SaaS in the Enterprise

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Retailers will always need software and services. Or put another way, they will always need both offline functionality though on-premises software and online functionality through software as a service (SaaS). This may not sound wildly dramatic until you realize it signals a shift as bold as the one decades ago from centralized architecture to the client-server model.

The *RIS/Gartner Tech Trends Study* has been tracking SaaS deployment in retailing for the past four years, and according to soon-to-be-released data, the study finds a sharp spike occurring in the adoption of SaaS in the retail enterprise.

Prior to the current study, which will be available in April, SaaS was chosen by a range of 14 to 17 percent as a favored software deployment approach. But the 2010 study finds this figure jumps to 27 percent, which indicates SaaS has penetrated more than a quarter of the tech stacks in retailing and has become one of the primary options in the CIO's tool box.

Weighing the Benefits

The emergence of SaaS began in the early 2000s when software vendors developed a new services orientation model that uses XML and Web services to pass messages among services to promote interoperability. This loosely coupled Web services archi-

tecture made services-oriented software development feasible.

Today, when we refer to SaaS we typically mean software deployed as a hosted service and accessed over the Internet. It operates on a centralized, single-instance architecture and shares data and processes with other applications.

Although off premises, it essentially offers all the benefits of an on-premises application without the burden of ownership. The SaaS provider performs all necessary administrative functions like application upgrades, database backups, and operating system patches for a recurring fee that covers the cost of the software licenses and maintenance.

The term cloud computing has been criticized for being broad and vague, but there is general agreement that SaaS falls under the umbrella of cloud computing.

As SaaS spreads through retailing its impact will be profound. According to a recent study by *InformationWeek* the top reason CIOs deploy SaaS is speed to implementation. As retailers emerge from the recession with pent-up demand for new capabilities and leaner IT staffs speed will be a high-value benefit.

Following speed on the benefits list are two cost containment factors: capital expense savings and operational expense savings. These are a big part of the growing appeal of SaaS.

SaaS is able to lower costs for retailers through shifting software deployment and maintenance burdens to the service provider, thereby freeing up resources for other projects.

Two other major benefits include: on-demand, pay-as-you-go subscription models, and the ability to easily adapt to a distributed or mobile workforce. For browser-based SaaS apps, remote access is the name of the game.

But the cautious pace of SaaS adoption in retailing until recently indicates CIOs felt there were risks and hurdles to overcome before they would take the plunge.

While SaaS shifts costs and responsibilities to the service provider, it also places the retailer at the mercy of the provider for support, security and regulatory compliance.

Several other issues and concerns include fear of service outages that halt business, poor response times that hamper productivity, and data ownership at the end of a contract.

As SaaS has matured over the past five years these issues have either disappeared or been resolved, and the time is right for SaaS to reach mainstream adoption levels in retailing.

According to soon-to-be-released 2010 data from the *RIS*/Gartner Tech Trends Study a sharp spike is occurring in the adoption of SaaS in the retail enterprise.

SaaS Apps in Retail

There are a number of retail applications available in the SaaS model today, including POS, price optimization, merchandising, CRM, BI and more. Here's a look at some recent retail go-lives and deployments.

Ahold USA: The mega-grocer currently uses DemandTec's SaaS solutions across all retail banners in the United States, including Stop & Shop and Giant Food Stores to leverage category, brand and shopper insight, also to execute merchandising and marketing strategies.

Big Y: The regional grocer recently began deploying a suite of pricing applications using the SaaS delivery approach from Revionics. It will use the applications to develop and execute a strategy aimed at setting prices aligned with customer expectations.

Bob's Stores: The regional furniture retailer uses a store communications and task management system on a SaaS model provided by Opterus. Mobile functionality for field management was an important consideration for deployment.

Charming Shoppes: The female apparel retailer uses a SaaS platform from GT Nexus to support and automate a range of processes including item-level visibility, air and sea freight contracting, customs documentation, and performance analytics. The platform includes an import data hub that captures and standardizes information about inventory and shipments fed by partners in the supply chain. Charming Shoppes is able to track inbound inventory at the container level or according to item-level details like size, color and style.

Dollar General: The discount chain manages 70 billion records using a SaaS model in the cloud with 1010data, which hosts the retailer's enterprise data warehouse and provides front-end analytical tools and related support for the entire enterprise. Dollar General uses the SaaS solution to handle the addition of more than five billion records of data annually on top of an accumulated 70 billion records of historical and operational data.

Metropolitan Opera House: Drawing more than 800,000 people each year, the Met has a retail store that sells products to a highly motivated and loyal clientele. To help run the store, it uses an Epicor suite delivered on the SaaS model that includes store operations, merchandising, audit and CRM modules.

Keys to a Successful SaaS Framework

Interestingly, many CIOs report that the IT department often is not the primary driver for adopting the SaaS delivery model, and instead pressure is coming from C-level or line-of-business executives. The result is that a comprehensive SaaS strategy, or at least one that accounts for a hybrid architecture of both SaaS and on-premises apps, is frequently lacking.

SaaS, of course, should be on the table any

Cost Analysis for SaaS and On-Premises Software

COST ELEMENT	Year-One Costs		Subsequent Annual costs	
	SAAS	ON PREMISES	SAAS	ON PREMISES
Annual subscription/license	✓	✓	✓	
Application Implementations	✓	✓	✓	✓
User Administration	✓	✓	✓	✓
Training	✓	✓	✓	✓
Hardware		✓		
Data Center Space		✓		✓
Middleware/DB License		✓		
Middleware/DB Implementation		✓		
Application Support		✓		✓
Middleware/DB support		✓		✓
Hardware Management Resources		✓		✓
Software Management Rsesources		✓		✓

Source: AMR Research

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time a new IT functionality needs to be brought into the company. So, here are some key areas of focus when creating a framework for evaluating and operating SaaS in the enterprise.

Select the right provider: SaaS is touted as simple, cheap and easy to end a contract. But don't be lulled into forgoing rigorous up-front analysis of features and capabilities. Then sign the right contract. Find out how pricing changes as users are added or removed, and if there are bandwidth limitations. Also, look into exit fees for transferring data back in a form you specify, which includes customizations made during the course of the contract. Finally, create a formal exit plan to ensure a smooth transition and cover contingencies.

Manage the relationship: Experience with outsourcers will help ensure the provider is meeting your needs. Consistent monitoring and evaluation is necessary. Also necessary is a back-up plan for apps that can't go down or data that can't be lost. Part of this plan should be a weekly data export so there is always a local copy of all your data. Also, determine IT's role in support. Who manages adding users and changing passwords? Who handles tech support calls from users?

Manage interoperability and integration: Applications aren't effective if they operate in a silo, which is equally true for SaaS apps. Work with the vendor to determine which integration approach is best: API, Web services, middleware or a third-party SaaS integration service. SaaS app deployment should not be viewed as a point solution, but instead should be considered in a holistic way that includes integration with other internal applications.

Secure your data: PCI compliance and other mandated regulations have deeply impacted retail technology, so security must be a primary concern for any SaaS deployment. Much of the burden of maintaining security is shifted to the SaaS provider, but this doesn't lessen responsibility or liability. Controls must be put in place that monitor a vendor's security processes, technologies and certifications that must be kept up-to-date.

As the SaaS model matures and enters mainstream retailing IT departments will have to learn new skills and develop new strategies for dealing with a hybrid architecture that includes legacy, best-of-breed, custom and SaaS applications. **RIS**

Why is SaaS so Popular?

Q&A: How its Changing Technology Delivery

Some benefits of SaaS in the enterprise include shifting software deployment and maintenance burdens to service providers and freeing up resources for other projects? What other benefits do you see for retailers?

SaaS has come a long way since it began in its original form of a service bureau. The ubiquity of the web has technically enabled a virtually unlimited number of applications to be deployed as a service. Our experience tells us that the two most important factors in choosing SaaS has been about the total cost of ownership and the desire to focus available resources on core business functions. Let technology vendors worry about the bits and bytes. Other benefits of SaaS are holding vendors accountable by paying them as they deliver over time as opposed to the traditional upfront license model, having the system operated by the experts who own the software instead of the retailers who need to find the experts and finally, if the application is truly built for SaaS, it enables retailers to virtually eliminate the need for upgrades and maintenance.

Cost savings are also of prime importance today. How does SaaS fit into a cost-containment strategy?

SaaS providers typically incorporate long term pricing protection into their offerings by limiting annual pricing increases to a fixed number (typically 4%) or an economic indicator such as CPI whichever is lower. More importantly, well run SaaS providers truly add value by eliminating the surprises companies have to deal with when they have staff turnover in IT, costly server upgrades when replacing aging hardware and the very intangible costs for retailers who are utilizing non current releases of the application they own. A proper SaaS engagement should enable a retailer to budget their exact costs for many years to come.

How can retailers get comfortable with and ensure things like data ownership, uptime, availability, security, regulatory compliance and other key issues?

Regardless of the model (license or SaaS) retailers only benefit when the relationship they have with their application software provider is built on trust, loyalty and partnership. Retailers have been relying on providers for years for accounting, legal and store design. Any of these matters handled by the wrong party often leads to disaster. IT is no different, so choosing a partner that has a long track record of delivering satisfaction to an extensive client base is paramount. Companies often make the mistake of just checking the references they have been provided. A thorough reference check to include clients that previously left the provider as well as receiving an entire client list will better prepare the retailer. Finally, you can learn a lot about a company by their contract. Make sure your agreement protects you and does not lock you in forever.

Speed of implementation and ROI in less than a year are important to retailers today. How realistic are these expectations for SaaS apps?

Like all software, it all depends on the application and associated costs. However if one were to compare the costs and time to go-live for owned vs. SaaS you would typically expect SaaS to win. The retail business is very well suited for SaaS due to the distributed and increasingly global nature of stores. Still, SaaS does not make sense for every business. In the 25 years that we have provided SaaS solutions, we have seen the best fit in medium sizes organizations; that is companies that need the functionality of advanced technology but don't operate on the same cost structure as their larger counterparts. Typical clients have a completely rolled out retail system in 120 days. That's on the average 50% less than a typical 6 – 9 month implementation cycle for in house solutions.

Do SaaS delivered apps have an edge over on-premises apps, or is SaaS just one option retailers should consider whenever they add new functionality or applications?

The concept of SaaS has been around for many years. Often I hear people referring to the SaaS model as simply a financial one in that you pay for the software as you go instead of all upfront. In fact in some cases the provider is not even hosting the application, the retailer is. That is not where I believe the true value lies for retailers. Unless the application is hosted, supported, maintained and upgraded by the vendor, retailers will not extract the maximum benefit from this type of arrangement. Another benefit to consider is that SaaS providers can frequently exceed the internal service level standards that retailers typically live by.

Sam Kliger is the CEO of KWI headquartered in New York. For almost 25 years it has been providing SaaS services to many of the most recognized brands in specialty retail. Over 100 retailers comprising thousands of stores across the world rely on KWI's advanced technology and outstanding support for Merchandising, POS, CRM and Loss Prevention. **http://www.kwi.com**