ON-DEMAND OR ON-PREMISE?

Best Practices for Midsize Businesses

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Fundamentals:
On-Demand or On-Premise?

With myths out of the way, software as a service can be fairly evaluated

Like most IT-related decisions, deciding whether software as a service (SaaS) is right for your organization requires you to assess numerous criteria, ranging from the internal IT personnel and budget to how quickly you need the solution up and running.

Before diving in to those issues, it's important to fully understand what SaaS is and what it is not. That means dispelling certain myths about it. Jeff Kaplan, an independent consultant who focuses on SaaS and operates the SaaS Showplace Web site, addressed a number of those myths in an April 2006 article on BusinessWeek.com.

One is that SaaS is new and untested, which Kaplan refutes by noting that Salesforce.com has been around for more than six years, and the payroll software and service firm ADP has been in business for nearly 60 years. He also refutes the notion that SaaS only saves users the up-front cost of software licenses by pointing out that it also saves on the cost of much surrounding computing infrastructure and allows users to avoid paying for excess capacity.

Another myth Kaplan cites is that SaaS only applies to certain applications, such as sales force automation and customer relationship management. "While SaaS certainly makes sense for many front-office functions and team-oriented collaboration purposes, SaaS solutions are emerging to address nearly every business application need," he writes.

As for those who contend that SaaS won't stand the test of time and won't have a significant impact on the software industry, Kaplan says a survey he conducted revealed that a third of respondents were already using SaaS and another third planned to in the coming year. "As SaaS gains mainstream acceptance, it is becoming an important disruptive force in the software industry," he writes. "And as long as the quality and reliability of SaaS solutions continue to improve, the appeal of SaaS isn't going to go away."

Overview of SaaS vs. On-Premise Ownership
It is certainly no myth that SaaS represents a fundamental shift in an organization's approach to IT resources. The age-old in-house model of software ownership means the business buys all its application software or develops it in-house. SaaS operates on a utility model, where companies pay for only what they need.

Let's look at the business requirements and characteristics of each model.

Conducting a Self-Assessment
Deciding which model is right for your organization requires you to honestly assess various criteria.

The in-house model requires the following:

- **Part- or full-time IT staff** to install and configure the solution as well as to manage and optimize it over time. Ongoing management and optimization is an important consideration that many companies fail to recognize. IT environments are like living, breathing entities that constantly change.

- **Up-front investment** in software and the infrastructure to support it. Depending on the size of the organization and its specific requirements, this infrastructure may range from a single server to a multi-server farm complete with a storage network and backup facilities. Additionally, software maintenance fees can run 15 percent or more of the original purchase price every year.

- **Corporate commitment** to routine upgrades. Failure to continually update and optimize its various applications can, at best, leave an organization with a suboptimal solution that doesn't take advantage of the latest features. At worst, the organization may be leaving itself open to security risks if it fails to update its applications with appropriate patches as they become available.

- **Support for branch locations**, where applicable. It can be a challenge to provide application support to remote sites from a central location. If members of the central IT team must travel to the branches periodically for support, that increases costs.

   Of course, for many organizations, these investments in time and personnel bring important benefits, including:

- **Complete control** over the IT environment, which can be important if the IT infrastructure is a distinct differentiator for the business, and to ensure regulatory compliance, for example.

- **The potential to consistently produce** innovative technology that provides the organization a competitive edge.

- **The organization owns the software and infrastructure** and is free to use it for as long as it wants, and to repurpose components such as servers and desktops as it sees fit.

Now let's examine characteristics of the SaaS model:

- **No up-front fee** for software purchases. Customers instead pay a lower fixed monthly fee.

- **No additional IT infrastructure.** The solution provider provides all required server and storage facilities, enabling the customer to avoid potentially large up-front costs.

- **No need to increase IT staff.** Indeed, companies that are outsourcing an existing solution may be able to reduce the size of their IT group.

- **Routine optimization and upgrades.** As new software versions become available or vendors release security and other updates, the solution provider will implement them in a timely fashion.

- **Predictable long-term cost.** With the SaaS model, customers know exactly what they will pay each month for service, support and updates.

   Naturally, the SaaS model also comes with its own set of issues and challenges for user organizations, including:

- **Less direct control** over the infrastructure, applications and data.

- **The organization must be able to effectively manage** the SaaS provider in order to make the most of the relationship.

- **The organization is dependent** on the service provider for enhancements and innovation.

- As in a car lease, for example, at the end of the contract or relationship, the **user doesn't take ownership** of any of the software or infrastructure.

- **Many SaaS providers are startups,** making it difficult for users to determine whether they will remain viable for the long haul.

Implementation speed

   First, how quickly do you need to implement the solution? In-house software implementation times vary dramatically, depending on the IT resources a company can dedicate to the solution and the depth of knowledge of its IT team. In practice, many companies dramatically underestimate implementation times because they fail to dedicate resources.

   SaaS solutions can generally be installed quickly, since customers benefit from the experience of engineers and tech-

nicians who have installed the same solution many times.

Time to value

Closely related to implementation speed is time to value, which is the elapsed period of time before a business begins to benefit from new software or other IT deployment. The real downside of implementations that drag on too long is that the business loses the potential value of its new solution, and perhaps new opportunities as well.

For example, getting its SAP Business ByDesign solution up and running quickly helped Viper Motorcycles realize quantifiable improvements in a number of areas, including:

- 12 percent annual improvement in the productivity of its purchasing and procurement processes
- 17 percent annual improvement in procurement margins
- 27 percent increase in output per production worker, year over year
- 18 percent average reduction in warehouse inventory levels

Security

Customers must also ask themselves some honest questions about whether they can provide proper security for any new application. For an in-house implementation, that requires significant security expertise, which many small businesses and midsize companies simply don't have.

With SaaS, security is handled by the solution provider. But the customer should ask the provider detailed questions about how it handles security. In a research note published in July 2007, Gartner vice president and research fellow John Pescatore recommended customers ask potential providers about issues such as:

- How the provider ensures administrative security for its own routers and switches
- Whether it performs routine penetration tests
- How it protects against denial-of-service attacks
- Whether the provider uses content monitoring and filtering or data leak prevention tools to detect inappropriate data flows

Vertical Customization

Customers in different vertical industries often use the same application in very different ways. Here again, customers that have internal software development expertise may be able to adapt an off-the-shelf application to meet its requirements.

Alternatively, they may be able to purchase the application from a value-added reseller or hire an outside developer to help. Both options would mean an increased up-front cost, and potentially a longer time to value.

Many SaaS providers already have versions of their offerings tailored for different

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verticals, or perhaps focus on just a handful of verticals, giving them deep domain expertise. Serus Corp., for example, offers a SaaS-based manufacturing information system specifically for semiconductor makers that outsource manufacturing. Other SaaS providers will tailor their solutions to a specific vertical at an additional cost, but with their deep expertise and dedicated personnel can often complete the job much more quickly than a customer could on its own.

Netting It Out

As you can see, the decision on whether to choose SaaS over an in-house deployment largely comes down to the level of IT expertise you have on hand, as well as the availability of the appropriate experts. Be realistic: if your best and brightest IT folks are spending 95 percent of their time just keeping your company's existing systems running, they aren't going to have time to implement a new solution unless you somehow free them up from day-to-day chores. 🌑