requirements change, the SaaS approach makes it easier and less costly to turn off the service or switch to an alternate service.

Supplier relationship

SaaS fosters closer relationships between suppliers and clients, and changes the balance of risk from the customer to the software vendor. Because the service is paid for on a subscription basis, the vendor needs to provide continuing value to the customer each month, not simply at the point of purchase. Equally, the supplier can monitor more directly how the client is using the software, where the pinch points are, etc. This ensures better products and usability for customers as opposed to just effective sales and marketing pitches.

Flexible access

SaaS provides more flexibility than most installed software, because you can access the system from any internet-connected PC, Mac or mobile device. This means easy access for customers, sub-contractors, partners and employees, even when they are away from their normal office and PC. SaaS can provide access to software applications in the same way that the mobile phone has provided access to voice communications.

Ease of use

Most SaaS is designed to be intuitive, with online help and online support services. As such it tends to be very easy to learn to use. Any web-based application needs to ensure good performance over the internet.

Frees IT for other things

SaaS places far less reliance on client IT and technical staff for support. The technical support, infrastructure, software upgrades, backup and recovery routines are all handled by the SaaS vendor. Therefore the client's IT resources can be focused on higher value activities.

Integration

Easy data importing is important, but so is exporting and integration with other applications and services. Professional SaaS service providers ensure that these things are all taken care of through widely accepted web standards and procedures.

Continuous improvement

The software is always up to date, as opposed to the lengthy release cycles often associated with traditional software. SaaS is upgraded at frequent intervals, out of hours, so that the new release is an incremental change simply available for the customer the next time they log on following an update.

User sensitivity

The SaaS vendor builds up knowledge about how customers really use the software as opposed to how they say they do. This enables the vendor to target enhancement programmes based on real usage, delivering rapid innovation, improved usability and greater productivity to all users of the software.

How is Software as a Service different?

So far, we have offered occasional oblique references to traditional software. Here, we're going to spell out exactly how SaaS is different from traditional software implementations. Some of the points have been made already but, for completeness, we repeat them here.

- With installed software you often need to be sitting at a computer in the office where it is installed. With SaaS, customers have access from anywhere in the world via an internet-connected device. This includes laptops, netbooks and mobile phones at the office, at home or anywhere else that has internet coverage.

- SaaS requires only a standard browser, or a minimal amount of small software downloads, such as Java, to be installed on the user's computer. IT management issues such as backup, recovery and network management are provided by the vendor. The typically high levels of security and protection against interruption provided by SaaS vendors would be very expensive for customers to provide for themselves. With installed software, the customer installs and manages the software on their own computer or servers. They are responsible for all the IT management issues including backups, upgrades, recovery, etc.

- SaaS is much easier to use than conventional on-premise software when the current trend is for SaaS vendors to have a similar mindset and approach to consumer service providers like Amazon or Flickr. They think, "You don't need to do any training or read any manuals to work out how to order products from Amazon, or upload photos to Flickr, so let's do it the same way with SaaS."

- The software is always up to date because there is a single instance of the software which is updated regularly. Not only do you not have to wait for software developer and/or the IT department to schedule the update and apply it but, through these frequent software updates, customers can instantly benefit from innovative new features.

- SaaS solutions can be more innovative as they are being continuously enhanced, have been designed for the web and the vendors know they need to keep pace with the latest web-based tools that people make use of.

- The SaaS business model is based on a steadily increasing and recurring revenue stream with an emphasis on good quality product and support services to ensure customer satisfaction, recommendation and repeat payment. It is typified by rapid adoption through word of mouth and low sales and marketing spend, with more resource being devoted to application development and support services.

- SaaS brings the user back into the purchasing equation. They are able to determine business needs and to ask the right questions of the SaaS vendor. (A checklist of questions a customer should ask can be found on page 16.)

- Finally, remember that SaaS vendors are service providers, driven by their customers, compared with software producers which are product-led organisations with a high focus on selling.

Table 1: SaaS and On Premise Comparison

	SaaS	On Premise Comparison
Access	Connect through the internet. If no internet connection is available, or the capacity or bandwidth are small, the application may not be accessible, though some services may provide a separately installed local version of the application.	Connect via customer's internal network. Remote access outside of the office may not be possible or needs internal network to be extended via dial-up or over the internet.
Browsers	All major browsers are supported, (eg Internet Explorer, Firefox, Safari and Chrome).	Traditional Windows/Mac application.
Code	Code executes on the SaaS provider's server, apart from minor functions that may be downloaded to the browser such as Java applets, ActiveX components or Flash.	Each customer has an individual copy of the code even if it is the same code.
Code location	A code executes on the SaaS provider's server apart from minor functions that may be downloaded to the browser such as Java applets, ActiveX components or Flash.	Code executes locally on customer's clients and servers.
Data	Held on SaaS provider's servers.	Held on customer's own servers.
Data ownership and compliance	Whilst primary responsibility for data protection and compliance remains with the user, a SaaS provider may have an offering to assist with the demonstration of compliance, or the services of an independent third party auditor may be called upon.	Customer has data on site and owns the data. The user is responsible for data protection compliance.
Ease of use, training	Less training needed, products typically leverage users' familiarity with web sites and provide self service tools and help.	Anything from a day to three days for average users, a week for administrators.
Evaluations	SaaS providers typically offer a free trial.	Usually limited to a trial without specific set-up requirements.

	SaaS	On Premise Comparison
Failover	SaaS provider may have a redundant data centre for fast fail over.	Customer may have disaster recovery plan; most don't. Few can fail over in 20 minutes.
Installation	No installation needed, just a browser. Can include some locally installed applets, (Java).	Installation needed on servers and/or on client servers.
Interfaces	Most SaaS products have data import routines plus APIs (Application Programming Interfaces) that run over the internet for lower level integration.	Most products have data import/export routines, plus APIs to local software. Interfacing to local applications is sometimes possible; interfacing to web sites and SaaS systems may be problematic.
Implementation	Anything from instant to five days or more. Normally done by customer or provided by SaaS vendor.	Anything from a day to a month or more. Normally provided by a paid consultant.
IT Maintenance	Application updates/upgrades, data backups, platform availability all the responsibility of SaaS provider.	Customer applies updates/upgrades, is responsible for backups and IT infrastructure.
Payment model	Subscription: per year, per month or per use etc.	Software license purchased upfront, plus annual maintenance payments.
Support	Support desk can access customer's system directly to help with configuration.	Support desk can talk customer through the system or provide online help, but can't make changes without a site visit or remote access.
Updates and upgrades	Continual or quarterly updates and upgrades.	Six monthly or annual update cycle. Enhancements upgrades can be included as part of a maintenance contract.

Implementation process

In this section we examine an example of the procurement process and implementation of a SaaS product.

One of the factors that provides better total cost of ownership for SaaS solutions compared to traditional installed solutions is the cost and time of implementation. SaaS solutions are characterised by their ease of implementation and quicker time to market or to value with deployments generally available instantly compared to a month or more with traditional software.

Customers don't have to spend time and money installing or maintaining additional servers, networking equipment, security products, or other hardware. SaaS providers generally offer a free trial period but, in any case, the 'pay-as-you-go' pricing lends itself to a small pilot with a few users that can start almost immediately to prove the system. Once proven, the focus of the rollout is on end-user training and acceptance. Depending on the complexity of the applications involved, the implementation consultancy for a SaaS solution can be a fraction of that needed for traditional software.

Evaluation

An advantage of many SaaS products is that a free of charge evaluation period is available. This allows you to test the software using a small volume of data. For small business, this allows a solution to be tested on an almost instant basis. For larger business, an evaluation will only be meaningful if planned and, where necessary, configured for the customer's business. The ability to scale up and down is assumed with SaaS services but, if in doubt, be sure to ask for reference customers.

Contract consideration

Most SaaS services offer a standard contract or Terms and Conditions - the 'click to accept' model. However, some businesses, especially larger ones, will insist on changes to these fixed terms in order to protect their financial and security interests. This is covered in detail on page 13.

Configuration

It may be possible to configure the SaaS application to suit a particular organisation's needs. In general terms such customisation will be limited but it should be explored to ensure the best fit for the customer.

User access

As in any multi-user system, access rights need to be considered, set up and administered.

Data loading

Depending on the particular service, a significant volume of data may need to be loaded. The SaaS vendor usually provides data input or migration tools to help with this, or other third parties may specialise in providing data conversion services.

Testing or user acceptance testing

Testing may be carried out as part of the evaluation process or, if the risk is low, once the customer has subscribed to the service. The testing ensures that the organisation specific configuration is correct and that the service is working as a harmonious part of internal business processes. For many SMEs the testing phase may well be a simple 2-3 month pilot of using the software in parallel with existing systems. User acceptance is crucial for large organisations using mission-critical applications. SaaS vendors often build a database of test data that all of their customers can use and, if they wish, add to.

Training

An often underestimated aspect of any system implementation is training. A good SaaS vendor will provide adequate training; the key difference is that most SaaS products are intuitive and training can generally be provided as the user unlocks the different parts of the application. Fitting with their need for a scalable business, most SaaS vendors will offer a mix of self service tools, online help and training that can be done at the user's desk.

Support

It is important to review the support elements of the service. SaaS vendors will generally provide total support to the user. The IT department, if there is one, should therefore have less day-to-day involvement. Remember that SaaS is a 'service' and not just another method of technology provision. Having said that, customers need to be clear about what support is on offer and whether they need to incorporate further support within the organisation.

Pathway to 'Go Live'

A SaaS product, depending on its particular service, can be implemented in many ways. Table 2 provides a generic comparison of the SaaS selection and implementation process with that of traditional software. Customers' specific requirements may vary but this should provide a useful guide.

Table 2: SaaS and On Premise Implementation

	SaaS	On Premise Implementation
Business Assurance	Global vendors ensure the product meets local compliance and regulatory rules regarding data protection and privacy.	
Costs	Based on Operating Cost: Subscription fee usually based on system usage or number of users. Other costs are data preparation, site configuration, business change and training.	Based on Capital Cost: Requires a large upfront investment in software licences and hardware to support the application. Other costs include internal IT, data preparation, configuration, application modification, business change and training.
Data	Quality/quantity of data is controlled within the SaaS application. The data is still owned by the customer although the data will be outside the organisations physical boundaries.	The business and IT are responsible for data ownership, cleaning, loading, and governance.
Evaluation	The evaluation is performed by configuring and using the application to test how the services can be integrated with the organisation's business processes. IT involvement is only normally needed to ensure users can access the SaaS website or if integration with other systems is required.	The evaluation process is mainly a paper-based comparison of stated requirements and available features to establish the percentage fit. Extensive checking of each package is made followed by demonstrations by each potential supplier. IT is heavily involved to evaluate requirements for servers, network and PCs.
Implementation	The software is already installed and running but will usually require some configuration. For example, user security and company specific data fields. Minimal requirement for IT resources unless integration with other software is required.	Implementation is a large part of the total project often involving the installation of new servers and PCs as well as both server-based and PC-based software. Software modifications may also need to be developed and tested.
Integration	Most SaaS suppliers provide standard 'web service' interfaces to allow integration with other software.	Some packages have standard 'web service' interfaces but many have limited interfaces for integration or require bespoke code to be written.
Maintenance and updates	The service is updated frequently (usually monthly) so the organisation is always using the latest version.	New releases are less frequent (often 12 months apart) and must be installed by IT.

	SaaS	On Premise Implementation
Performance	Performance levels are agreed within the terms of a service level agreement.	Service levels are dependent on internal IT as well as the performance of the application supplier.
Requirements specification	Usually a high level list of minimum requirements is made with the knowledge that the SaaS provides standard offering cannot be changed.	At the lower end of the market the situation with standard packages is similar to SaaS. But for larger projects, a detailed requirements specification is produced to determine whether a standard package can meet the needs or whether a 'bespoke' solution is needed.
Risk	As an organisation can test and pilot use of the software during a free trial period or by committing only to a short term subscription risk is very low.	Risk is high as most of the costs and most of the effort are expended upfront before the users are able to acceptance test the system.
Support	Predominantly provided by the service provider with little, if any, support needed from IT.	Usually support is handled in two levels: 1 IT to determine if it is an IT or functional issue. 2 The application provider.
Training	As the software is designed for ease of use to fit a 'sign up and go' model, training needs are significantly reduced. Most vendors will offer online training that can be done at the user's desk.	Training is generally carried out in a classroom setting. Training is also required for IT so it can install and support the product.
User testing and pilot running	The project is primarily to ensure that the organisation can adopt the software within its business processes.	The testing phase is generally much longer than with SaaS as the users have not had 'hands on' experience of the software during evaluation. Both functional and business process testing is required.

Cost differentiations

Traditional installed software is typified by:

- upfront license fees.
- higher implementation costs.
- lengthy implementation timescales and processes.
- access issues by a mobile workforce.
- ongoing upgrade costs.
- high ongoing support costs.
- significant internal infrastructure, hardware, software and support costs.
- future infrastructure upgrade costs not part of the initial contract and so adds risk.

Direct cost savings of SaaS

- No upfront costs; the investment is opex not capex.
- Rapid speed to implementation improves business agility and flexibility.
- Pay-as-you-go, which increases or decreases as you need to.
- Apart from web access, no infrastructure requirement as the vendor hosts the data externally.
- The customer does not need to worry about internal IT support, security, backups, storage and such like.
- Quick implementation typified by a simple 'subscribe and use' approach.
- All staff can use the application no matter how mobile they are, just as long as they have access to the internet and an adequate browser.

Indirect cost savings of SaaS

- Most SaaS applications are easy to use and, as such, enable good productivity with little investment in training.
- Upgrades and enhancements are made in smaller, more frequent, releases which enables learning in a more digestible manner than the traditional annual upgrade.
- Applications support is taken care of by the SaaS vendor so the customer does not need internal or outsourced IT staff for this.
- Low monthly costs minimises the cost of a wrong decision because there are few upfront costs and, often, no fixed/minimum contract term.

Economies of scale are achieved by having a single version of the software, bugs and small enhancements are fixed quickly and for all.

- SaaS users can work from anywhere, especially the home. This means the customer can save on physical offices, premises and commuting costs.
- Single instance of the software means no differing versions, making support easier.
- By hosting several customers' data in one place, SaaS solutions can take advantage of network effects. The vendors can make use of the metadata of all the customers to assist in decisions about how to improve the application, resulting in better applications innovation over shorter time periods.
- Vendors can integrate with other applications via web services-based API's, thus saving integration, testing and customisation costs for customers.

Traditional installed software is hosted and managed internally. Applications run on the customer's computers and the data is stored on the customer's infrastructure, which is managed by the organisation's IT department.

With SaaS, the software is hosted on, and accessed via, the internet. All of the customer's data is stored on infrastructure within the service provider's data centre. In some instances, the SaaS vendor will outsource the hosting to a specialist data centre. It is of paramount importance to the customer that data confidentiality, integrity and availability (CIA) is maintained wherever the data is hosted or accessed.

While the SaaS model offers significant advantages over on-premise, it does carry potential risks that must also be considered. The SaaS user needs to know that all possible steps are being taken to safeguard its data. The SaaS provider needs to reassure customers that their data is in safe hands and can be retrieved in a useable format when required.

SaaS can be a daunting prospect from a security perspective but the issues cannot be ignored. Organisations looking to adopt SaaS applications will need to examine their appetite for risk in the context of their other business drivers and data security requirements applicable to its industry, particularly FSA requirements for regulated financial services business. The potential for the involvement of a number of different organisations in delivering the service brings with it increased loss of control data. SaaS providers will be required to take adequate steps to ensure the protection of client data. For SaaS providers this is mission critical and is generally taken very seriously to the point where data security is as important, if not more so, than the SaaS product itself.

At the moment SaaS vendors have no common security standard to sign up to other than ISO 27001. This internationally recognised security management standard helps providers implement a security management system in their organisation. However, this standard revolves around a risk assessment carried out by the organisation itself. It is not a guarantee of security, and if your provider has a high appetite for risk, then greater risks to data will remain. The onus is on the customer to assess how safe their information is and to obtain suitable contractual guarantees on the location processing and protection of its data.

Backup and failover

The SaaS vendor should back customer data up at least once a day, preferably more often, and then move and store a backup of that data safely elsewhere, out of their data centre. The length of time that the back up should be stored will depend on the value of the data, and on legal and regulatory requirements applicable to the customers. Should the SaaS vendor's data centre be destroyed, or simply go off line for a while, there should be another data centre on standby, not with just the replicated data but also the capacity to run the application so that your business is not disrupted.

Communications

Communication between your workstations and the system should be encrypted so that data travelling over the public internet cannot be intercepted and read. This is normally done using a technology called SSL (secure socket layer) between your browser and the application.

Confidentiality

Customers need to be sure data is not accessed by anybody other than those in your organisation who are authorised to do so, and that the obligations of confidentiality with customers, prospects and suppliers whose details you hold are not breached. A written procedure should cover who in the SaaS vendor's organisation can access customer data and what they are able to do with it. General safeguards should be in place to protect its security.

Putting it in perspective

Although a reputable SaaS vendor should provide all of the above, it is worth contrasting this with your in-house security and compliance before becoming unnecessarily worried about storing your data outside your organisation. If the server with your in-house system fails then most companies, not having standby facilities, will be without that application for a day or more. Has anyone checked that your backup system is working by attempting to restore the data kept in-house? Are backups taken every few hours? It is widely accepted that most data theft originates from within an organisation, often by disgruntled employees, and most SaaS systems do not hold data locally on laptops that can be left in taxis. For most organisations a reputable SaaS vendor may well protect their data better than that kept in-house.

Legal issues to consider

No-one should overlook legal issues. The SaaS business model is relatively new, but most of the legal considerations are well recognised, albeit that some aspects have developed from consumer services, which were far less likely to be challenged by the customers.

The table below identifies some of the principal legal issues that you should consider.

Table 3: Legal considerations

Method of contracting	If the contract value is significant for your organisation then you should ensure that the terms and conditions proposed by the vendor are fully reviewed by a suitably qualified lawyer, and ensure that non-authorised employees do not commit the organisation to services, or service terms, you do not want to be bound to. The vendor will offer a hard copy agreement or website terms and conditions. If the latter be sure that the terms are easily accessible early on in the sign up process and, ideally, expressly accepted.
Software licensing	Licensing practices vary. Some SaaS vendors do not grant the customer a license to the software at all, as the customer receives a service where it has the right to access software.. Other models grant a license to access and use the software for the purpose of receiving the service. Ensure the licence, or grant of access rights, are wide enough for your requirements in purchasing SaaS (including any jurisdictional requirements). Additionally, consider whether an intellectual property rights indemnity should be sought against intellectual property rights infringement by the vendor (including patent infringement and copyright infringement).
Service levels	You need to be clear as to exactly what service levels (if any) are being offered by the vendor and the potential remedies for failure. Matters to consider include: how availability will be measured and over what period; whether availability should apply to all applications comprising a SaaS offering or just individual components; system response times; service response times; and helpdesk response times. One feature of SaaS is the ability to rapidly scale up and down the level of usage – ensure that all relevant metrics and limits are clearly agreed. Customers should seek regular and transparent reports.
Service credits	Service credits will generally be offered as the customer's primary or sole financial remedy for the vendor's failure to meet its service levels. Note that the wording of service credit clauses can have a significant bearing on whether service credits are seen by a court as 'liquidated damages' for breach of contract or a contractual mechanism setting out a price payable for a particular level of service. You should consider whether the service credits on offer are adequate and whether an exclusive remedy provision is acceptable. You also need to consider including a right to terminate for consistently poor service or a major outage. Your vendor should be aware that attempts to limit the customer's remedy to just service credits in a standard form terms of business agreement will need to be 'reasonable' under the Unfair Contract Terms Act 1977.

Business continuity	Both parties need to consider what contingency plans are offered or should be sought in the event of a disaster or the vendor's insolvency. You also need to consider back up arrangements for your data. It is unusual for escrow solutions to be offered in pure SaaS contracts.
Security	It is important that any security requirements are clearly set out in the contract. The vendor should additionally include acceptable use, user password provisions and additions on each party's liability in relation to the introduction of viruses/ harmful code. Vendors will be looking for liability limitations and exclusions for failure to achieve specified security requirements (e.g. loss of data). In particular they will be considering whether to exclude consequential losses and include an overall cap on liability in the contract. You need to consider encryption of data prior to transmission, customer-specific hardware, specified levels of security at the vendor's physical premises, minimum-vetting requirements for vendor personnel that have access to infrastructure, and back up requirements.
Data protection	If the SaaS is hosted in the UK or EU the customer (as data controller) will need to comply with the Data Protection Act 1998 if any of the customer's personal data is to be transferred to the vendor's servers. The vendor typically acts as data processor and contractual provisions must be included to comply with the Data Protection Act. Your compliance obligations will include ensuring that the vendor provides appropriate technological measures against unauthorised disclosure of personal data. Additional factors will apply if the SaaS is hosted outside of the EEA, particularly if sensitive personal data is to be transferred.
Ownership of data	You should seek an express provision that all data (and rights in such data) belong to your organisation. Also consider what rights, if any, the vendor has to such data.
Other regulatory issues	You may have additional regulatory concerns (such as compliance with MIFID, the material outsourcer provisions in the FSA handbook), that should be raised as necessary with vendors to ensure that the vendor is able to comply.
Exit/migration	Most SaaS contracts do not contain detailed exit provisions in certain circumstances, eg, where data access and migration is necessary. You need to know what's involved before committing your organisation's data to the service.
Other clauses	For the sake of contractual certainty both parties should ensure that contracts contain choice of law and jurisdiction provisions (with local law advice being sought as necessary), clearly drafted payment provisions (and mechanism for working out cost), and provisions dealing with third party rights, waiver, severance, duration and termination rights for each party. You should also consider seeking a right to terminate on the change of control of a vendor.

Software as a Service checklist

Questions to ask any SaaS vendor

After finding the SaaS application that meets functional requirements, an organisation should check that the supplier's legal, pricing and support arrangements are acceptable before committing to use the system. As the acronym implies, SaaS is a 'service' and the supplier is responsible for delivery, ongoing support and maintaining your data.

The checklist below is not a list of functional requirements, but it should provide a useful sanity check after a suitable SaaS solution has been found and before an organisation commits business to that vendor. It is approximately in the sequence of importance. Unsatisfactory answers higher up the list are more serious than those lower down.

Cost	
Do you price per named user, live user, system, simultaneous user?	
Do you offer a guarantee that the cost will not be increased, and for how long?	
What is the cancellation notice required?	
How long do I have to commit for?	
Payable by invoice, standing order, direct debit, credit card?	
Data loading	
How can I move my existing data to the new system?	
How much will this cost?	
Legal and compliance	
Where is the data physically held? Is it outside the EU?	
Who owns the data?	
How do I get the data back? Can I get it back after my subscription lapses? Is there a cost?	
How often is the data backed up? Are the backups held off site?	
Who has access to my data and what policies do you have for staff access?	
What format is the data in?	
Continuity	
What unscheduled downtime have you had in the last 12 months?	
Do you have a standby system if the main data centre fails, and is it located sufficiently away from the main system?	
Do you have a Service Level Agreement, and what happens if you don't meet it?	
Vendor viability	
How many users/seats?	
How long have you been in business?	
Can I talk to reference customers?	
Is the company profitable? Well funded?	
How many solicitor's letters have you received from customers over the last 12 months?	

Technical	
Do you support all the main browsers (eg Internet Explorer, Firefox, Safari and Chrome)?	
Do you need any local software installed?	
Is all communication between the client and server encrypted using SSL?	
Can the service be accessed via mobile telephone, PDA, Blackberry?	
Customisation	
If I want a feature that is not part of the standard product, can it be added? How do you charge?	
- Data interfaces	
- Text file import/export?	
- Web services APIs?	
- Integration with other vendor's products? Which ones?	
Limitations	
The number of transactions/records?	
What is the cost of adding additional storage or users etc.?	
Emails sent?	
Document storage?	
Users?	
Support	
What are your support hours? Support for all UK business days?	
Is support available through email, telephone and/or a web form?	
What is the average time for a support request to be answered?	
Is the post-sale support team the same as the pre-sale support team?	
Training and set up	
Is set-up included in the subscription cost? If not what should I expect to send?	
Is training needed? If so for how long and how much?	
What online help is provided?	
Evaluation	
Free trial? For how long?	
Can the trial system then become the live system, or do I start again?	
Development plan	
Do you intend to continually add to and improve the product?	
What new features were released in the last six months?	
What new features are planned for the next six months?	

Conclusion

Software as a Service, or SaaS, is an increasingly popular way to deliver software capabilities to organisations. It remotely hosts and manages the software and data associated with particular applications. And it delivers its services across the internet directly to any device that can run a web browser. This means that people can work on applications from any location that has internet access.

Not only this, but it places very little upfront financial demand on its customers. They pay for what they use as they go along. Capital expenditure on hardware and software is replaced with a monthly fee which scales according to usage.

Because SaaS is a service, it would be relatively easy for customers to turn off the tap unless they were satisfied with their provider. This, more than anything else, keeps the SaaS vendors on their toes, always doing their best to support and enhance the product while keeping it easy to use.

In this paper, we have tried to retain a sense of perspective and have tried, without exaggeration, to compare the alternative approaches to software provision. We recognise that SaaS isn't for everyone and for all circumstances but, where an application need can be satisfied in a fairly standard way, where the customer is content with having their data held by a third party, where they are keen to keep costs under control and where they would like a fairly rapid time to results, then SaaS has to be taken seriously.

Hopefully the checklists in the book, including legal considerations and questions to ask prospective vendors, will serve as good guides and help you navigate the hype that currently surrounds SaaS and avoid any potential pitfalls.

Good luck!

At the end of 2007 The Institute of Chartered Accounts of England and Wales (ICAEW) decided that it wanted to provide an online community facility which would support its 130,000 members with content and discussions for the various regions, special interest groups and faculties. Although it has a large in-house IT department, it decided to take a web-based SaaS approach using WordFrame. John Pearce, ICAEW's head of digital communications, says, "At the start we were piloting a new concept for us and we weren't sure how successful or quickly it would be adopted by the members. The SaaS approach meant that we could do a rapid pilot, focus on the community objectives rather than technical or capacity issues, and then scale up as the members came on board. It's already exceeding expectations."

Twinfield's Online Accounting system forms the basis of 'BDO Online Accounting', which enables Netherlands-based BDO CampsObers Auditors & Tax Consultants B.V. to improve its service level. The service offers BDO clients a collaborative solution where accountant and client can work together on the same data wherever they are located. The system is used across all of its 34 offices for several thousand of its customers. According to Jan Bijsterbosch, partner at BDO, "Maintaining the software updates and versions of the various accounting systems was very costly and time consuming, The Software as a Service model is not only beneficial for our customers, but also for our own organisation."

The Care Services Efficiency Delivery Team (CSED), part of the Department of Health, has adopted Really Simple Systems' hosted customer relationship management program provided via Software as a Service, to assist in managing and maintaining its working activities and client histories. CSED's regional consultants provide support for the implementation of a variety of solutions that vary from assessment and care management, demand forecasting and capacity planning, to better buying, crisis response and assistive technologies. Tim O'Connor, programme director at CSED explains, "With so many councils as clients it was difficult to keep track of all activity and be able to share knowledge between remote teams that are working all over England as well as people working centrally. A hosted CRM system containing all contact information and client histories that could be accessed from anywhere was an ideal solution."

The system minimises CSED's role in software maintenance, ongoing operation, and support. O'Connor comments, "The system requires no internal IT support, as such all staff are able to focus on business activities."

SaaS or online accounting has been a core part of Vantis' London outsourcing team for many years. It facilitates the interaction with clients and enables the efficient production of monthly management accounts and other financial information. Vantis is now in the process of upgrading all of its on-line clients to e-conomic which, with its superior capabilities and bookkeeping functions, will enhance the service offering. Richard Messik, the partner at Vantis responsible for the online accounting project, says, "The decision to standardise our online offering with e-conomic is an exciting step in expanding our Cloud activities. e-conomic is enabling us to work closer with our clients and collaborate in an innovative and efficient manner."

Aspire Systems is an Outsourced Product Development (OPD) firm committed to helping ISV's build software products better and faster. We work with some of the world's most innovative Independent Software Vendors and software-enabled businesses, ranging from start-ups to established industry leaders, transforming the way software is built. Several years of building high quality software products has culminated into "Producteering™" – Aspire's approach for building well-engineered software products quickly and consistently. **www.aspiresys.com**

Civica Group Limited is a market leader in software-based solutions that help organisations to improve service delivery and efficiency, with specialist expertise in local government, social housing, enforcement, education, healthcare and regulated markets. Blending consulting, software and managed services, the group supplies more than 1,800 customers in the UK, Australia, Singapore and the USA, including 94 per cent of the UK's local authorities. **www.civica.co.uk**

D Squared C Limited, which is shortened to D2C, specializes in social media strategy, enterprise content, and collaboration solutions. They are a consulting, software development and systems integration company providing cloud based products and services for building web communities, web publishing, online accounting, CRM, intranets and extranets. We combine our experience of enterprise software and business process reengineering with practical knowledge of applying blogs, wikis, workflow, social networking, and other web 2.0 tools to add value for business. Headquartered in St. Albans, Hertfordshire, they partner with ITBrix for WordFrame and PageTypes, Twinfield , Mtivity, and OpenCRM. The D2C approach to solutions is – "think Business, not Technology." **www.d2c.org.uk**

e-conomic's online accounting software is used by nearly 20,000 companies and 3,000 accountants/bookkeepers, from sole practitioners to some of the largest accounting firms in the world including KPMG and Ernst & Young. Its clients range from sole proprietors to businesses employing over 100 staff. e-conomic is an independent, self-funded company with offices in the UK, Denmark, Sweden and Norway. **www.e-conomic.co.uk**

FAST - Federation Against Software Theft Ltd.
Championing the professional management of software and protecting members rights.
www.fastiis.org

FastFill plc is quoted on the London Stock Exchange (FFA: AIM UK) and is a leading provider of 'software as a service' to the financial community. Front, middle and back office services deliver multi-asset coverage and straight through processing using a fully hosted global network. **www.ffastfill.com**

FinancialForce.com offers highly versatile, on-demand financial management solutions, designed to bring the benefits of cloud computing to organisations of all types and sizes around the world. The FinancialForce accounting applications are built on Force.com, the enterprise cloud computing platform from salesforce.com. The company was recently spun out of financial systems developer CODA and has joint investment from Unit 4 Agresso and salesforce.com. **www.FinancialForce.com**

Four J's is a global development tool and database company with customers in diverse markets including distribution, energy, financial services, manufacturing, media, public sector, retail and transport. Our mission is to drive down the costs of production and use of software applications deployed in both traditional and SaaS Models.
www.4js.com

Contributors

Getronics UK & Ireland is an Information and Communication Technology (ICT) company, with expertise in Workspace Management, Connectivity, Infrastructure and Consultancy services. Getronics enables people in medium to large organisations to achieve a personal performance which leads to real business results. Getronics UK & Ireland clients include Barclays, Booker, Clarks, CBI, CSC, Dell, Iceland, Innospec, Threshers, PSN, and many others. Worldwide, Getronics has revenues of € 1.9 billion and over 14,000 employees. Getronics is the largest ICT service-provider in the Benelux with operations across the globe allowing it to service the needs of globally distributed multinational businesses. Since 2007 Getronics has been part of KPN, one of the world's largest international telecommunications companies. **www.getronics.co.uk**

Hardcat specialises in asset management software and services. Hardcat software manages the life cycle of assets and tracking of assets across many market sectors delivering real tangable benefits. We have over 4000 customers in more than 40 countries. **www.hardcat.co.uk**

HTK Limited provides hosted solutions for interactive mobile marketing, automated customer service and mass notification, helping organisations sell more and serve better at lower cost. The HTK Horizon™ platform is web-based, with proven business applications to mobilise day-to-day business processes through IVR, SMS, MMS, email and WAP. For utilities and service providers, HTK delivers creative service propositions that improve loyalty and retention, and that facilitate rapid time-to-revenue at low cost and low risk. For the public sector, HTK delivers proven messaging and mass notification solutions that are flexible, secure and scalable from local to national level. **www.htk.co.uk**

KashFlow Software, chaired by The Rt Hon. Lord Young of Graffham, provides web-based accounting software to micro-enterprises and accountants with the emphasis on ease-of-use. The company has won numerous awards including beating industry leaders Sage and Quickbooks in the user-voted Software Satisfaction Awards and was the first accounting product in the world to be certified by PayPal for automated accounting. **www.kashflow.co.uk**

MidlandHR is a leading independent provider of HCM and Payroll solutions. Offering on premise, SaaS and fully managed solutions to over 350 clients. MidlandHR's ethos is operational excellence and innovation through the use of its technology platform known as iTrent. **www.midlandhr.com**

One Point is a niche consultancy helping clients realise the business driven benefits of IT through Enterprise Architecture, Technology Consulting, Biometrics and Open Source. **www.onepointltd.com**

Pitney Bowes Business Insight (PBBI), a division of Pitney Bowes Software Inc., provides a unique combination of location and communication intelligence software, data and services that enable organisations to make more informed decisions about customers, competition and market expansion. Pitney Bowes Software is a wholly-owned subsidiary of Pitney Bowes Inc. (NYSE – PBI). With the industry's most comprehensive set of solutions for maximising the value of customer data, PBBI provides the tools required to more effectively locate, connect and communicate with customers in today's global markets. Leading organisations rely on PBBI solutions to increase the accuracy and effectiveness of customer information delivery and drive profitable growth. **www.pbbusinessinsight.com** and **www.pb.com**

Porthminster Rocks Solutions provides independent advice on the sales, marketing, implementation and support aspects of online solutions, drawing on the experience of Mark Davies, a pioneer of online accounting who launched the e-conomic system in the UK in 2007. **mark@porthminsterrocks.com**

Really Simple Systems Hosted CRM is aimed at small and medium sized organisations that want a straightforward hosted CRM sales, marketing and support system. **www.reallysimplesystems.com**

SME Computer Services Ltd
Liberator provides customers with a comprehensive Hosted IT service. These include Hosted Exchange, Hosted Desktop, Hosted Applications and Hosted Sharepoint. Behind these elements is a comprehensive customer support infra-structure, dedicated to solving the 'mysteries of IT' for our users. **www.smecom.com**

Speechly Bircham is a London based law firm offering informed, commercial and cost effective advice. Speechly Bircham offers a full range of contentious and non-contentious service for technology clients, including: IT/outsourcing; network/telecommunications; software licensing and resale; Data protection/ Information security; and dispute resolution. Clients include multinational companies, IT suppliers, specialist SME providers, media and games houses, entrepreneurs, banking, insurance and financial institutions.**www.speechlys.com**

SunGard Availability Services is the pioneer and leading provider of Information Availability and business continuity services. SunGard services keep people and information connected, from business continuity consulting & BCM software through recovery services to managed IT services, thereby helping over 10,000 clients worldwide have uninterrupted access to their business-critical information systems. SunGard is one of the world's leading software and IT services companies. **www.sungard.co.uk**

Vertex Law is a specialist commercial law firm that provides a full range of legal services to its clients: from SMEs to large corporates. Vertex Law has an established Technology and Media team whose lawyers have all worked in, or have significant experience in the industry and as a result are able to provide a unique combination of legal and technological knowledge and advice. **www.vertexlaw.co.uk**

Xero is an online accounting system for small business and their accountants that's truly SaaS (software-as-a-service). No software to install, no ongoing maintenance. Xero makes accounting fun, easy, with all your financial information up-dated in real-time. And it's accessible anytime, anywhere in the world on a PC, Mac or popular mobile device. **www.xero.com**

The Bunker delivers Ultra Secure Managed Services, Hosting and Data Centre solutions from within Europe's most secure data centres which are outside the M25 yet within easy reach of London. The Bunker is ISO 27001 accredited. **www.thebunker.net**

Further information

About our Transformational Business focus area

"Transformational business is about the technology industry using its knowledge and capabilities to improve competitiveness and productivity of the UK."

Intellect's Transformational Business focus area looks to strengthen knowledge and sector visibility and highlight how effective application of technology can improve productivity, profitability and ultimately national economic performance and global competitiveness.

Our core challenges

- Improving the way both our companies and our customers run their businesses to support growth and innovation
- Demonstrating the value of technology driven business change to CEOs and CIOs across the economy
- Helping to create the policy environment required to support a thriving ICT sector
- Improving the image and accessibility of the technology industry to increase the number of skilled individuals within it

About our Software as a Service Group

Intellect's Software as a Service Group exists within the Transformational Business focus area and looks to provide members and the industry with a strong voice around this developing and important business model. The group works closely with Intellect's Software Group.
www.intellectuk.org/saas

Key areas

- To act as an independent point of contact for anyone interested in SaaS
- Publicly raise awareness about the benefits of SaaS
- Connect with media and industry leaders to enhance their understanding of SaaS
- To act as a forum to meet and network with others with an interest in SaaS

For further information contact

Carrie Hartnell
Head of Industry Strategy
T 020 7331 2007
E carrie.hartnell@intellectuk.org

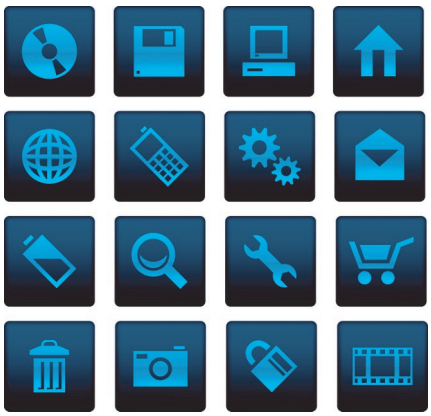
Lloyd Adams
Programme Executive
T 020 7331 2189
E lloyd.adams@intellectuk.org

intellect
REPRESENTING THE UK TECHNOLOGY INDUSTRY

Intellect works with and for members to:

- develop the UK's capability to support a strong and growing technology sector
- improve their business performance by
  - providing insights into markets and supply chains and constructively influencing their development
  - engaging with government and regulators to create the most favourable environment for growth and employment
  - maintaining the industry's reputation and championing its strategic importance
  - sharing and promoting best practice

For more information visit www.intellectuk.org



Intellect Russell Square House 10-12 Russell Square London WC1B 5EE
T 020 7331 2000 F 020 7331 2040 E info@intellectuk.org W www.intellectuk.org