# Cloud computing: Managing the transition Technology sector November 2010







# Cloud computing: Managing the transition

The emergence of cloud computing will reshape the software industry; at a disruptive pace in some areas and evolutionary one in others. This presents significant opportunities for companies and investors alike but threats and pitfalls also lie on the transition path ahead. We offer advice to investors and corporates on how to manage this transition.

# Cloud computing transition is underway

Sales from US-listed software-as-a-service (SaaS) pure-plays alone are expected to be \$4.2bn in 2010 and estimates call for 18% annual growth over the next two years versus c 7% for the rest of the software sector. Given the predominant subscription model of SaaS businesses versus upfront licensing in software, it is possible these figures underestimate the extent to which SaaS businesses are winning share. M&A in the sector is also rife, with 36 SaaS businesses acquired in Q310 alone, and cloud-related take-out values averaging 5.4x trailing revenues over the last year.

# Threats and opportunities

Fundamental technology shifts are usually presented as an opportunity with the threats being underestimated – SaaS is no exception. It is not clear to us whether SaaS will be value-creative or erosive for the software sector as a whole. Just like any other business model, there will be good SaaS companies and bad ones, successes and failures. The emergence of platform-as-a-service (PaaS) offerings from the likes of Salesforce.com and Google could reduce barriers to entry for specialist applications while concentrating value around the first movers.

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# Contents

Key messages for investors	
Key messages for companies	
nvestment summary: Managing the transition	
The evolution of cloud computing	9
SaaS from an investor's perspective	13
SaaS from a vendor perspective	
SaaS from a user perspective	28
Company profiles	35
Allocate	36
EMIS	38
FFastfill	40
K3	
Kewill	
Maxima	
SDL	
smartFOCUS	52
StatPro	54
Workplace Systems	56

# Key messages for investors

# A more attractive model in theory

The attractions of the SaaS business model are well documented – it gives companies an opportunity to expand their addressable markets and build a more stable business model, with a higher level of recurring revenues. However, while US valuations are clearly pricing-in significant revenue growth ultimately resulting in margin expansion at some stage, margin expansion has yet to come through and will not do so for everyone. There is also a clear risk that the emergence of a new business model actually results in increased value concentration around the first movers, similar to that witnessed in e-commerce (Amazon, eBay) and search (Google).

# Geniune SaaS businesses should merit a premium

Overall, we believe that recurring revenues are being undervalued by investors, especially in a market where earnings momentum is becoming more mixed. Scrutiny is required, but overall we feel that the quality of earnings of established SaaS businesses should merit a premium to similar more lumpy licence-based businesses.

# The devil is in the detail

Many things can be dressed up as cloud computing but not all are equal. For example, many companies claim to have SaaS products that in reality are single-tenant hosted products. This may not matter to the customer, but for the vendor it will have longer-term margin implications, as it is unlikely to scale as effectively as a multi-tenant solution.

### The UK transition: Evolution not revolution

For UK investors, opportunities to gain exposure to pure -play SaaS businesses are limited. Having reviewed the cloud strategies of a selection of UK software and services companies, it is clear that the move to SaaS is underway, but in most cases at a relatively measured pace and strategies for making this transition vary significantly.

### Beware of pitfalls in the transition

A hiatus in revenue growth is the obvious risk during the migration from a licensing to a subscription model. Inevitably this will result in some fundamentally sound businesses being penalised for migrating to a more recurring revenue model. Inevitably, other companies will use the transition as an excuse to mask a fundamental weakness in trading.

### Demand disclosure

Inevitably, companies will seek to 'sell' their SaaS story to investors. However, the relative strength of the business and the progress being made in migrating the business model need to be made measurable. To take a SaaS story seriously, as well as a clear communication of the strategy and estimate of the costs involved in making the change, we would demand full disclosure of key SaaS metrics (highlighted in Exhibit 1).

# It will not be right for everyone

Different markets will migrate to SaaS at different rates. New applications (often replacing spreadsheets), applications handling dynamic third-party data and those requiring minimal integration are the most likely SaaS candidates. Mission-critical or graphics-intensive applications and those accessing highly sensitive data will be slower to move.

# Key messages for companies

# Don't ignore the trend

Albeit from a low base, vendors are starting to win market share beyond just small, start-up companies looking for a low-cost solution. It is vital that software companies consider their approaches to cloud computing and define their strategies.

# Make your strategy clear

Investors need to understand exactly how, when and why you are shifting your business model.

# Give investors metrics and milestones

As there is the risk of a revenue shortfall during the transition, it is important to set out key milestones, eg timing of development of the new solution, target dates for beta versions and commercial launch, costs to develop the new solutions, changes to the cost base. When a SaaS solution is launched, it is important to disclose key metrics (see Exhibit 1), which will differ from those for traditional licence sales, to enable investors to evaluate the performance of the new business.

# If you are not doing it, be prepared to explain why

A shift towards the SaaS delivery model will not be right for everyone. However, given that it is likely to become a building theme with investors, companies choosing not to change need to ensure that investors are aware that it has been considered and understand the reasoning behind any decisions.

# Consider platform-as-a-service

The cost of putting in place the infrastructure to deliver SaaS can be substantial, but may be reduced by the emergence of PaaS offerings, such as Salesforce.com's Force.com and Google's App Engine. Companies who have not yet migrated their offerings should consider this route. In certain instances, being slightly later to market could turn into an advantage.

# Beware of silent assassins

In niche areas, SaaS start-ups will fly under the radar screen of public market investors or be listed overseas. Many will also make their initial wins with customers who are deploying an application for the first time rather than replacing an incumbent provider's offerings. So the competitive impact on incumbent suppliers is unlikely to come from a high-profile customer loss, but a more gradual erosion of growth opportunities.

# Investment summary: Managing the transition

# Cloud computing is moving from niche to widespread adoption

Cloud computing, whether software, platform or infrastructure-as-a-service, is starting to comprise a material percentage of IT spend. Gartner estimates that SaaS-based enterprise applications generated revenues of \$7.5bn in CY09 and forecasts this will rise 14% to \$8.5bn in CY10 (c 10% of total enterprise application software). At the same time, IDC expects traditional software licence revenues to fall by \$7bn in CY10 as more customers adopt SaaS solutions. While many pure play SaaS companies are still in start-up phase, with annual revenues below \$200m, Salesforce.com has become the first \$1bn SaaS company, and is on track to generate revenues of \$1.6bn this year.

# Software companies cannot afford to ignore the trend

Albeit from a low base, vendors are starting to win market share beyond just small, start-up companies looking for a low-cost solution. It is vital that software companies consider their approaches to cloud computing and define their strategies. Strategy will depend on a variety of factors such as the type of application, customer demand, the type of customer (large sophisticated buyers versus SMEs) and the extent of the threat from pure-play SaaS companies. Where companies choose not to develop SaaS based solutions, they need to ensure that investors are aware that this has been considered and understand the reasoning behind any decisions.

# Opportunities: Expanding the addressable market

SaaS has been successfully adopted in 1) niche areas where SaaS companies are providing something not supplied by on-premise solutions; 2) stand-alone applications not requiring high levels of integration with other applications eg CRM, email, HR; and 3) as scaled down solutions to the SME market who would not otherwise be able to afford the on-premise versions offered by the likes of SAP, Oracle or Microsoft. Development and adoption of SaaS has been slower for applications with a high level of integration with other applications or that require a high level of customisation (eg ERP). Beyond the start-up phase, a SaaS business should offer a more stable business model with a high level of recurring revenues.

# Threats: Short-term revenue and cost implications; long-term margin erosion

The main risk to traditional on-premise software vendors is the loss of market share to nimble new entrants. We estimate that the emergence of platform-as-a-service (PaaS) to develop and deploy multi-tenant applications will result in a lowering of margins across the industry as barriers to entry are reduced. If traditional on-premise vendors decide to develop SaaS solutions, there is the possibility of a slump in revenues and profits while making the transition. This results from moving from large upfront licence fees to smaller monthly revenues while increasing R&D to develop multi-tenant solutions. SaaS applications offer customers the benefit of greater flexibility than traditional software licences, but in order for the subscription revenues to be truly recurring, vendors will need to focus heavily on customer service to prevent churn.

# Companies will need to signpost their strategies to investors

If a software company decides to make the move to SaaS, the company needs to communicate its strategy to investors, particularly as it could impact revenues and costs negatively in the shorter-term. Key points to include are: the extent of the change (whether all software is being redeveloped as multi-tenant or only specific products identified as suitable), timeline, costs involved (sales, R&D, support, capex), whether the plan is to develop software in-house or buy in, and the impact on the top and bottom line in the short, medium and long term. The company should identify milestones by which investors can measure progress. This should make it easier for companies to avoid the SaaS-based profit warning, whereby licence revenues drop off but SaaS revenues do not compensate (customers weighing up options may take longer to make a decision, and if they opt for SaaS, will generate lower upfront revenues).

#### Move to SaaS means a new set of metrics for investors

In order to assess the performance of SaaS businesses, a different set of metrics will be required to traditional software businesses. Key metrics to disclose (company) or request (investor) include: retention rates, net new subscribers, subscription revenues, total contract value of bookings, average first year annual contract value, and average contract term.

Exhibit 1: Software performance metrics

Typical on-premise software metrics	Typical SaaS software metrics
No. Licences signed	Subscription revenues
Ave. licence value	Recurring revenues
Recurring revenues	Renewal/retention rate
Deferred revenues	Net new subscribers
Cash conversion	Total subscribers at period end
Licence revenues	Ave. revenue per subscriber
Support & maintenance revenues	Annualised contract value
Consulting revenues	Ave. contract value/customer
	Average contract term
	Bookings - total contract value
	Ave. first year contract value
	Deferred revenues
	Salesforce headcount
	Split of new business by upsell/new customers

Source: Edison Investment Research

# US SaaS companies trading at a premium

US pure play SaaS companies continue to trade at a premium to traditional software companies. On average they are achieving operating margins of 11% with the most successful achieving margins of 23% compared to traditional software companies on an average of 30%. Investors are anticipating further substantial revenue growth (average growth is 20% for FY11 for our sample of companies) with the belief that, at some point, heavy R&D and sales investment will pay off resulting in margin expansion. Exhibit 2 demonstrates the performance of the SaaS sector versus the NASDAQ since the peak in December 2007. While underperforming the NASDAQ on the downside, SaaS sector performance overtook NASDAQ a year ago and has significantly outperformed over the last six months.

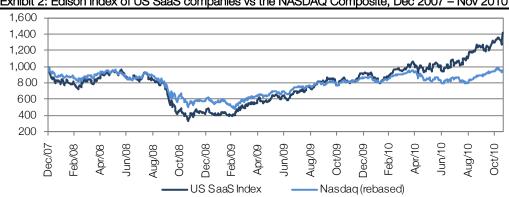


Exhibit 2: Edison index of US SaaS companies vs the NASDAQ Composite, Dec 2007 - Nov 2010

Source: Bloomberg, Edison Investment Research

# Not all SaaS companies are equal

Despite the premium at which the SaaS sector is trading, the move to a SaaS model does not necessarily make the company a good one. Investors will still need to assess the underlying business performance and value the company accordingly - new metrics should help. Some of the largest US SaaS companies have had problems, eg Digital River lost a 30% customer a year ago and has been working to make up the revenue shortfall; Workstream has undergone a debt to equity conversion, significantly diluting existing shareholders.

# Do not believe the hype

It is important to understand a company's cloud strategy - many companies claim to have SaaS products which in reality are single-tenant hosted products. This may not matter to the customer, but for the vendor, it will have implications at the cost level. A hosted solution has the advantages of being a step towards customer acceptance of internet-based software delivery and allows the customer to have a customised solution. However, from a revenue and cost perspective, a singletenant solution will not scale as efficiently as a multi-tenant solution, and this will have longer-term margin implications. This means that the company should not command a SaaS premium, although it could trade at a premium to traditional on-premise due to the more recurring nature of its revenues.

# Most likely adoption scenario: Hybrid

From a customer perspective, we expect that the approach to cloud computing will differ depending on the size of the company. We see large companies, with significant in-house IT expertise and a large installed base of software, taking a hybrid approach and using a combination of on-premise, hosted and SaaS. Mission critical or highly integrated applications or those subject to strict regulatory requirements are likely to remain on-premise. New applications or those requiring minimal integration are the most likely SaaS candidates. We believe that SMEs are likely to be most attracted to the cost model (opex rather than capex) and usage-based charging. Small start-ups are the most likely to wholly use cloud-based solutions as they tend to have little in-house expertise and limited cash for infrastructure.

# UK: More evolution than revolution

The majority of UK listed software companies are traditional on-premise software suppliers. The move to SaaS from traditional software is underway, but in most cases at a relatively slow pace. We have reviewed a sample of listed small/mid-cap software companies' strategies. We see a variety of paths: some have made the transition already (FFastFill, smartFOCUS), some are getting there via acquisition (Kewill, SDL, WorkPlace), some are in the process of developing solutions (Allocate, StatPro), some have decided that their applications or customers are not suited to the multi-tenant model (EMIS, K3) and others are expanding their infrastructure offerings to support hosted solutions (Maxima, K3).

# The evolution of cloud computing

# What is cloud computing?

As defined by the US National Institute of Standards and Technology (NIST), cloud computing is a pay-per-use model for enabling convenient, on-demand network access to a shared pool of configurable and reliable computing resources (eg networks, servers, storage, applications, services) that can be rapidly provisioned and released with minimal consumer management effort or service provider interaction.

According to the NIST, cloud services exhibit five characteristics:

- On-demand self-service
- Ubiquitous network access
- Resource pooling
- · Rapid elasticity
- Pay per use

The "cloud" represents the internet – the term having evolved from the early days of network design when engineers used the symbol to denote a network infrastructure that was not entirely describable. Rather than describing the general use of the internet, cloud computing is used to specifically denote business models associated with the internet. We have outlined the most common delivery methods in this report – software-as-a-service (SaaS), platform-as-a-service (PaaS) and infrastructure-as-a-service (laaS).

# Before the cloud: Traditional enterprise IT

As technology became ever more important in business, corporations developed bulky IT departments to manage their complex hardware, software and networks. Software was typically acquired as a perpetual licence with ongoing maintenance charges and the IT department was required to install, manage and update the software. Hardware needed to be regularly updated.

This meant traditional IT vendors could potentially be very profitable and scalable. However, there would often be lumpy sales relating to the lengthy upgrade cycle. In the software space, there is the challenge of convincing a customer to spend substantial funds on a few CDs. Further, the licence fee is typically not linked to usage, let alone economic payback. Channels to market can be either through an in-house sales team (direct) or through reseller partners (indirect).

Architecturally, the traditional software business model is 'single-tenant' which means the application is installed on a server for use by only the end user group of a single customer. The customer therefore typically has to pay for implementation services, deploy its own hardware and deal with backup, networking and ongoing maintenance and training.

### What is SaaS?

SaaS is a cloud computing delivery method whereby customers pay for a software application on a usage basis rather than through ownership of a perpetual licence. SaaS software is developed specifically for use over the internet (ie it is web-native). It is typically delivered on a one-to-many basis (single instance, multi-tenant architecture) and is hence targeted at a broader market than a customised product would be. SaaS is delivered over a network from the provider's own storage infrastructure and is normally associated with business software.

#### How SaaS has evolved

SaaS has evolved from the application service provider (ASP) model, which began to roll out in the late 1990s as rapid internet development inspired the concept of application outsourcing. The ASP model had many drawbacks, for instance:

- As with traditional software licences the ASP model was architecturally 'single-tenant'.
   This limited ASP providers' ability to scale their businesses and many went bust.
- ASP applications were simply traditional software applications with HTML front ends
  which enabled remote access to them. They were not developed specifically for use
  over the internet and hence their performance was often less than optimal.
- ASP vendors often were unable to provide sufficient application expertise. Hence
  customers would often need to employ in-house expertise to ensure applications were
  functioning correctly.

The advancement of SOA (service-oriented architecture) – the technology behind 'multi-tenant' architecture – combined with falling internet bandwidth costs hastened the development of hosted web-native business applications under the term 'SaaS'. The SaaS model has evolved as a simplified cost effective solution to deliver specialised applications in an ever more complicated IT environment.

We explore the SaaS market in more depth from p13.

#### What is PaaS?

PaaS is a platform upon which customers can develop and deploy applications to the cloud and is charged on a usage basis. A PaaS offering will typically provide development tools and middleware along with hosting.

Clearly PaaS has a component of infrastructure and hence many companies that offer laaS provide PaaS as well. Key players in the PaaS market include Google, Microsoft and salesforce.com. We provide a brief description of the largest PaaS providers.

#### Google

Google's PaaS offering is called AppEngine. Applications can be developed in two programming languages: Java or Python. All applications can use up to 500MB of storage and enough CPU and bandwidth to support an app serving around five million page views a month for free. If a customer subsequently enables billing for their application, their free limits are raised, and resources are paid for to the extent that they go above the free levels.

#### Microsoft

Microsoft has developed Windows Azure as its PaaS offering. The Azure operating system enables developers to work in .NET, Java, Ruby or PHP. Microsoft has two charging mechanisms: consumption based (pay per compute time, data stored, data transferred and transactions requested) or subscription based (monthly charge for a minimum of six months).

#### Salesforce.com

With the success of Salesforce.com's SaaS Customer Relationship Management (CRM) applications, which are configurable but not customisable, management recognised that there was the opportunity to provide a platform to enable customers to customise their applications. This

Other smaller PaaS providers include Engine Yard and Heroku, which both support Ruby on Rails (open-source web framework) developers.

### What is laaS?

laaS is the delivery of computer hardware (servers, disk space, etc) as a service – customers rent hardware instead of buying and installing it in a data centre or on their own premises.

Infrastructure is typically provided by hosting companies, either as a co-location service (customers place and manage their servers in a hosting company's datacentre) or as a managed service (the hosting company provides and maintains the servers and is responsible for running the customer's software applications on the servers).

To be defined as a true cloud Infrastructure-as-a-Service, the provider must be able to offer a truly scalable, elastic service, allowing customers to ramp up and ramp down the amount of infrastructure used and pay for it on a usage basis. Large cloud laaS providers include Amazon and Rackspace.

#### Amazon

Amazon leverages the huge infrastructure it has built for its online retail service through its Amazon Web Services (AWS) division. AWS offers a wide selection of web-based services, with the best known being Amazon Elastic Cloud Compute (EC2) and Amazon Simple Storage Service (S3). Amazon's EC2 offers scalable compute capacity in the cloud. Developers can rent space on EC2 for specific periods of time for specific levels of processing power. This allows a developer to test and run applications as and when necessary without needing to have the hardware capacity on site to deal with peak load. S3 offers web-based storage that can be used to store and retrieve any amount of data from anywhere. The service is offered on a pay per use basis. AWS recently announced a free tier, which includes 750 hours of EC2 and 5GB of S3 per month for free for a year.

#### Rackspace

Rackspace's background is in managed hosting and it more recently launched its cloud hosting service, Rackspace Cloud. Rackspace Cloud offers three services: Cloud Servers for on-demand computing power, Cloud Sites for robust web hosting and Cloud Files for on-demand online file storage and content delivery network. Rackspace offers this on a stand-alone basis, or as part of a hybrid offering with managed hosting.

### UK infrastructure providers

The main UK listed infrastructure providers such as Telecity, Phoenix IT and Iomart offer hosting services (co-location and/or managed) although Iomart has a Cloud hosted service which offers elastic infrastructure.

# SaaS is the main focus of the report

There is a wide range of investable businesses involved in cloud computing, ranging from software vendors, to cloud 'hosters' (Google, Amazon etc), storage, virtualisation, data centres and telecoms infrastructure & testing. However, SaaS is the technology in the UK market with most significant opportunities and for the rest of this report we will focus on SaaS.

# SaaS from an investor's perspective

Technology transitions typically create confusion for investors as companies jump on the bandwagon with claims that they have the latest technology. For further information on the impact of SaaS on software users and vendors see the sections starting on p22. In this section, we discuss SaaS from the investor's perspective, and we highlight several factors that we believe are useful to consider when making investment decisions.

- We analyse the pace of SaaS growth versus the overall software market.
- The US market has been the first to develop. We review this trend, outlining the major
   SaaS vendors and assessing the reaction of traditional vendors.
- Technology M&A has accelerated recently, and cloud-related companies are common targets as companies position themselves for the transition. We outline recent deals and analyse the valuation implications.
- We discuss the new metrics that are useful to assess the performance of SaaS-based companies and review valuation.
- We analyse the valuation of small- and mid-cap UK technology stocks in relation to their exposure to SaaS/cloud-based computing and assess their cloud strategies.

# SaaS market growth to exceed overall software growth

According to Gartner, global enterprise application SaaS revenues are forecast to reach US\$8.5bn in 2010, up 14% from the US\$7.5bn generated in 2009, which in turn was 17% higher than in 2008. The growth of SaaS revenues in 2009 is in contrast to the 2.6% decline in overall enterprise software revenues.

Gartner estimates that SaaS enterprise applications made up c 10% of the overall enterprise application market in 2009. The rates of adoption of SaaS vary widely across applications – Gartner estimates that 82% of web conferencing software revenues were SaaS-based in CY09 versus only 4% for enterprise content management. The best known SaaS segment – CRM – made up 24% of CRM software revenues in CY09.

Highlighting the differing growth rates for on-premise software versus SaaS-based software, IDC estimates that global software licence revenues will drop US\$7bn in CY10.

# The US experience

Over the last 10 years, a new breed of software vendor has emerged in the US supplying software solely on a SaaS basis. Many traditional software vendors have remained entrenched in their existing licence-based models, faced with the challenge of transitioning their established infrastructures (management, developers, customer relationships, channel partners, sales forces etc) to the cloud model. Consequently the pure play SaaS vendors have been able to establish strengthening market shares in a number of niche software areas such as CRM, e-commerce and human capital management. The success of the pure play SaaS vendors has forced the traditional vendors to devise strategies to move some if not all of their businesses to the cloud.

#### Pure play SaaS vendors

The table below shows a selection of key pure-play SaaS vendors in the US. There has been substantial M&A activity in this area, with many traditional software vendors accelerating their route

to market by acquiring key SaaS vendors. Not all of these companies started life as SaaS vendors; some (Concur, Kenexa, Taleo and Ultimate Software) have made the transition from being traditional software companies.

Exhibit 3: US SaaS companies

Company	Product offering	Year started	Ownership	Market cap (\$m)	Last FY revenues (\$m)	Y/E
Blackboard	Enterprise learning applications and services.	1997	NASDAQ listed	1,403	377	31/12/09
Concur Technologies	On-demand business services and software solutions that automate corporate travel and expense management processes.	1993	NASDAQ listed	2,700	293	30/09/10
Constant Contact	Email marketing, online survey and event marketing tools.	1998	NASDAQ listed	604	129	31/12/09
Digital River	Provides outsourced e-commerce solutions globally to a variety of companies primarily in the software and high-tech products markets.	1994	NASDAQ listed	1,250	404	31/12/09
Kenexa	Human capital management software.	1987	NASDAQ listed	421	158	31/12/09
NetSuite	ERP, accounting and CRM software for growing and midsize businesses.	1998	NYSE listed	1,540	167	31/12/09
Plex Systems	ERP software, focused on manufacturing.	1995	Private	N/A	26	31/12/09
Rightnow Technologies	Customer experience management software solutions that support a business's external customer-facing channels, as well as sales, marketing and customer service operations.	1995	NASDAQ listed	576	153	31/12/09
Salesforce.com	Customer relationship management (CRM) services to businesses of all sizes and industries worldwide. The company delivers its service through a standard web browser.	1999	NYSE listed	16,320	1,306	31/01/10
SuccessFactors	Business execution software.	2001	NASDAQ listed	1,907	153	31/12/09
Taleo	On demand talent management solutions that enable organisations to assess, acquire, develop and align their workforce for improved business performance.	1999	NASDAQ listed	1,177	198	31/12/09
Ultimate Software	HR, payroll and talent management solutions.	1990	NASDAQ listed	1,027	197	31/12/09
Workday	HR, financial management and payroll software.	2005	Private	N/A	+50% y-o-y, in the "tens of millions"	31/12/09
Workstream	Services and web-based software for human capital management (HCM).	1996	NASDAQ listed	16	17	31/05/10

Source: Thomson, company reports

# Reaction of the traditional vendors

Managements of the larger traditional software vendors have been cautious as this new sector has evolved. We assess the cloud strategies of the largest software vendors.

#### Microsoft

Microsoft has been relatively slow to move to the cloud, which is understandable considering its reliance on the traditional software licensing model. Microsoft has adopted a software and services model rather than software-as-a-service. Its approach to the cloud is branded "We're all in" and the key products for which it offers a cloud service are:

- Windows Azure: platform on which to develop and build out applications (Microsoft's answer to EC2 or AppEngine).
- Microsoft SQL Azure: cloud-based relational database built on SQL server technology. It
  provides a highly available, scalable, multi-tenant database service hosted by Microsoft
  in the cloud.
- Microsoft Business Productivity Online Suite: users can select from the following:
  - 1) Exchange Online: secure, hosted email that can be accessed from anywhere.
  - 2) Microsoft Sharepoint Online: collaboration service online.
  - 3) Microsoft Office Communications Online: web-hosted communications, with links to Word, Excel, PowerPoint and SharePoint.
  - 4) Microsoft Office LiveMeeting: web-based conferencing.

 Microsoft Dynamics CRM Online: a multi-tenant version of Dynamics CRM that is already available in the US and will be available in other geographies towards the end of 2010.

#### Oracle

Until recently, Larry Ellison has preferred to invest his money in Salesforce.com and NetSuite rather than shift Oracle's strategy. Ellison was an early investor in Salesforce.com and at one point sat on the board, but was asked to leave in 2000 after developing a competing product. Having helped found NetSuite in 1998, Ellison and his family currently own c 60% of the company. In September 2010, Ellison unveiled Oracle's Exalogic Elastic Cloud, which it calls a "cloud in a box". This is designed to integrate servers, databases, networking and software and is targeted at cloud providers or enterprises building their own private clouds. The company is developing its Fusion application suite and it should be commercially available from Q111. This is apparently going to be available via every deployment method.

#### SAP

SAP has been developing a SaaS-version of its software for the SME market for the last six years. In 2008, SAP announced the launch of its on-demand suite called Business ByDesign, targeted at the SME segment. However, later that year it said that it had "elected to modify the rollout strategy" and it was not until August 2010 that the full commercial product (Business ByDesign v2.5) was launched. The company worked with c 100 lead customers over that time to develop the product into a commercially viable solution.

# M&A in the SaaS space

Many companies are choosing to develop their SaaS strategies through acquisition rather than developing solutions from scratch. This has been particularly apparent in the US where several of the large technology companies are looking for ways to spend their substantial cash balances. Also, the large US technology companies have been increasingly moving into services.

In Exhibit 4, we show a sample of cloud-related acquisitions over the last year. For those transactions where deal details are known, the average take-out price was 5.4x trailing sales. Given the pace at which the SaaS market is growing, we would expect continued M&A activity as the large software vendors seek to protect their ground.

Exhibit 4: Recent Cloud-related M&A transactions

Target	Acquiror	Business	Announce	Value	Valuation
			date	\$m	price/sales
Leam.com Inc	Taleo	SaaS learning management solutions	01-Sep-10	125	4.2x
Salary.com	Kenexa	SaaS human capital management	01-Sep-10	80	1.7x
3PAR Inc	Hewlett-Packard	Storage	23-Aug-10	2350	c10x
MrTed	StepStone	e-recruitment software	02-Aug-10	N/A	N/A
iTradeNetwork Inc	Roper Industries Inc	SaaS based supply chain management	26-Jul-10	525	6.6x
Language Weaver	SDL	Statistical machine translation software	15-Jul-10	43	3.5x
Vertafore Inc	TPG Capital	Insurance software; some SaaS-based	10-Jun-10	1400	4.8x
Exalead SA	Dassault Systemes SA	Search software has a hosted solution	08 - Jun-10	162	9.7x
iPay Technologies LLC	Jack Henry & Associates Inc	Online bill paying	07-May-10	300	N/A
Cast Iron Systems Inc	IBM	Integration-as-a-Service	03-May-10	N/A	N/A
ViaWest Inc	Oak Hill Capital Partners LP	Data centres	20-Apr-10	420	N/A
StepStone Solutions	HgCapital Trust PLC	SaaS based talent management	30-Mar-10	148	c1x
Nimsoft Inc	CA Inc	SaaS based monitoring solution	10-Mar-10	350	10.9x
AMICAS Inc	Merge Healthcare Inc	Web based healthcare software	24-Feb-10	190	2.8 x
SkillSoft PLC	SSI Investments III Ltd	SaaS provider of e learning software	12-Feb-10	1132	3.4x
TriOptima AB	ICAP PLC	Web based trading software	05-Feb-10	149	N/A
SmartTurn	RedPrairie Holding Inc	Workforce management software	11-May-10	N/A	N/A
Omniture	Adobe Inc	Web analytics	15-Sep-09	1800	c 6x
Mint.com	Intuit	online personal finance service	13-Sep-09	c 170	N/A
QuickArrow	NetSuite	Software for professional services businesses	23-Jul-09	20	N/A

Source: Bloomberg

IBM said earlier this year it planned to spend \$20bn on acquisitions over the next five years and identified SaaS as one of its target sectors. It purchased Cast Iron, which is an integrator of cloud solutions, in May, and Coremetrics, a private web analytics company, in June. IBM also acquired Umica, which makes marketing automation software and has both traditional and SaaS solutions, in August for \$480m - this represented a 120% premium to the share price before the deal and the valuation was c 4x forecast revenues.

Hewlett-Packard recently won 3Par in a fevered battle with Dell, to develop its storage offering for cloud computing. Intuit, the accounting software provider that acquired Digital Insight in 2007 for \$1.3bn (6.1x sales), has recently snapped up Mint.com to establish a cloud-based personal finance offering and Medfusion, which offers healthcare SaaS.

Other notable SaaS transactions in recent years include Cisco's 2007 purchase of WebEx for \$3.2bn (8.4x sales) and Adobe's purchase of Omniture for \$1.8bn (c 6x sales) last year.

# SaaS share price performance in the US

We have updated our US SaaS sector index (see Exhibits 5 and 6), which we constructed in 2008 for a sector report on SaaS. The index is based on the US companies we mention in these reports, and includes those that have been taken over. We ran the index from pre-SaaS times to look at the longer-term evolution of this 'on demand' sector. As is evident, the sector has strongly outperformed the NASDAQ since 2001. This is also reflected in valuations, with US SaaS companies trading on significantly higher revenue and profitability multiples than traditional US software companies. Further, it is apparent that the US SaaS sector has a high sensitivity to market risk – our US SaaS index fell nearly 70% from its peak in 2007 to its November 2008 low point while the NASDAQ fell 50% over the same period. Similar patterns are evident in the periods of stock market weakness within the years 2004-06. However, during the last summer when the NASDAQ pulled back, the SaaS index simply paused. Additionally, the SaaS index has typically

bottomed out of the downturns earlier than the NASDAQ and since the bottom in November 2008 the SaaS index has nearly quadrupled while the NASDAQ is yet to double over the same period.

Exhibit 5: Edison index of US SaaS companies vs the NASDAQ Composite, Dec 1999 - Nov 2010



Source: Bloomberg, Edison Investment Research

Exhibit 6: Edison index of US SaaS companies vs the NASDAQ Composite: Dec 2007 - Nov 2010



Source: Bloomberg, Edison Investment Research

# Valuation methodology and key performance metrics

In 2009, our sample of listed US SaaS companies generated average revenue growth of close to 15% – impressive in a year when technology companies were impacted by the recession and enterprise software revenues fell nearly 3%. Growth is forecast to accelerate to 19% in FY10 and 20% in FY11 as the economy comes out of recession, representing faster growth than the group of non-SaaS software companies that on average are forecast to grow 11% in FY10 and 8% in FY11.

Most companies in our sample were profitable in FY09, with an average normalised EBIT margin of 11.1%. This is forecast to rise to 11.6% in FY10 and 14.2% in FY11. EBITDA margins are forecast to approach 20% by FY11. SaaS sector profitability is still a long way behind the traditional software sector, as the SaaS companies invest heavily in sales and marketing to scale their businesses.

Exhibit 7: Key financial metrics US SaaS companies, data based on year two consensus forecasts

Notes: All y/e 31 December except Concur (30 September) and Salesforce.com (31 January); EBIT & EBITDA exclude share-based payments, exceptional items and amortisation of acquired intangibles.

	Revenue growth			E	EBIT margin			EBITDA margin		
	FY09A	FY10E	FY11E	FY09A	FY10E	FY11E	FY09A	FY10E	FY11E	
Blackboard	20.8%	18.5%	13.5%	20.5%	21.1%	24.7%	25.5%	26.0%	27.8%	
Concur Technologies	14.9%	18.3%	19.3%	23.3%	23.1%	23.5%	29.9%	28.9%	29.0%	
Constant Contact	47.9%	34.8%	25.2%	2.6%	6.3%	9.2%	9.2%	13.0%	16.0%	
Digital River	2.4%	(10.4%)	12.5%	22.1%	11.6%	19.2%	26.9%	18.5%	24.9%	
Kenexa	(22.6%)	23.3%	24.5%	10.1%	8.4%	9.7%	16.3%	14.9%	15.5%	
NetSuite	9.2%	15.2%	16.3%	1.9%	5.1%	6.1%	8.3%	9.7%	10.7%	
Rightnow Technologies	8.7%	20.2%	16.5%	7.3%	10.7%	15.5%	12.2%	14.5%	19.4%	
Salesforce.com	21.2%	23.1%	19.6%	16.4%	15.8%	17.5%	19.7%	18.7%	19.9%	
SuccessFactors	36.8%	32.8%	25.2%	(1.1%)	2.0%	3.3%	1.5%	3.9%	4.7%	
Taleo Corp	14.2%	20.1%	25.0%	12.2%	13.7%	13.7%	26.0%	21.9%	21.6%	
Ultimate Software Group	10.1%	16.1%	18.7%	6.5%	10.1%	13.6%	12.4%	15.2%	18.2%	
Median	14.2%	20.1%	19.3%	10.1%	10.7%	13.7%	16.3%	15.2%	19.4%	
Average	14.9%	19.3%	19.7%	11.1%	11.6%	14.2%	17.1%	16.8%	18.9%	
Software ex-SaaS										
Median		12.1%	9.2%	25.0%	30.0%	31.0%	30.9%	36.1%	36.2%	
Average		11.3%	7.9%	28.6%	31.0%	32.0%	31.6%	36.8%	37.3%	

Source: Company reports, Thomson

With the length of time it takes pure play SaaS vendors to move into profitability, the key valuation metric has historically been EV/sales. However, many listed SaaS companies are now profitable at the operating level, and in Exhibit 8 we review valuation using three metrics: EV/sales, EV/EBIT and EV/EBITDA. The SaaS sector trades at a premium to the software market on all measures, despite substantially lower profit margins. The market is clearly giving credit to SaaS companies for their superior growth prospects and is forecasting that at some point the heavy investment in sales and marketing will abate resulting in meaningful operational leverage.

Exhibit 8: Key valuation metrics US SaaS companies, data based on year two consensus forecasts

Note: All y/e 31 December except Concur (30 September), Salesforce.com (31 January); EBIT & EBITDA exclude share-based payments, exceptional and amortisation of acquired intangibles.

	Code	Share	Market	Net cash	Enterprise	EV/S	ales	EV/EB	IT	EV/EB	ITDA
		price	cap		value						
		(US\$)	(US\$m)	(US\$m)	(US\$m)	FY10E	FY11E	FY10E	FY11E	FY10E	FY11E
Blackboard	BBBB	40.03	1378	29	1350	3.0	2.7	14.3	10.8	11.6	9.6
Concur Technologies	CNQR	49.68	2579	403	2176	7.4	6.2	32.1	26.5	25.7	21.5
Constant Contact	CTCT	22.49	660	68	592	3.4	2.7	54.2	29.4	26.1	17.0
Digital River	DRIV	36.45	1459	438	1021	2.8	2.5	24.3	13.1	15.3	10.1
Kenexa	KNXA	19.66	449	65	384	2.0	1.6	23.6	16.4	13.3	10.2
NetSuite	N	22.23	1440	101	1339	7.0	6.0	136.6	98.1	72.1	55.9
Rightnow Technologies	RNOW	26.76	870	99	771	4.2	3.6	39.3	23.3	29.1	18.6
Sales force.com	CRM	113.63	14940	829	14111	8.8	7.3	55.7	42.0	46.9	36.9
SuccessFactors	SFSF	28.13	2175	244	1931	9.5	7.6	474.4	227.7	243.2	162.7
Taleo Corp	TLEO	30.78	1250	196	1,054	4.4	3.5	32.2	25.9	20.2	16.4
Ultimate Software Group	o ULTI	42.02	1063	14	1,049	4.6	3.9	45.6	28.5	30.2	21.3
Median						4.4	3.6	39.3	26.5	26.1	18.6
Average						5.2	4.3	84.7	49.2	48.5	34.6
Software ex-SaaS											
Median						3.7	3.3	12.1	10.9	10.4	9.4
Average						4.0	3.7	13.5	12.3	11.4	10.5

Source: Company reports, Thomson

# Additional metrics useful to investors

Due to the changes to the business model, additional metrics are useful to assess the performance of SaaS companies. Exhibit 9 shows some of the metrics typically disclosed by traditional and SaaS vendors.

With the move from upfront licence fees to subscription-based revenues, customer retention becomes a key performance indicator. In the case of a traditional software provider, while the company runs the risk that a customer will decide not to renew its support and maintenance contract, this is fairly unusual as it leaves the customer without access to support or software upgrades. In the case of the SaaS provider, there is the risk that the customer will give notice at any time after the minimum contract period has expired (which could be as early as 12 months). This could be because the application does not perform as expected, an alternative application is going to be used, fewer licences are needed due to a smaller workforce or the application is no longer required.

Many SaaS companies are still in a major growth phase and are investing heavily in their sales effort – investors are keen to know the size of the current and target salesforce in order to calculate the impact on the cost base and to forecast potential revenue growth.

Exhibit 9: Software company performance metrics

Typical on-premise software metrics	Typical SaaS software metrics
No. Licences signed	Subscription revenues
Average licence value	Recurring revenues
Recurring revenues	Renewal/retention rate
Deferred revenues	Net new subscribers
Cash conversion	Total subscribers at period end
Licence revenues	Average revenue per subscriber
Support & maintenance revenues	Annualised contract value
Consulting revenues	Average contract value/customer
	Average contract term
	Bookings - total contract value
	Average first year contract value
	Deferred revenues
	Salesforce headcount
	Split of new business by upsell/new customers

Source: Edison Investment Research

# UK companies to watch

We have met a number of UK software and IT service companies to ascertain their approaches to cloud computing. We provide more details on the cloud strategies of these companies in a later section (see p35).

We see a variety of strategies being adopted:

- SaaS solution developed in-house
- SaaS companies acquired
- SaaS IP acquired
- Single-tenant hosted solutions developed
- Infrastructure services being offered to support customers' cloud strategies

Note: \*SaaS includes multi-tenant only; multi-instance classified as hosted; x: available now; (x) soon to be available

	laa	laaS			ployment
	Co-location	Managed	SaaS*	Hosted	On-premise
Allocate			X	(x)	X
EMIS				Х	X
FFastFill			X	Х	
lomart	X	Х			
K3		X		Х	X
Kewill			Х	Х	X
Maxima	X	X		Х	X
Phoenix IT	X	Х			
SDL			Х	Х	X
smartFOCUS			х	х	x
StatPro			(x)	Х	X
Telecity	X				
WorkPlace			X	Х	X

Source: Edison Investment Research

# Valuation of UK technology stocks

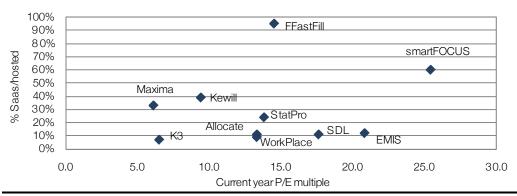
We have plotted the current year P/E multiple against four different data points:

- Percentage of current year revenues from SaaS and hosting (estimated where not disclosed)
- 2) Percentage of current year revenues from SaaS (estimated where not disclosed)
- 3) Current year PBT margin
- 4) Current year recurring revenues

The charts appear to show that valuation is most closely linked to a company's profitability, closely followed by the level of recurring revenues. One exception to this is smartFOCUS, which has a high valuation despite single digit PBT margins. However, smartFOCUS has already gone through the process of creating a multi-tenant version of its software and has a high and increasing level of recurring revenues and it is possible that the market is giving credit for this, anticipating margin expansion as SaaS revenues accelerate.

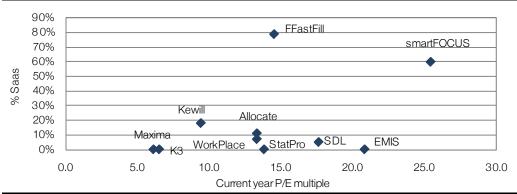
Investors appear to be putting most emphasis on current profitability and recurring revenues. With many of the companies in the early stages of developing and rolling out SaaS solutions, there is potential for increasing recurring revenues but also the risk that the transition may impact margins in the short term. Consequently, to best manage expectations, it will be as important for companies to flag any short-term negative impact on revenue and profitability as it will be to highlight the longer-term upside.

Exhibit 11: Current year P/E multiple versus current year SaaS/hosted revenues (estimated)



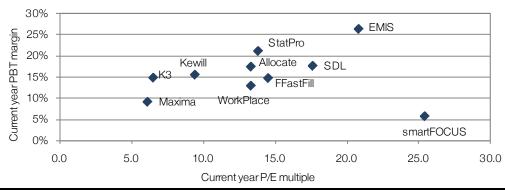
Source: Thomson, Edison Investment Research

Exhibit 12: Current year P/E multiple versus current year SaaS revenues (estimated)



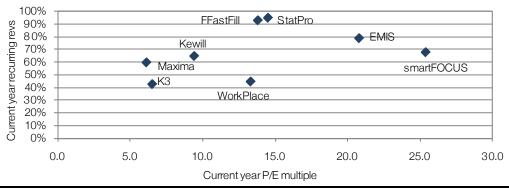
Source: Thomson, Edison Investment Research

Exhibit 13: Current year P/E multiple versus current year PBT margin



Source: Thomson, Edison Investment Research

Exhibit 14: Current year P/E multiple versus current year recurring revenues



Source: Thomson, Edison Investment Research

### The traditional software model

In the UK there are over 120 quoted traditional software companies accounting for some £22bn of equity market value. Typically these are traditional software businesses with models which involve the sale of a perpetual licence with ongoing maintenance charges. After R&D costs the marginal rates of profitability are high since manufacturing costs are negligible.

Channels to market can be either through an in-house sales team (ie direct) or through reseller partners (ie indirect). While a traditional software business can potentially be very profitable and scalable, there is often a long and lumpy sales cycle given the challenge of convincing a customer to spend substantial funds on a few CDs. Further, the licence fee is typically not linked to usage, let alone economic payback.

Architecturally, the model is 'single-tenant' which means the application is installed on a server for use by only the end user group of a single customer. The customer therefore typically has to pay for implementation services, deploy its own hardware and deal with backup, networking and ongoing maintenance and training.

# SaaS deployment: The technicalities

SaaS software is developed specifically for use over the internet, delivered over a network from the provider's own storage infrastructure. The use of modular-based service oriented architecture (SOA) enables a SaaS provider to scale, adapt and version the software in a very efficient manner. SOA enables the single instance, one-to-many delivery method (also known as multi-tenant) which means that each user sees and uses the same version of the software. The modular approach enables far more efficient development and maintenance of applications, as only one version of the software is developed and maintained. The software is configurable but not customisable by the user. The vendor will upgrade the software on an ongoing basis, with all upgrades available to all users simultaneously.

#### Incentives to move to SaaS

Although the advantages of a move to SaaS are clear for the user and for a start-up software vendor (see p22), it is not so obvious why an existing vendor would shift to offering its products on a SaaS basis. We see the following as drivers of the transition to SaaS:

- Reduced cost base: As stated above, the one-to-many nature of the delivery method
  means that the vendor only needs to maintain and upgrade one version of the software,
  reducing R&D and support costs in the longer term.
- Defensive move: Start-up SaaS-only companies are taking share from traditional software companies.
- Larger addressable market: With lower upfront costs and the ability to roll-out SaaS
  software to a small number of users, vendors could use SaaS to attract a new customer
  base both SMEs with smaller IT budgets, and divisions of larger companies keen to try
  out new applications. This could also make it easier to expand into new geographies.

### SaaS routes to market

Whether independent software vendors are looking to launch a start-up SaaS business or to evolve an existing traditional model, there are number of potential routes to market. As we have highlighted, if companies are to scale their service it is important they have addressed the technological issues to achieve a robust scalable architecture for the software and ensured the appropriate network and application monitoring is in place. For example, in the case of transaction systems, they need to ensure that the software is up 24/7 and runs in real-time. On top of that companies looking to build out their own service need to source, pay for and manage their own data centre infrastructure. Not surprisingly the costs associated with putting all this in place can be substantial.

Alternatively, software vendors can use a partner to get their product to market and launch the application via one of the many major platforms such as Force.com or AppEngine. The pricing of the service is typically a lot lower (since the independent vendor has to 'pay-away' a significant amount of the value of the service to the hosting partner), but this approach supports costs (ie infrastructure), significantly reduces the time to market, and importantly immediately gives the company access to a large captive potential customer base.

#### Case study: FinancialForce.com

The company FinancialForce.com was created in November 2009 as a joint venture between Unit 4 Agresso and Salesforce.com (Unit 4 has the majority stake) to exploit and expand on the CODA 2go application. CODA 2go was the debut SaaS product from the independent software vendor CODA. CODA provides financial management software and related services principally to medium and large organisations operating in all sectors and was acquired by Unit 4 Agresso in February 2008.

CODA chose to launch CODA 2go on Salesforce.com's Force.com platform. CODA recognised that the costs of developing its own SaaS offering were large and that existing delivery platforms already 'owned' its target customer base. Many target customers are traditionally very conservative and are concerned about letting data pass the firewall; customers are most willing where they have already used SaaS products, eg CRM products.

Key reasons for using Force.com to develop and deploy CODA 2go were:

- Marketing. FinancialForce.com offers seamless integration with Salesforce's CRM
  application, hence enabling Salesforce to offer a wider Enterprise Resource Planning
  solution (ie CRM + Financial). Salesforce's customers are tech savvy and are more
  likely to be comfortable with security issues than the average finance department
  executive.
- Infrastructure. It uses Salesforce's existing infrastructure, enabling the business to take advantage of Salesforce's encrypted security and SAS 70 certification – the latter is required by some US customers.
- Savings. The deal saved CODA at least two years and millions of pounds in development costs. CODA estimated it would have taken at least \$20m of investment to start from scratch.

Payaway. The levy Force.com puts on software suppliers to use its platform is \$50 per month per user. There has been some scepticism about the 'platform-as-a-service' route to market among software vendors as the fixed price royalty can represent a very significant payaway for lower-priced software applications – and it puts serious limitations on a software provider's pricing strategy. However, it is potentially well suited for higher-priced software applications such as FinancialForce.com.

# SaaS revenue models

SaaS software is most often sold on a subscription basis (typically per user monthly or based on the number of unique daily users) which covers upgrades, maintenance and basic support.

Transaction based pricing (profit sharing) and ad-based revenues also exist, as do 'hybrid' models. We expect to see SaaS pricing move more directly towards usage, given competitive pressures, and some companies already charge on a basis of revenue share or per click. Contracts can be short- or long-term; some customers prefer long-term contracts as a way to lock in pricing terms. For example, Salesforce.com contracts are typically for a minimum of 12 or 24 months, invoiced quarterly/annually in advance.

Revenues are typically recognised on a monthly basis through the life of the contract. Deferred revenues are usually less than 12 months of revenue, depending on the invoicing policy.

# SaaS changes the business model

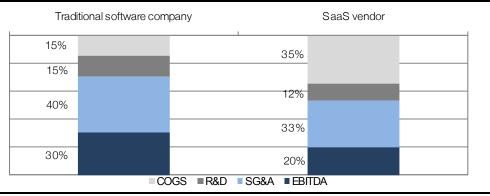
Moving to a SaaS model is not just a case of rewriting software to make it multi-tenant. The whole cost base will change and profitability will be different to that of a traditional software vendor. The key changes are:

- Higher costs for delivery. Traditional software businesses have close to 100% gross margin reflecting the very low cost of sales (ie only manufacture of CDs, manuals etc). However, SaaS providers have the major additional costs associated with hosting, and managing the application and data centre environments. The SaaS vendor needs to employ infrastructure, support teams and other staff to meet these demands (especially spikes in usage as well as to cope with other technical issues that may arise across a global client base). Some vendors have their own datacentres, although it is more common for them to use third party datacentres.
- 2) Sales, general and administration costs. SaaS vendors typically have higher sales and marketing costs relative to earnings than traditional vendors in their start-up phase. This is caused by two factors: firstly a subscription model for software produces lower revenues during the growth phase, since payments are spread over a period rather than made immediately in a one-off licence sale (see Exhibit 17). Sales expenses in both models are expensed as incurred, however, leading to a higher ratio of costs to earnings for the service model. As SaaS businesses mature they typically require lower sales and administrative infrastructure to support a broad range of customers, ie not having to account manage the implementation, maintenance and sale of bespoke solutions to a wide range of customers.
- 3) R&D and product support costs. SaaS providers are not typically maintaining multiple software versions, lowering R&D and support costs (vendors often limit customer service to self-help options rather than telephone support). When a traditional vendor

decides to offer a SaaS product, R&D costs will increase while the multi-tenant version is developed. For pure play SaaS vendors, this cost will have been incurred early in the life of the company, so for many of the larger US names, R&D is already at a lower level.

In Exhibit 15 we show diagrammatically our estimate of the difference in cost structures between traditional software and SaaS companies.

Exhibit 15: Estimated apportionment of P&L items as a percentage of revenues

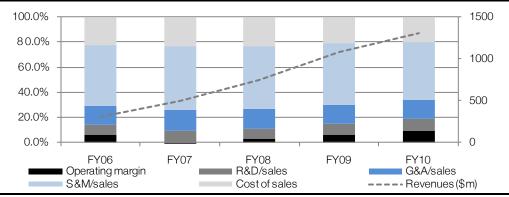


Source: Edison Investment Research

#### Lower margins, but greater potential to scale

The economics of the SaaS model are therefore fairly straightforward. The additional costs to host and deliver the application outweigh the savings from lower overheads and infrastructure (typical EBITDA margins c 20% versus c 30% for traditional businesses). However, at the core of the SaaS model is the potential to scale the service to a substantially wider user base than can be reached through the traditional direct sale/licence model (reflecting both the delivery method and the much lower upfront costs for customers). In addition, the incremental marketing and operating costs of adding additional subscribers, and of offering new services and applications to existing customers are minimal. Therefore, successful SaaS players may take longer to deliver revenues and profitability but in the longer term the model has the potential to deliver far greater aggregate cash flows. To demonstrate this, we chart below the revenue, cost and margin progression of two of the largest US SaaS vendors, Salesforce.com and NetSuite.

Exhibit 16: Salesforce cost and margin progression (% of sales), FY06-10



Source: Salesforce.com, Edison Investment Research

Exhibit 17: NetSuite cost and margin progression (% of sales), FY06-09

Source: NetSuite, Edison Investment Research

#### Typical three- to four-year payback for SaaS providers

In Exhibit 18 we show the revenue profile of a software enterprise application as a traditional licence/maintenance sale compared with an equivalent application sold as SaaS. As we have highlighted, SaaS vendors are less profitable when they are young since they are essentially 'deferring' the chunky licence revenues. However, Exhibit 18 shows that between three to four years the cumulative SaaS revenues overtake the traditional revenues. In addition another benefit of having the subscription model over time is that subscription revenue streams are steadier with greater visibility as they do not depend on irregular licence fee revenues, but rather monthly user subscription fees, transactions, clicks etc, which are usually less volatile and easier to forecast.

800 700 £ thousands 600 500 400 300 200 100 0 1 2 3 5 4 Years ■ Traditional revenues SaaS revenues Cumulative traditional ---- Cumulative SaaS

Exhibit 18: Traditional software revenues versus SaaS model

Source: Edison Investment Research

# Path to profitability can be long

Looking at the companies in Exhibit 7 on a normalised operating profit basis (ie before amortisation of acquired intangibles, share-based payments and exceptionals), the length of time to reach profitability ranges from five years to 11 years. In two cases (Success Factors and Workstream), profitability has still not been reached. For those companies that have moved from traditional onpremise software to a SaaS model, there has been a transition period of roughly five years before a return to profitability.

# Managing the transition: Risks to consider

Costs. As highlighted in the FinancialForce.com example, building out a truly robust SaaS delivery method can be very expensive both for new entrants and importantly for companies looking to evolve from more traditional licence models.

- Cannibalisation. Traditional software businesses have the challenge of trying to add hosted and subscription customers without cannibalising existing licence sales. Adoption of a SaaS product might result in slowing or declining revenues as some customers take up the lower-priced SaaS offering.
- Churn. While the SaaS revenue profile is more stable than the traditional licence-driven model, it is easier for customers to move as they have not committed to the large perpetual licence fee.
- Sales force compensation. Existing sales teams generate healthy income from selling licences. Shifting the sales force to a recurring revenue model needs to be managed as it would be less front end loaded, and more about retaining customers. While a separate channel could be created to sell SaaS it might confuse customers and lead to channel conflict.

# SaaS impact on resellers

Many pure-play SaaS companies have initially concentrated on a direct sales effort to penetrate the market. As their products have gained market acceptance, they have started to build out channel partners. The traditional software vendors developing SaaS solutions are also keen to use their channel partners to sell.

NetSuite has very publicly marketed its channel offering with the aim of signing up Microsoft Dynamics (on-premise) customers. For a two-year contract, resellers will be able to keep 100% of the first year's revenues and 10% of the second year (an average of 55% per annum over two years), compared to its usual 30% commission.

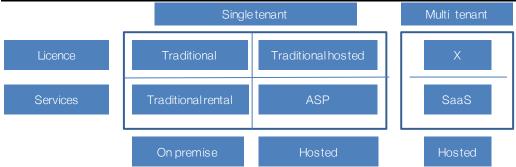
Traditionally, resellers have been responsible for delivering the software to the end customer, whereas with the SaaS, the software vendor is responsible for the delivery of the software (ie hosts the software). To capitalise on the transition to SaaS and to avoid being dis-intermediated, the role of the reseller needs to change. At the most basic level, the reseller can operate as an agent, earning introduction fees. A level up from this, the reseller can offer product support and training to the end customer in addition to creating industry-specific configurations. To gain maximum benefit, the reseller can offer services such as data conversion, data cleansing, integration with existing applications (SaaS, hosted and on-premise), project management and advice on the best solutions to adopt.

As the SaaS business model relies heavily on customer retention, the reseller's commission will be tied to this, and consequently the reseller's focus needs to be on ongoing customer service to ensure customer renewal when the subscription expires.

# SaaS from a user perspective

The software user is faced by an array of choices for software delivery. We distinguish between the deployment method (single or multi-tenant, hosted or on-premise) and the payment method (licence or subscription). The diagram below summarises the options.

Exhibit 19: Software deployment and payment options



Source: Edison Investment Research

# Software deployment: A range of choices

The trend towards outsourcing and the emergence of SaaS means that users have a variety of software deployment methods to choose from. In addition to the traditional on-premise software deployment, we summarise the other options open to enterprises.

#### Pure SaaS

The software vendor develops multi-tenant software which it hosts in its own or a third party datacentre. The customer accesses the software via the internet with customer data stored in the vendor's datacentre. The customer can configure the software but not customise it.

#### Hosted solution

The customer owns a perpetual software licence or pays for the software on a subscription/rental basis but outsources software implementation and maintenance to a third party (not necessarily the vendor). While users access the software via the internet, the user experience is the same as with an application installed on premise. The customer would save the cost of buying and maintaining hardware and installing and maintaining software on every machine on premise but would still be able to customise the software.

Managed hosting providers can improve their efficiency by deploying the software as multi-instance. The database and client are multi-tenant, but by using virtualisation software, the application layer is single-tenant, meaning it is possible to serve up to each user their own instance of the software. This enables users to have their own customised versions of the software while the vendor is able to make more efficient usage of its infrastructure.

### Hybrid solution

The software vendor develops offers both on-premise and SaaS versions of the software. The customer can then choose the most suitable option. From a supplier perspective, this increases R&D and support costs as both versions need to be developed, maintained and supported, but enables the vendor to offer solutions to customers who insist on using on-premise software (whether for regulatory, security or other reasons).

#### Community cloud

Infrastructure is shared between organisations that have similar requirements, but is not open to the public cloud. An example of this is Google's GovCloud which provides infrastructure for government organisations.

#### Private cloud

A private cloud enables an enterprise to retain all of its data behind its own firewall. What makes a private cloud different from on-premise servers or datacentres is the use of tools that create cloud-based characteristics, ie self-service (automated management tools), shared resources (virtualisation), metered according to usage (utility billing). Unlike using the public cloud, private cloud owners still need to buy hardware and, for this reason, the service cannot be completely scalable.

# Payment terms

- Perpetual licence: the customer buys a perpetual licence which involves an upfront licence fee payment plus annual support and maintenance fees.
- Term licence: an initial upfront licence fee is paid to gain access to the software for a
  fixed period of time, eg five years. Support and maintenance fees would also be
  payable.
- Subscription: the customer pays for software on a regular basis but does not own
  perpetual rights. This is effectively a term licence for a shorter period of time, eg one
  year. This is also known as the rental model.

# Key drivers of SaaS adoption

The SaaS model benefits from the trend for companies to focus on their core competences and outsource other tasks. Outsourcing (from recruitment to logistics and catering) has been a major business driver in recent years as companies seek to reduce costs and boost efficiencies. The SaaS model takes it further as SaaS applications can be regularly upgraded with ease – a significant advantage over traditional on-premise upgrades. Further, some SaaS applications are radically different to traditional applications, or even entirely new concepts.

- More than just hosting. The vendor looks after the application, network and service monitoring.
- Highly scalable. Multi-tenant architecture not only means a customer has its own version
  of an application, but also that the application and the physical back end hardware
  infrastructure can be shared with many other customers. This means SaaS applications
  are highly scalable. Thus they are significantly more cost effective than ASP applications,
  which required heavy data centre investment.
- Internet improvements. Faster data rates, falling bandwidth costs and a more stable
  internet environment have made it more feasible for companies to operate applications
  over the internet. Advances in low-cost wireless internet could further strengthen the
  case for SaaS delivery.
- Cost is linked to usage. As with the ASP model, the SaaS model normally involves
  recurring subscription charges. Alternatively some providers offer payment
  methodologies linked to economic payback such as per click or transaction. While the
  model is normally pay as you go, contract terms can be long term. The customer is not

- Widest possible delivery. SaaS applications, as with ASP solutions, can be delivered anywhere and anytime, with all infrastructure and support requirements met by the vendor.
- Time savings. There are no delays resulting from the need for internal IT organisations to develop or enhance the application. Although there will some time and expense incurred in implementing the software (resulting from the transfer of data to the vendor and training staff to use the new application), this will be significantly lower than in the case of installing on-premise software. The ability to employ the technology quickly is especially useful for start-up companies.
- Reduced customer risks. A customer can test a SaaS product on the job and if it is not
  satisfied or finds a superior product it can switch vendor with relative ease. Under the
  traditional model, a perpetual licence fee is lost money if a customer makes the wrong
  decision or if the product falls behind competitors' products. A customer can also trial
  the product with a limited number of users and scale up once happy that product is
  suitable.
- Simple upgrade cycle. Only the vendor installs the upgrades, lowering support costs for enterprises. In addition managers can be sure that all employees have the same, if not the most recent, version of the software product. SaaS has a key competitive advantage over traditional software in that it can be continually upgraded as vendors improve their product knowledge and respond to feedback from their customers. Modular-based service oriented architecture (SOA) means it is easy for developers to make changes. Many SaaS companies upgrade all their users simultaneously although some, for example NetSuite, upgrade their software in a phased release process, so that any issues with the initial group can be resolved before the upgrade is rolled out to remaining customers.

# Financial considerations: Lower cost of ownership

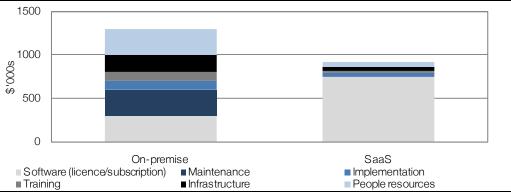
A major factor in a customer's choice of a SaaS solution over an equivalent traditional application is the relative cost of ownership. A comparison is hard as it can involve many issues including hidden costs and intangible factors. Research firm Gartner has estimated that "customers can spend up to four times the cost of their software licence per year to own and manage their applications". People resources would represent much of this. Typically in the software businesses we have met the business model is a third, a third, a third – the licence fee is typically matched over time by the implementation and maintenance charges by the vendor. Traditional costs forgone in the SaaS model include:

- A large proportion of implementation and deployment costs.
- Licence and maintenance charges.
- Hardware and network infrastructure; probable upgrades.
- Ongoing people resources to maintain the applications.
- Security, testing, monitoring, installing upgrades, possible requirement of further software to run the applications effectively.

#### Most training costs.

Exhibit 20 provides a graphic example of the cost of implementing a mid-sized enterprise software application on-premises and as SaaS, over a five-year period. As SaaS, the application's cost is estimated to be 30% lower than it would be to implement on-premise.

Exhibit 20: Estimated cost of deploying an enterprise application over five years



Source: Edison Investment Research

#### Further customer and end user considerations

In addition to lower costs, an 'on demand' SaaS application has a number of other advantages over a traditional solution 'in a box'. However, there are other factors also to consider before switching to a SaaS solution.

#### Security

Traditionally, a company has had to trust its IT department with sensitive data; with the SaaS or hosted model it has to trust the IT people and infrastructure of the provider. Managers are naturally cautious about letting sensitive data outside the firewall and SaaS was initially regarded as a major security hazard. More recently the view that SaaS vendors can potentially offer greater security is gaining traction since vendors are able to leverage their security investment and skills across their customers. Indeed, some vendors are now using this as a selling point. In the US many customers require their vendors to hold SAS 70 certification which involves an in-depth audit of security and internal controls. Perhaps the correct comparison to make when assessing security is for the customer to view the vendor's security set-up in relation to its own existing security, rather than against a theoretical perfect solution.

#### Regulation

Linked into security considerations, the user must be sure that moving data to a vendor's facilities does not contradict any regulations surrounding customer data. For example, for companies within the European Economic Area (EEA), personal customer data may not be transferred outside of the EEA unless the country or territory to which the data are to be transferred provides an adequate level of protection for personal data. When using a cloud application, it is not always possible to identify where data is stored geographically. In the Financial Services industry, there are often even more stringent requirements regarding data which may limit the number of applications that can be deployed in the cloud.

#### Suitability

Not all applications are suitable for SaaS. Applications that require extensive customisation or to be developed internally to establish competitive advantage will not be suited. Generally, the more

standalone an application, the better suited it is to be deployed via the cloud. Applications that are heavily linked to other applications will be more difficult to implement as each link will need to be moved to the cloud and tested to ensure interoperability. Every time the SaaS application is upgraded, the user will need to re-test to ensure it does not adversely impact other applications.

An application that requires high screen resolution or very heavy data processing is better suited to on premise use, as accessing the data over the internet is likely to introduce some latency.

To date, the functions that have most successfully adopted SaaS software are CRM, e-commerce and HR. Although ERP software tends to be heavily integrated with other applications, SaaS solutions are starting to emerge from companies such as SAP, NetSuite, and Plex Systems.

#### Downtime and reliance on the internet

SaaS applications typically have much lower downtimes than on-premise applications since the provider has application expertise and specifically monitors its performance. A key risk of using cloud-based services is the reliance on the internet. There is no way of getting round this - for example, if the internet connection is physically disrupted by matters outside of the user's control, the user will not be able to access applications or data. It is possible to build in business continuity procedures that enable staff to access the most mission critical applications using 3G access. It is unusual for internet access to be down for lengthy periods of time and the benefits of using SaaS are likely to outweigh this risk.

#### Contract flexibility

Although SaaS is advertised as being usage-based, it is not always as flexible as it sounds. Contracts are typically for a minimum 12 month period so the user will be locked in for this length of time even if the service is found to be unsuitable. However, this is still a substantially lower sunk cost than if an on-premise license were acquired and implemented. It is also vital that users are aware of the pricing of the service after any introductory discounts expire.

#### Supplier lock-in

Customers should clarify how the SaaS vendor will provide their data in the event that they decide to terminate the service. Every time a customer moves supplier, data will need to be transferred and someone will need to be paid to undertake the move and new set-up (whether the data is moved back on-premise or moved to a new SaaS provider).

#### Implementation cost

When moving from an on-premise solution to a SaaS solution, the user will need to take into account implementation costs, although these should be significantly lower than the cost of implementing a solution on-premise. This is a good opportunity to do a data cleanse to prevent transference of flawed data.

#### Risk management

When choosing a SaaS provider, the customer needs to ascertain what contingencies are in place if there is a security breach or unplanned downtime. What service level will the supplier commit to? What compensation will be received if the SLAs are not met? Is the maximum SLA needed for all functions or could the cost of the contract be reduced by assessing the functions that need the highest SLAs and reducing them for other functions? It is also worth considering the size of the vendor - both in terms of the bankruptcy risk of the vendor and whether the vendor has a robustenough service. As an example, a small UK accounting SaaS vendor, ClearBooks, had an unplanned outage that resulted in customers losing data. It was only after the event that customers realised that the vendor's back-up procedures were inadequate.

#### Loss of control

IT managers are typically concerned about relinquishing control over applications. They will need convincing that a SaaS provider can deliver an application better than they can. However, employing SaaS applications can allow IT departments to redirect their resources to strategic initiatives, eg business process improvement. It could also have HR implications if it means that fewer IT staff are required.

#### Ease of use and reliability

Users want an application that makes tasks easier and is easy to learn. They need to be convinced that a SaaS application can do the job as well as traditional applications.

# Government use of the cloud

The cloud model offers potential cost savings while enabling staff in different locations to share the same information. This makes it an attractive prospect for government departments seeking to save money while using IT to improve efficiency. Despite the obvious advantages such as scalability and cost savings, the public sector has been slow to move the cloud, mainly for security reasons.

#### UK: Developing the G Cloud

In the UK, the government is looking to develop its own private cloud, called the G-Cloud, in order to take advantage of the benefits of cloud computing. The recent Efficiency Review authored by Philip Green found that IT services are contracted for too long with little flexibility and that the government neither leverages its buying power nor follow best practice. The aim of the G-Cloud would be to aggregate buying power across the public sector, and potentially the third sector, with the aim of cutting 30% from the government's £17bn IT budget.

As the G-Cloud will take several years to implement, some local authorities have accelerated plans to share services and consolidate their IT assets. The London boroughs of Hammersmith & Fulham, Kensington & Chelsea and Westminster announced in October that they would share services (broadly defined as Environmental, Family and Corporate services), while retaining their own individual identities. As part of the implementation of the G-Cloud, the government will aim to reduce the number of public sector datacentres from 130 to 10-12. While not specifically mentioned in October's Comprehensive Spending Review, any change to IT strategy that can reduce costs will be welcomed at a time of severe budget cuts.

#### US policy: "Cloud first"

In the US, the government's first ever federal CIO, Vivek Kundra, has been tasked with coordinating the strategic direction of IT across the entire federal US government. He is keen to shift to a "cloud first" policy and consolidate the number of datacentres (which currently number more than 1,000). As part of this, he wants to establish standards for security, inter-operability and data portability and to centralise the certification of cloud solutions.

A key obstacle to government adoption is security, although the US government has shown that there are ways to counter this risk. Google has developed a version of its Apps for the US

government – called Apps.gov. The apps meet all necessary regulatory and security requirements and are designed for use by government agencies. The applications are based on what Google describes as a "community cloud" for government, whereby data is stored "in a segregated system located in the continental United States, exclusively for our government customers".

#### Government choice: Public or private cloud

This shows two contrasting approaches to security in the public sector: a) establishing a private cloud that can only be accessed by authorised public sector workers or b) working with public cloud providers to develop security protocols that meet the requirements of public sector organisations. The first option is likely to offer the greatest security whereas the second option is likely to cost less as it means that that the government can leverage the existing public cloud infrastructure and expertise.

# Company profiles

# Allocate

Edison
investment

Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (X)	Yield (%)
05/08	11.6	2.0	4.1	0.0	19.0	N/A
05/09	15.8	2.6	5.4	0.0	14.4	N/A
05/10	22.0	3.5	6.3	0.0	12.4	N/A
05/11e	28.6	5.0	5.9	0.0	13.2	N/A

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, share-based payments and exceptional items.

Allocate provides workforce rostering software to the healthcare, maritime and defence industries. While on-premise solutions are likely to remain the norm in the maritime and defence sectors, Allocate is re-architecting its healthcare rostering software to enable deployment by all methods, including SaaS. The recently acquired healthcare compliance solution, Dynamic Change, is a SaaS business.

# Company background

Allocate provides workforce and compliance optimisation software to three industries: healthcare, maritime and defence. Its background is in long-term planning software for the procurement arm of the British Army. In Healthcare, its largest segment, Allocate historically generated the majority of revenues in the UK, but the acquisition of Swedish Time Care AB expands Allocate's markets to Scandinavia and Northern Europe while the business has also registered significant wins for its rostering software in Australia and the US.

# Cloud strategy

Allocate's cloud strategy is defined by end market. In the defence industry, there is a reluctance to use the public cloud for security reasons, although private clouds may start to emerge. In the maritime industry, hosted or SaaS solutions are difficult because of the requirement for constant internet access. Cruise ships tend to use satellite communications to regularly update the shore – this would be very expensive to use on a 24/7 basis. The Healthcare industry is much better suited to hosted or SaaS solutions. Allocate's healthcare compliance product, supplied by the recently acquired Dynamic Change, is a SaaS solution. Allocate is working on providing its software via all main deployment methods. Two years ago, the company started rewriting its healthcare software architecture from the ground up so that it could offer:

- multi-tenanted hosted solutions,
- the ability to support SaaS,
- database independence, and
- localisation (the software is currently only available in English).

Price 78.0p\* £49m Market Cap \* price as at 19 November Share price graph 75 70 65 60 55 Share details Code ALL Listing AIM Sector Software and Computer Services Shares in issue 61.2m Price 52 week High Low

# Balance Sheet as at 30 May 2010

 Debt/Equity (%)
 N/A

 NAV per share (p)
 28

 Net cash (£m)
 2.9

78.75p

57.75p

# **Business**

Allocate Software is a leading provider of workforce and compliance optimisation solutions. The primary focus is on healthcare end markets, although the company is also active in defence and maritime.

# Top five shareholders

Herald Investment Management	22%
Jupiter Asset Management	11%
Gartmore Investment Management	11%
GLG Partners	6%
BlackRock Investment Management (UK)	6%

### Revenues by geography (2010)

UK	Europe	US	Other
65%	16%	6%	14%

# Analysts

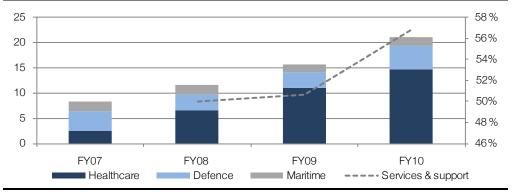
Katherine Thompson 020 3077 5730 Richard Jeans 020 3077 5700 tech@edisoninvestmentresearch.co.uk

The newly architected software has already been demonstrated to a user group and the beta version should be available in the first quarter of calendar year 2011. The software would then be commercially available from May 2011.

# Revenue impact

Allocate does not yet disclose its recurring revenues, although we know that this must have increased in the past year with the acquisition of Dynamic Change, which itself had recurring revenues of c 70% prior to acquisition. Once the newly architected software is launched (ie from FY12), we would expect both hosted and SaaS solutions to grow as a percentage of revenues. Prior to this, we are forecasting that SaaS revenues (ie Dynamic Change) will make up 11% of FY11 revenues.





Source: Allocate

# **EMIS**



Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (X)	Yield (%)
12/08	55.4	4.0	N/A	N/A	N/A	N/A
12/09	57.7	12.0	14.9	0.0	27.9	N/A
12/10e	62.6	16.5	20.2	11.2	20.5	2.7
12/11e	75.2	20.3	23.2	12.3	17.9	3.0

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, share-based payments and exceptional items.

EMIS is the leading software provider to British GP practices. The majority of practices use an on-premise solution, with a small proportion using a hosted version of the software. EMIS has recently developed its next-generation hosted solution, EMIS Web, which, now that it has been accredited, should be rolled out to the installed base over the next four years.

# Company background

EMIS is a primary care software provider, with a 53.8% share of GP practices in the UK. 99% of revenues are generated in the UK, with a nascent business in Canada making up the remainder of revenues. The company was founded in the 1980s by two GPs, who wrote the software with the founding principle that the systems used by GP surgeries should improve patient care ('written by doctors, for doctors'). The majority of the installed base (c 70%) uses EMIS LV, which was first launched in the late 80s. The rest use EMIS PCS and EMIS PCS Enterprise, which were launched in 1999 and 2002 respectively. EMIS PCS is broadly the same as LV, but with a Microsoft Windows interface. EMIS PCS Enterprise is a fully-hosted solution. EMIS recently received CfH accreditation for EMIS Web, its next generation online solution. EMIS listed on AIM in March 2010.

# Cloud strategy

# Current hosted solution used by a minority of the customer base

The fully-hosted EMIS PCS Enterprise solution is used by 62 PCTs comprising 664 GP practices. This equates to 12% of the customer base as at the end of 2009. EMIS hosts the data at two fully-owned datacentres in Leeds (based 10 miles apart).

# EMIS Web is the next generation hosted solution

EMIS started developing EMIS Web in 2006 – it is designed to be fully hosted and, in addition to holding patient records, has modules for appointments, medication, document management, care planning, workflow management, dispensing, patient administration and search and population reporting. The software enables healthcare practitioners (not just GPs) working across different locations to access live patient records centrally. With the addition of a module called Qute, the practitioner can also access secondary care information.

Price	415p*
Market Cap	£243m
* price as at 19 November	
Chara price graph	

Share price graph



### Share details

Code	EMIS
Listing	AIM
Sector	Computer and Software
	Services
Shares in issue	58.3m

# Price

High	Low
430.0p	303.5p

# Balance Sheet as at 30 June 2010

Debt/Equity (%)	N/A
NAV per share (p)	68.3
Net cash (£m)	10.5

# Business

EMIS is a primary care software provider, with the leading position supplying UK GP practices.

### Top five shareholders

Riddell (Sean Douglas)	14%
Sowerby (Peter Redmore)q	12%
Whitwam (Andrew David)	9%
Stables (David Lindsay)	8%
Woodrow (Phillip Andrew)	8%

# Revenues by geography (2009)

UK	Europe	US	Other
99%	0%	0%	1%

## Analysts

Katherine Thompson	020 3077 5730	
Richard Jeans	020 3077 5700	
tech@edisoninvestmentresearch.co.uk		

### Accreditation of EMIS Web signals start of rollout process

EMIS Web was accredited by CfH in September 2010, enabling GP practices to be centrally funded to upgrade to and use EMIS Web software. By March 2010 1,752 GP practices (33% of the installed base) were already using EMIS Web on a read-only basis with patient data streamed real time into the EMIS data centres.

EMIS and CfH have also recently facilitated a familiarisation service to enable GP practices to run EMIS Web in read-only mode alongside their existing software. The intention is that practices run service-free for six months then upgrade to the full version.

As at 14 September, EMIS had received 192 orders from customers to upgrade to EMIS Web and a further 1,036 orders for the familiarisation service.

EMIS plans to roll-out EMIS Web to 50 practices by the end of 2010 and expects to take two to four years in total to roll it out to its GP user base.

At the time of the company's IPO, EMIS Web was also used outside the GP customer base by 49 speciality healthcare teams across 14 PCTs, covering 13m patient records, with EMIS having committed that it would not start charging for the product until after CfH approval had been received.

# Revenue impact

EMIS charges an annual licensing fee for existing on-premise and hosted software and currently generates average revenue of £10,000 per practice per year. The company expects this to increase to nearer £13,000 once EMIS Web is fully rolled out. In addition, it expects to generate one-off installation revenues of c £2,500 per practice per roll-out.

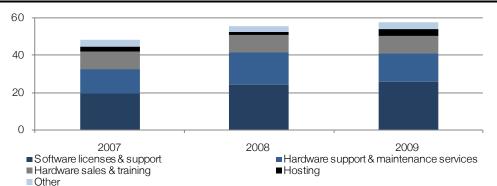


Exhibit 22: EMIS revenue breakdown

Recurring revenues were 75% of the total in FY09 and increased to 81% in H110 as more customers moved to accredited hosting. Recurring revenues should gradually increase from the FY09 level through the roll-out process as more practices move to a fully-hosted set-up. There will be a small reduction in the proportion of hardware sales and maintenance as practices will own less of their own hardware. Based on the £13,000 average annual revenue per practice, EMIS estimates that at least 78% of revenue will be recurring. With the development of EMIS Web substantially complete, R&D costs should moderate.

# **FFastFill**



Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	SPG (p)	P/E (x)	Yield (%)
03/09	14.4	0.2	0.1	0.0	137.5	N/A
03/10	14.3	1.2	0.3	0.0	28.4	N/A
03/11e**	15.4	2.3	0.6	0.0	13.8	N/A
03/12e**	16.7	2.8	0.7	0.0	11.8	N/A

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, sharebased payments and exceptional items. \*\*Forecasts are consensus data.

FFastFill spent more than six years building a high-performance SaaS platform targeting the front and middle offices of traders of exchange-traded derivatives. Further, the group has a hosted back office capability enabling FFastFill to provide straight through processing functionality with its own technology while it also offers a risk management solution. The initial SaaS investment was completed in FY09, and the SaaS business model is providing a strong recurring revenue base - the group has c 65 customers together contracted to pay c £13.5m in annual revenues of which c 79% is SaaS (representing 70% of consensus FY11 revenues).

# Company background

FFastFill was founded in 1999 with the goal of developing a high-speed electronic trading and risk management software platform for derivative products. The company was listed on AIM just after the peak of the technology boom in late 2000. The group's trading applications are used to automate trade-flow processes across a firm's front, middle and back offices, encompassing electronic order-routing, clearing, back-office settlement and risk management. FFastFill developed its front office platform from scratch while its middle- and back-office capabilities and the build out of a global support presence were added through the acquisitions of Future Dynamics in 2004, Exchange Systems Technology in 2007 and Exchange Technology Pty Ltd in 2008. The group has operational centres in London and Chicago and a software development centre in Prague.

# Cloud strategy

A new management team joined the group in 2002 and a prompt decision was made to develop a SaaS business model. Subsequently the group's front and middle office platforms have been developed into multi-tenant SaaS platforms. In total, management has spent nearly £20m developing a robust SaaS platform (based on industry-standard Microsoft and Oracle technology) in arguably one of the toughest vertical markets. The back office capability remains a single-tenant hosted licence fee model, due to the lack of customer demand for a SaaS offering. Nevertheless, FFastFill retains a leadership position in SaaS as none of the group's key competitors presently can offer a multi-tenant platform in front office orderrouting or middle office clearing.

Price	8.25p*
Market Cap	£33m
* price as at 19 November	
Share price graph	
8	برسم
6 D J F M A M J J A	s o N
Share details	
Code	FFA

Code FFA Listing AIM Sector Software & computer services Shares in issue 397m

# Price

52 week Low High 9.88p 6.88p

# Balance Sheet as at 31 March 2010

Debt/Equity (%) NA NAV per share (p) 3.2 Net cash (£m) 2.0

# **Business**

FFastFill develops and markets a derivative trading SaaS platform for banks.

### Top five shareholders

ION Trading Capital Partners 25% Herald Investment Mgmt 11% ISIS Equity Partners 7% BlackRock Investment 6% Management (UK) 6% Underwood (Michael)

# Revenues by geography (FY10)

Asia-Pacific Europe US 79.5% 13.1% 7.4%

### **Analysts**

Richard Jeans 020 3077 5700 020 3077 5730 Katherine Thompson tech@edisoninvestmentresearch.co.uk

# Revenue impact

# Large addressable market; outsourcing to favour FFastFill

Management believes the addressable market for front, middle and back office platforms is very sizeable, in the order of \$1bn, and there is a significant opportunity to benefit from the outsourcing of these functions from major financial firms. The total cost of ownership favours a SaaS model. For example, a prime broker might spend £10m annually on its technology infrastructure, while it might cost just £1m per annum to outsource the function to FFastFill. Meanwhile, FFastFill benefits from operational leverage as the new business would require minimal increased operating costs. Another benefit from SaaS is the fast implementation and a trial can be running in half an hour.

# Organic growth remains the focus

The group has been upselling solutions to existing customers while also winning new SaaS customers, including HSBC earlier this year, which reflected the confidence in FFastFill's technology by the Dresdner team which moved to HSBC. The company also sees the potential to sell its solutions to the "buy side" of the investment industry.

### SaaS revenue progress

The group's recent revenue decline was primarily due to a fall away in low margin third party software sales, following the ending of a reseller agreement with Trading Technologies. In spite of the credit crisis, and the subsequent loss of its largest customer, Dresdner, which scaled back its derivatives business when it was acquired by Commerzbank, FFastFill has still managed to grow its SaaS order book. FFastFill generated £9.1m of SaaS-based revenues in FY09 (64% of total revenues) and grew this 15% in FY10 to 74% of sales. SaaS orders worth £10.7m made up 79% of the 12-month backlog at the end of FY10.

In its recent trading update, FFastFill said that SaaS revenue had continued to show strong growth both from new and existing customers and that there had been an increase in new business bid activity, with FFastFill winning 10 new contracts during the first half.

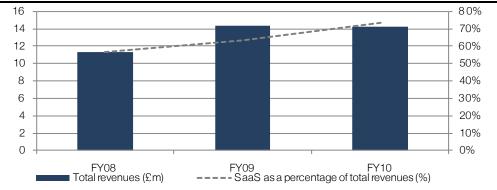


Exhibit 23: FFastFill total and SaaS revenues

Source: FFastFill

# K3 Business Technology

Edisc	on
investm	ent

Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	SPS (p)	P/E (X)	Yield (%)
12/08	37.6	5.9	18.2	0.50	8.2	0.3
06/10**	59.8	7.6	23.4	0.75	6.4	0.5
06/11e	53.8	8.0	23.2	0.60	6.4	0.4
06/12e	58.9	9.0	26.1	0.60	5.7	0.4

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, share-based payments and exceptional items. \*\*18 month period.

K3 is a value-added reseller of Microsoft-based ERP software for the retail and manufacturing markets. With the ERP software market slow to move to a SaaS model, the company's main cloud computing focus is on migrating customers to its hosting service, and we forecast that revenues from Managed Services will grow from 2.8% of revenues in FY10 to 13.8% in FY12.

# Company background

K3 is a value added reseller of Microsoft-based ERP software, focused on the manufacturing, distribution and retail sectors. The Manufacturing business is UK-based – K3 has the exclusive rights to sell SYSPRO (a Microsoft.NET-based manufacturing ERP system) in the UK and also has a Microsoft Dynamics AX-based business specialising in process manufacturing. The Retail business sells Microsoft Dynamics NAV-based software in the UK and Holland and recently entered into a strategic partnership to re-sell Omnica's AX-based multi-channel retail modules in the UK, Ireland and the Netherlands. K3 is also investing in its own Retail AX solution to coincide with Microsoft's imminent release of Dynamics AX for Retail. Through the recently acquired Panacea, K3 also sells Sage ERP and CRM solutions.

# Cloud strategy

# Recent entry into the hosting market

The majority of K3's customers buy software on a traditional on-premise licensing and maintenance basis. In late 2007, K3 started offering network infrastructure services to manufacturing customers. In March 2010, K3 acquired DigiMIS, a hosting company specialising in hosting ERP software, particularly SYSPRO. Since then, K3 has merged the existing network infrastructure services business with DigiMIS to create a new Managed Services business. The company can now offer a fully hosted solution for each software application that it sells. The majority of hosting customers are SYSPRO-based, but K3 has recently signed its first hosting contract in the Netherlands which is to host its MS Dynamics NAV-based retail solution. K3 rents space in datacentres in London, Edinburgh and New York – all are PCI-compliant as they are used by banks, providing an additional level of security for customers. K3 effectively doubled its Managed Services business in November 2010 when it bought Panacea. Panacea did not offer application hosting so K3 has the potential to offer hosting to Panacea's 260-strong customer base.

Prio	ce 149	9.5p*
Ма	rket Cap £	:38m
* prid	ce as at 19 November	
Shar	re price graph	
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Share details
Code KBT
Listing AIM
Sector Software and Computer
Services

25.6m

Price

Shares in issue

52 week High Low 150p 81.5p

# Balance Sheet as at 30 June 2010

 Debt/Equity (%)
 35

 NAV per share (p)
 122.9

 Net borrowings (£m)
 11.0

# **Business**

K3 provides Microsoft-based supply chain management solutions to SMEs in the retail and manufacturing sectors.

# Top five shareholders

Claesson (Per Johan)	22%
Laxnes	6%
Herald Investment Management (UK)	5%
BlackRock Investment Management (UK)	4%
YFM Private Equity	4%

### Revenues by geography

UK	Europe	US	Other
76%	18%	4%	2%

### Analysts

Katherine Thompson 020 3077 5730 Richard Jeans 020 3077 5700 tech@edisoninvestmentresearch.co.uk

### Drivers to migrate customers to hosted solution

The Managed Services business has the goal of not just transferring customer software and data to its premises, but of transforming the customer's IT. Customers get the obvious benefits of reducing their IT hardware capex and support and maintenance budgets. In some cases, customers are tied to sites because of the way the IT network is structured. Once all key software and data is stored offsite, this has enabled some customers to move out of expensive or badly located premises, further saving money.

### Hosting rather than SaaS is the immediate focus

Only a small proportion of K3's customers currently use its hosting service and this is the company's immediate focus. With the addition of a further 260 customers from the Panacea acquisition, K3 has significant potential to grow revenues from hosting. Management has previously noted that of the hosting deals done to date, for every £1 of annual maintenance revenues, it can earn an additional £2-3 in recurring hosting revenues.

ERP software tends to have many more linkages to other internal applications than some of the most commonly used SaaS applications such as CRM, and customers tend to require a high level of customisation. These factors combined with the fact that many of K3's smaller customers tend not to be particularly forward facing regarding technology mean that the company has seen little demand from its existing customer base for SaaS-based solutions. Where a customer does require a subscription-style service, K3 delivers this as a multi-instance solution, ie the client and database are multi-tenant, and, using virtualisation software, the application layer is single-tenant enabling the customer to access their own customised software. The customer is then charged on a monthly basis. By offering the hosting service, K3 is enabling customers to get comfortable with the concept of outsourcing a proportion of (if not all) IT services and accessing software and data via the internet.

# SaaS ERP: Later entrant to the SaaS market

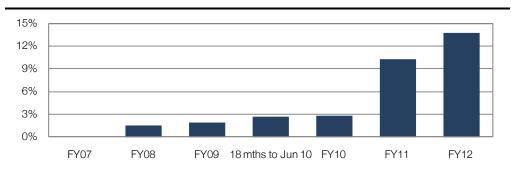
We are not aware of any plans for Microsoft to offer a SaaS version of MS Dynamics NAV or AX. Within the ERP software market place, there are several vendors of SaaS solutions, although the traditional ERP software providers have been slow to develop multi-tenant solutions. SAP's Business ByDemand has been several years in the making and, as it is targeted at SMEs, could be a competitor to K3. As it was only launched three months ago, there is little data available on take-up rates, although SAP has commented that its pipeline is growing fast. Pure SaaS ERP providers include NetSuite and Plex Systems (which has a particular focus on manufacturing). As a Microsoft value-added reseller, K3 has no immediate plans to start offering a pure multi-tenant version of its existing software, although this does not preclude it from buying a SaaS-based business.

# Revenue impact

The Managed Services business made up 2.8% of revenues in the year to June 2010 and we forecast this will rise to 13.8% of revenues by FY12.

Exhibit 24: Managed Services revenue contribution (% of total)

Note: Financial years 2007 to 2009 have a December year end; 2010 to 2012 have a June year end.



Source: K3 Business Technology, Edison Investment Research

# Kewill

Edison
investment research

Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	SPG (p)	P/E (x)	Yield (%)
03/09	53.3	7.4	9.1	1.00	9.9	1.1
03/10	56.3	8.7	10.5	1.10	8.6	1.2
03/11e	60.1	9.4	9.9	1.23	9.1	1.4
03/12e	63.3	10.1	10.5	1.42	8.6	1.6

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, share-based payments and exceptional items.

Kewill has built up a portfolio of specialist logistics software with a mix of deployment methods. The company has no immediate plans to create SaaS versions of existing on-premise/hosted software although Kewill has several SaaS applications from recent acquisitions. We would expect any further SaaS applications to be bought rather than built.

# Company background

Kewill is a provider of global trade and logistics software solutions to enterprises, shippers and logistics service providers. Its key business lines are:

- Logistics: managing the physical movement and storage of goods. It includes trucking and forwarding solutions
- Compliance: managing cross border security and customs declarations
- Reverse logistics: managing the return and repair of products
- Integration and Visibility: connecting businesses and monitoring flows in the supply chain

The company has grown through nine acquisitions, most recently buying Minihouse, a Benelux-based software company specialising in the automation of customs compliance, in June 2010.

# Cloud strategy

Kewill sells its software via three deployment methods:

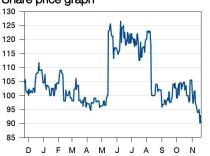
- Traditional on-premise licence
- Hosted
- SaaS

The majority of products are only available via one of the three deployment methods. There is no current plan to make existing on-premise/hosted products available as multi-tenant solutions – to do so would require significant R&D spend. The more likely step is to offer certain on-premise solutions as hosted solutions. The company's existing SaaS products have been obtained through acquisitions. For example, the Minihouse solution is a pure SaaS product. We show in Exhibit 1 which deployment category each product falls into.

# Price 90.0p\* Market Cap £81m

\* price as at 19 November

Share price graph



### Share details

Code KWL
Listing FULL
Sector Software and Computer
Services
Shares in issue 90.23m

Price

52 week High Low 126.5p 90.0p

# Balance Sheet as at 31 March 2010

 Debt/Equity (%)
 N/A

 NAV per share (p)
 61.2

 Net cash (£m)
 17.0

# **Business**

Kewill provides software that simplifies the management of complex global supply chains for enterprises and logistics service providers.

### Top five shareholders

AXA Framlington Investment Mgt 11%
Standard Life Investments 8%
JO Hambro Capital Management 7%
Schroder Investment 7%
Management
Scottish Widows Investment 5%
Partnership

# Revenues by geography (2010)

Europe US Other 59% 36% 5%

### Analysts

Katherine Thompson 020 3077 5730 Richard Jeans 020 3077 5700 tech@edisoninvestmentresearch.co.uk

Exhibit 25: Kewill's product portfolio by method of deployment

Business line/product	Traditional licence	Hosted	SaaS
Logistics			
Kewill Forwarding	Х	X	
Kewill Transport	X		
TMS Quick Start		X	
Kewill Flagship	X		
Kewill Clippership	X		
Kewill Warehousing	Χ		
Compliance			
Kewill SPEX	X		
Kewill ECS			X
RDPS			Х
Kewill Customs (US)	X		
ISF			Х
Kewill CustomsXchange			X
Customs (Asia)	X		
Customs (EU)			X
Integration & Visibility			
Kewill Easy Trade	X		X
Kewill Trade		X	
Kewill eBiz-Manager	X		
Kewill Messagebroker			X
Kewill Xchanges			X
Reverse Logistics			
Kewill SLS			X

Source: Kewill, Edison Investment Research

# Revenue impact

Kewill has grown its recurring revenues (defined as Hosting/SaaS revenues and maintenance revenues) from 48% in FY08 to 62% in FY10. Within this, Hosting/SaaS revenues have also grown as a percentage of total revenues (from 27% to 36%). All other things being equal, we estimate that including Minihouse revenues for nine months in FY11 will drive up the percentage of revenues from Hosting/SaaS by at least another 3%.

Exhibit 26: Kewill's product portfolio by method of deployment



Source: Kewill

The company has not formally set any targets for each product category, but we would expect a gradual shift from traditional licence and support & maintenance revenues to hosting/SaaS revenues. Drivers include the move to offer more products on a hosted basis and the impact of future acquisitions that are likely to be SaaS-based. Sales compensation has already been realigned to make it neutral to the sales person which deployment method is sold. The company does not yet capitalise any development costs although we expect that this would change if work is undertaken to convert products to multi-tenant solutions.

# Maxima Holdings



Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (X)	Yield (%)
05/09	56.6	6.9	20.3	4.5	4.1	5.5
05/10	51.0	4.5	12.2	3.0	6.8	3.6
05/11e	52.0	4.8	13.5	3.5	6.1	4.2
05/12e	53.8	5.3	15.0	4.0	5.5	4.8

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, share-based payments and exceptional items.

We believe Maxima has a significant opportunity to provide cloud-based services to SMEs given that many of these businesses continue to operate sizeable IT departments. In our view customers could achieve significant IT efficiencies through virtualisation and outsourcing. Maxima has been beefing up its cloud-based solutions, which include IBM servers and virtualisation technologies from Citrix and Microsoft. The group is positioning itself to provide on-premise "private cloud" services while also giving customers access to storage and processing power through Infrastructure-as-a Service offerings.

# Company background

Maxima recently refocused its operations from 11 to two key business units:

- Business Solutions: offers enhanced Microsoft and SAP software, in particular Business Intelligence solutions with a financial services focus and Microsoft Dynamics AX/CRM solutions for the construction, service management and manufacturing sectors.
- Support Enablement Services: offers virtualisation services and unified network infrastructure and communications service.

Maxima has 1,400 customers and has a strong position in construction, manufacturing and financial services. Two competency centres are being launched as part of a new marketing process, focused on the four areas where the company sees the most growth opportunities: Microsoft Business Solutions, Virtualisation, Business Intelligence and Unified Infrastructure. Maxima offers customers the ability to outsource a portion of their IT departments' functions – either through managed services or hosting – and hence make significant cost savings. Maxima's virtualisation services (using Microsoft's HyperV and Citrix's ZenDesktop) enable customers to make more efficient use of their existing IT infrastructure.

Price	82.5p*
Market Cap	£21m
* price as at 19 November	
Share price graph	
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65	
JFMAMJJA	S O N
Share details	

# Code MXM Listing AIM Sector Software & computer services Shares in issue 25.3m

# Price

52 week	High	Low	
	104.5p	67.5p	

# Balance Sheet as at 31 May 2010

Debt/Equity (%)	49.1
NAV per share (p)	94.9
Net debt (£m)	11.8

### **Business**

Maxima is an IT business systems and managed services company.

# Top five shareholders

Harrison (Kelvin Frank)	15%
Hargreave Hale	10%
Herald Investment Management	10%
Unicorn Asset Management	7%
Octopus Investments	7%

# Revenues by geography (FY10)

UK	Europe	US	Other
89.9%	7.4%	2.6%	0.2%

# **Analysts**

Katherine Thompson	020 3077 5730				
Richard Jeans	020 3077 5700				
tech@edisoninvestmentresearch.co.uk					

# Cloud strategy

### Target: Moving the installed base to the cloud

While large IT services companies are positioning themselves to deliver services to big corporate customers, we believe Maxima has a significant opportunity to provide cloud-based services to its existing customer base (who are typically SMEs) as well as new customers. The group has partnered with IBM to deliver cloud-based services, which will be joint-marketed with IBM. Maxima owns its own fibre network and provides resilient data centre backup across two data centres.

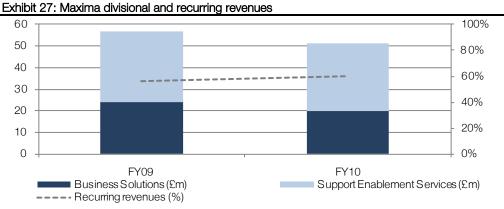
### Initial focus on the infrastructure side

We see the Support Enablement Services business as the initial focus for cloud-based services. This business line offers services ranging from support for on-premise IT (managed services and virtualisation services) to cloud-based services such as hosting. As a first step, customers will often look to make more efficient use of their own IT infrastructure through virtualisation. For those smaller businesses with limited in-house IT expertise, managed services can be attractive. A managed service can be the first step to outsourcing a large proportion of IT functionality, potentially leading to a fully hosted model.

On the Business Solutions side, Maxima offers applications on premise, hosted or "on demand" (subscription-based hosted). Maxima's main focus is on Microsoft Dynamics and SAP for applications, supported by their own IP which is directed at industry specialisation.

# Revenue impact

Management has restructured Maxima over the last year and consequently has reduced the number of software solutions it offers in order to focus on a smaller group of partners. Also in FY10, a partner, QAD, decided to move to a direct sales model. Both factors had a negative impact on FY10 revenues, but from FY11 we are forecasting modest growth and believe that Maxima has the opportunity to cross-sell cloud-based services to its large installed base. We would expect a gradual increase in recurring revenues.



Source: Maxima Holdings

# SDL



Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (X)	Yield (%)
12/08	158.8	19.9	25.0	0.00	22.6	N/A
12/09	171.9	24.0	29.1	0.00	19.4	N/A
12/10e**	191.2	33.9	31.7	4.14	17.8	0.7
12/11e**	208.6	37.3	34.5	4.79	16.3	0.8

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, share-based payments and exceptional items. \*\*Forecasts are consensus data.

SDL helps companies manage their global content, building brand equity, speeding up time to market and reducing the costs of managing global content in multiple languages. The explosion of digital content over the last 10 years has significantly strengthened SDL's opportunity. Further, recent acquisitions and organic development have added SaaS and hosted offerings. This has widened the product portfolio while also broadening the group's customer base which drives cross-selling opportunities and joint-product marketing strategies.

# Company background

SDL combines software and services to deliver content globally and management describes this as "Global Information Management". The company has evolved from its Language Services division (c 62% of revenues) which includes an integrated human and machine translation service as well as consulting activities. The group's technology units make up the remaining 38% of revenues. SDL's three business lines are:

- Language Services translation service for customer's multilingual content.
- Content Management Technologies solutions which help automate and manage content in multiple languages, across websites, documentation and channels.
  - 1. Web content management. SDL Tridion enables customers to quickly and easily create, manage and publish content to the Internet.
  - 2. Structured content technologies. SDL's solutions enable companies to create, share, manage and publish technical information.
  - 3. eCommerce. Fredhopper is merchandising and marketing software specifically tailored to the needs of businesses online sales channels.
- Language Technologies enterprise and desktop solutions to help automate and manage multilingual assets. The recently acquired Language Weaver is part of this division.

The group has made a number of acquisitions (the most recent being Xopus in June and Language Weaver in July) with the aim of adding customers and cross selling solutions. More than 400 clients currently employ multiple SDL solutions.

Price	5	565	p*
Market Cap	£4	441	m
* price as at 19 November			
Share price graph 625 600 575 550 525 500 475 450 425 400 375 350 D J F M A M J J A	s ·	0 N	
Share details			
Code		5	SDL
Listing		l	SE
Sector Software & compu	ter s	servi	ces
Shares in issue		7	'8m

# Price

52 week High Low 615p 368p

# Balance Sheet as at 30 June 2010

 Debt/Equity (%)
 N/A

 NAV per share (p)
 231

 Net cash (£m)
 55.5

### **Business**

SDL is a provider of Global Information Management solutions.

# Top five shareholders

BlackRock Investment	13%
Managment (UK)	
AXA Framlington Investment	7%
Management	
Standard Life Investments	7%
F&C Asset Management	6%
Herald Investment Management	5%

### Revenues by geography (H110)

UK/Europe	N. America	Other
44%	45%	12%

# Analysts

Richard Jeans	020 3077 5700
Katherine Thompson	020 3077 5730
tech@edisoninvestmentres	search.co.uk

# Cloud strategy

# Historically internet focused

Since listing in 1999, SDL has always been positioned to benefit from cloud computing, given that its activities help companies globalise their businesses through the use of the internet. SDL's GIM solutions help companies to conduct their business in multiple languages and SDL launched a cloud-based translation management system back in 2000. Going forward there will be an increased focus on SaaS offerings such as the recently launched BeGlobal.

### Slow customer transition to the cloud

SDL's solutions drive significant savings for customers compared to traditional translation methodologies. Nevertheless, management believe the move to the cloud will be relatively slow as many businesses prefer to keep the majority of their applications behind their firewalls. SDL believes that eventually the concerns over security will dissipate as people learn to appreciate that cloud applications can actually be more secure and companies will see the financial logic in slimming down their IT departments.

### SDL's SaaS solutions

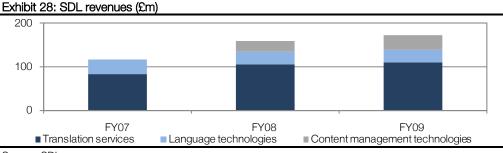
Within the Language Technologies unit, SDL BeGlobal, launched in October 2010, is a multitenant SaaS application which enables businesses to communicate across multiple languages with their customers, suppliers and employees. This uses one central interface for multiple types of content, communication and social media.

Within Web Content Management, a SaaS offering was launched in the US in 2009. However, currently c 90% of Tridion sales are sold as a traditional perpetual licence. Virtually all revenues of the eCommerce business, Fredhopper (acquired in 2009), are SaaS. The Structured Content Technologies unit, which is about delivery of content, such as manuals, over the internet, is well suited to pay-as-you-go business model. We understand that, overall, 30% of Content Management Technologies revenues are SaaS/hosted.

The group's SaaS and hosted offerings typically have a 3-year term and a portion of SDL's hosted customers have actually chosen to purchase the software as a perpetual licence.

# Revenue impact

Management believes all of its products will eventually be offered to some degree on a SaaS or hosted basis. C 30% of technology revenues are currently SaaS or hosted and management has a target for 90% SaaS/hosted (the balance mainly being traditional perpetual licence sales). This number does not include the Language Services division which also operates a recurring revenue model. However, Language Services' percentage of group revenue is declining as a percentage of revenues as the group widens its technological breadth through organic sales growth and acquisitions. SaaS offerings are likely to drive the strongest growth in this business in our view, eg, Fredhopper's vertical in online retail is growing at c 30% pa according to SDL.



Source: SDL

# smartFOCUS



Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	SPS (p)	P/E (X)	Yield (%)
12/08	10.4	(1.1)	(1.1)	0.0	N/A	N/A
12/09	11.9	0.6	0.4	0.0	38.1	N/A
12/10e**	13.7	0.8	0.6	0.0	25.4	N/A
12/11e**	14.8	1.1	0.8	0.0	19.1	N/A

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, share-based payments and exceptional items. \*\*Forecasts are consensus data

smartFOCUS is a marketing software and services company that has made the transition to offering solutions on a SaaS basis. In 2008, the company decided to develop a multi-tenant version of its software, and in 2010 it expects 60% of software to be sold on a SaaS basis.

# Company background

smartFOCUS sells marketing software and digital marketing services. Its software solutions include the smartSERVER: server platform and the smartMARKETER: marketing software application suite. Services offered include: building and managing marketing databases; planning and/or executing campaigns through print media, email, mobile, web and RSS; and account management.

The company's products and services can be deployed in four ways: 1) SaaS, 2) on-premise, 3) outsourced to smartFOCUS, or 4) omni-source – software is on-premise but is managed by smartFOCUS.

# Cloud strategy

### Making the move to SaaS

In 2008, the company decided that it wanted to change its financial model and reorganise its cost base in order to move to a SaaS model. Software was rearchitected for SaaS in a development process that took 18 months. The company took out c 10% of the cost base and realigned compensation and incentives for the sales team. In FY08, around one-third of revenues were generated from selling on a subscription basis. The company set its FY09 budget on the basis that it would not sell any perpetual licences, as the level of perpetual licence sales had dropped off significantly in 2008, particularly towards the end of the year. The company is developing common data models by industry vertical – the front-end of the software will be configurable by vertical. To date, SaaS adoption has mainly been by new customers.

### Drivers behind the move

One of the reasons for the move to a SaaS model was to remove a barrier to adoption – by moving to a subscription model the purchase has a lower upfront cost and becomes an opex rather than a capex decision, better suited to the kind of budgets held by marketing managers.

# Price 15.25p Market Cap £15m \* price as at 19 November Share price graph 17 16 15

# Share details

14

13

12

10 <del>|</del>

Code STF
Listing AIM
Sector Software and Computer
Services

Shares in issue 95.39m

Price

52 week High Low 16.25p 10.25p

### Balance Sheet as at 31 December 2009

 Debt/Equity (%)
 N/A

 NAV per share (p)
 3.7

 Net cash (£m)
 2.4

# **Business**

smartFOCUS is a provider of multichannel marketing software and services with operations in the UK, Europe and the US.

### Top five shareholders

Foresight Group 15%
Underhill (Christopher John) 14%
Butters (Jonothon) 7%
Charles (John) 6%
Koch (Richard John William) 4%

# Revenues by geography (2009)

UK	Europe	US	Other
61%	17%	22%	0%

# Analysts

Katherine Thompson 020 3077 5730 Richard Jeans 020 3077 5700 tech@edisoninvestmentresearch.co.uk

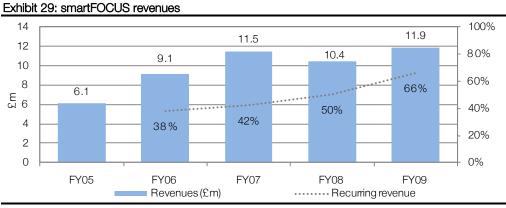
# Deployment versus payment

The company distinguishes between the software contract payment & revenue recognition structure and the deployment method. While all software is now sold on a subscription basis, by the end of FY10 the company expects to be delivering c60% of software on a SaaS basis ie using multi-tenant software. The remainder is delivered on-premise or as a hosted single-tenant product. Some customers will continue to use on-premise software for customer data security reasons. At H110 results, the company noted that it expects only a single digit percentage of FY10 revenues to be generated from traditional on-premise licenses.

Software is now typically sold as a term license for a minimum of 12 months. For a 12 month contract, the customer will have a 6 week notice period. For a three year contract, the customer will be on a rolling six-month notice period.

# Revenue impact

smartFOCUS saw several years of revenue growth until FY08, when the combination of the economic crisis and the decision to move to a SaaS model resulted in a drop in revenues. Perpetual licensing fell to almost zero, helping drive recurring revenues up to 50% from 42% in the prior year. The company returned to growth in FY09, and saw a substantial increase in recurring revenues as the SaaS product was rolled out. Consensus forecasts are for growth of 13% in FY10 and we would expect a further increase in recurring revenues.



Source: smartFOCUS

# StatPro Group



Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (X)	Yield (%)
12/08	27.9	4.7	7.0	1.75	17.4	1.4
12/09	31.6	6.9	9.0	2.10	13.6	1.7
12/10e	33.0	7.0	8.8	2.40	13.9	2.0
12/11e	34.7	8.0	9.9	2.60	12.3	2.1

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, sharebased payments and exceptional items.

While StatPro's products have historically been used by middle office personnel, the group's new SaaS product, StatPro Revolution, substantially broadens the addressable market by targeting other participants in the wealth management industry while also having prospects on the 'sell side' of the broader investment industry. The group remains on target for the full commercial launch of StatPro Revolution in January 2011 and we include £1m of SaaS revenues for FY11.

# Company background

Over its 16-year history, StatPro has established a strong niche as a provider of solutions for the asset management industry, with a series of acquisitions providing product breadth and scale on a global basis. StatPro's products have historically been sold directly to clients, priced on a rental model and typically installed on customers' premises. The group recently moved new business entirely to a hosted delivery model, creating the StatPro Seven product, which bundles the core solutions and is priced in terms of the number of the customer's portfolios. This effectively lowered the customer entry level for the traditional product while maintaining a similar experience for the end user. The group also has a "Data-as-a-Service" product, StatPro Unlimited, which combines the group's pricing and data services, offering clients equity and evaluated bond prices and model prices from its Complex Asset Pricing service.

# Cloud strategy

# SaaS solution: StatPro Revolution

StatPro started developing StatPro Revolution in 2008 and it became available for public beta testing and free trial in July 2010 with full commercialisation expected from January 2011. Revolution focuses on analysis, presentation, publishing and research and being genuinely web-based, in our view has the potential to transform the distribution of analytical information. It serves to enhance StatPro's production system Seven (or any other production system). While smaller asset managers including hedge funds and front office staff of existing clients were the original target market for Revolution, StatPro has widened this substantially to include 'gatekeepers' such as custodians, administrators, third-party software companies, back office outsourcers and prime brokers.

Price	122.0p*
Market Cap	£74m
* price as at 19 November	
Share price graph	
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Share details	
01-	000

Code SOG Listing AIM Sector Software & computer services Shares in issue 60.7m

Price

52 week High Low 128.5p 102.0p

# Balance Sheet as at 30 June 2010

Debt/Equity (%) 15.7 NAV per share (p) 66.7 Net borrowings (£m) 6.3

### **Business**

StatPro Group provides asset management software and asset pricing to the global investment industry.

# Top five shareholders

Wheatley (Justin MBT) 12% Herald Investment Management 12% AXA Framlington Investment Mgt 11% Liontrust Asset Management 8% Artemis Investment Management 6%

### Revenues by geography (H110)

UK	Europe	US	Other
24%	26%	36%	14%

# Analysts

Richard Jeans 020 3077 5700 Katherine Thompson 020 3077 5730 tech@edisoninvestmentresearch.co.uk

The new platform is a multi-tenant application specifically for use over the internet and hence offers a different user experience than StatPro Seven. Phase II of the public beta of StatPro Revolution was released on 4 October, which involved a significant upgrade, and more updates are scheduled over the coming months.

# Revolution designed to integrate with Seven

StatPro believes that Revolution will complement Seven in its traditional client base, reconciling middle office accuracy with front office ease of use. When implemented in the front office of organisations, it is seamlessly compatible with StatPro Seven, which is used in the middle office. StatPro believes this will give it an edge over front office pricing systems such as Thomson Reuters and Bloomberg, as fund managers typically use these systems to monitor their portfolios and estimate their returns, while middle office staff run their own calculations. Running Seven and Revolution together would provide consistent numbers throughout a client's organisation.

# Revenue impact

# Pricing structure for Revolution

Pricing for StatPro Revolution is expected to be in the order of \$100 per portfolio per month while contracts with larger customers will be negotiable. The initial focus will be on custodians and existing clients who have Seven for which StatPro plans to offer similar long-term contracts to its traditional business (three years with a three-month notice period). Terms for single users signing up over the internet could be for less than 12 months.

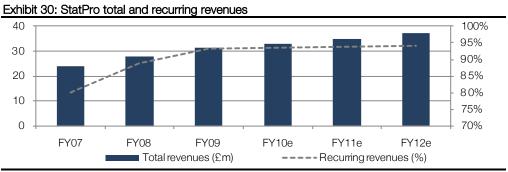
### Potentially large SaaS deal in the pipeline

A global custodian bank has recently contracted to integrate its client data with StatPro Revolution, following a successful feasibility study. StatPro has worked with this potential Revolution customer for over a year and the fact it is now integrating client data suggests the customer is serious about moving to the commercial stage. In our view this bank alone has the potential to generate more than \$2m in annual revenues.

### SaaS revenue forecast

While we have cautiously forecast £1m of revenue from StatPro Revolution in FY11, we note the customer roll-out process for SaaS solutions could be substantially quicker than the group has achieved historically. Without any competitors in the SaaS space, StatPro is well positioned to leverage this product and, if the strategy is successful, we believe the company has the potential to accelerate SaaS revenues from the FY11 level.

As StatPro has historically sold its products on a subscription basis, it has had a high level of recurring revenues, eg recurring revenues made up 93% of H110 revenues. SaaS revenues will continue to underpin this high level of recurring revenues.



Source: StatPro Group, Edison Investment Research

# WorkPlace Systems International



Year End	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (X)	Yield (%)
03/09	9.6	(0.4)	(0.3)	0.0	N/A	N/A
03/10	8.9	0.1	0.0	0.0	N/A	N/A
03/11e**	10.8	1.5	0.9	0.0	13.3	N/A
03/12e**	11.3	1.9	1.1	0.0	10.9	N/A

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, share-based payments and exceptional items. \*\*Forecasts are consensus data

WorkPlace's SaaS strategy has evolved at a fast pace, partly due to the recent recession which exemplified the need to develop new revenue streams, while potential customers have also been attracted by the significant cost benefits of the SaaS product. While trading updates have been downbeat, as the traditional business in particular has seen lengthened sales cycles, the SaaS pipeline is expanding and taking an increasing share of the order book. The group has a number of pilots running that it hopes to convert to sales by March 2011, which should start to impact financials from FY12.

# Company background

WorkPlace Systems' traditional software modules address all areas of staff planning and tracking, based on an underlying proprietary software algorithm. WorkPlace acquired a 25% stake in Australia-based SaaS provider WorkBuddy Solutions Pty Ltd in late 2007 and took its interest to 50% in June 2009. In addition, WorkPlace has acquired the IP and global rights to WorkBuddy's workforce management software. This software has become the core of the group's new SaaS product, WorkPlace OnLine, for a total investment of £0.25m (before hosting and additional costs).

# Cloud strategy

### SaaS target market

When WorkPlace first got involved with WorkBuddy, the initial plan was to target the new SaaS offering at smaller customers (who had not typically been targeted with on-premise solutions). However, this strategy moved dramatically as the group found larger businesses, including WalMart, also had an interest in the product. Hence, WorkPlace evolved its strategy to encompass large chains of small format stores as well as smaller customers and more recently also started targeting large format stores. SaaS customers are also typically new to WorkPlace – clearly the product would not be so attractive to existing customers who have invested significantly in perpetual licences and significant bespoking.

Price	12.0p*
Market Cap	£18m
* price as at 19 November	
Share price graph	
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### Share details

Code WSI
Listing AIM
Sector Software & computer services
Shares in issue 147.5m

# Price

52 week High Low 13.0p 7.0p

### Balance Sheet as at 31 March 2010

 Debt/Equity (%)
 N/A

 NAV per share (p)
 2.7

 Net cash (£m)
 2.1

### **Business**

WorkPlace Systems International is a world leader in the development and supply of software products for workforce management.

# Top five shareholders

Lenegan (lan Francis)46%Liontrust Asset Management12%Wailing (Michael David)5%Hargreave Hale5%Schroder Investment Mgmt5%

# Revenues by geography (FY10)

UK/Europe US Australia 80% 17% 3%

## **Analysts**

Richard Jeans 020 3077 5700 Katherine Thompson 020 3077 5730 tech@edisoninvestmentresearch.co.uk

### Drivers of customer adoption

While a customer for WorkPlace's on-premise solution would expect the deployment phase to take at least 12 months after which would start the process of working to get maximum benefit from the software, WorkPlace OnLine can be deployed in weeks enabling the customer to achieve as much as 80% of the benefits immediately. The customer also benefits from a product that is simple to use, requiring little training, but which also involves a different way of thinking about managing schedules than the on-premise solution. Workplace has a flexible pricing model based upon the term of contract and volume.

### WalMart case study

In late 2009, the group won a competitive tender to supply WalMart's US pharmacy division with the SaaS product. The software pilot went live in 10 days and WorkPlace rolled the product out across 4,400 stores in 13 weeks. WalMart is now the group's largest SaaS customer, processing c 20k people (still significantly below its largest on-premise customers), and the successful initial installation puts WorkPlace in a strong position to extend the product across WalMart Heatlh and Wellness and other parts of the group globally.

# SaaS progress

WorkPlace OnLine is typically piloted with potential customers before sales are made. At the end of FY10, the group had more than 100 active customers using the product in the US, UK and in Australia and the OnLine product was processing schedules for more than 30k employees each week.

# Financial impact

# Driving the sales process

The group's pipeline is now better than any time in the last three years, the majority of which is SaaS. Nevertheless, the market in the workforce management vertical remains immature, partly since IT departments can be reluctant to adopt SaaS solutions for fear of outsourcing their roles. Further, buyers are not sending out SaaS-specific RFPs and there has been considerable confusion with hosted solutions. WorkPlace therefore has to drive the selling process and sales people typically sell to the CEO, FD or operations director.

Clearly there is an opportunity for a land grab in this space and management believes that half of group revenues could be SaaS within three years. Assuming the traditional business is flat at c  $\mathfrak L9m$  this implies  $\mathfrak L9m$  SaaS revenues (equivalent to 750k employees at a conservative  $\mathfrak L1/employee$  per month) and group revenues of  $\mathfrak L18m$ .

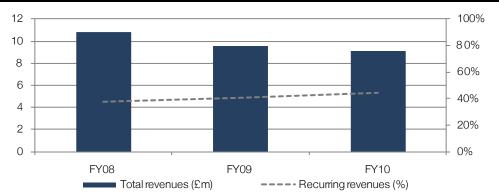
### Impact on costs: Hosting, development, sales commissions

The group spent c £200k in FY10 investing in its US hosting to support WalMart – this was substantially a one-off cost which can be leveraged across other customers. WorkPlace anticipates spending £300k in FY11 on its UK hosting. The product is only available in English but WorkPlace is now developing language functionality to target the European market. The group is also continually adding SaaS functionality which is largely customer driven. The sales force is remunerated on contracted revenues as they are earned for the first three years. Management argues that although this results in lower commission in the first year, it results in more commission over the three years, and hence should improve sales force loyalty.

# Longer-term revenue and margin impact

Margins on SaaS revenues are potentially significantly better in the long term as the group requires less people in support and development roles and visibility improves as SaaS adds more recurring revenue to the group's £4m annual maintenance book.

Exhibit 31: WorkPlace total and recurring revenues



Source: WorkPlace Systems

### EDISON INVESTMENT RESEARCH LIMITED

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