workday.

The Real SaaS Manifesto:

Defining “Real SaaS” and how it can benefit your business

The Real SaaS Manifesto:

Defining "Real SaaS" and how it can benefit your business

Contents:

The Definition of Real SaaS

Business software delivery models have evolved tremendously over the last decade, from on-premise implementations to off-site hosting to Software-as-a-Service (SaaS). Unfortunately, due to the proliferation and incorrect use of the term, SaaS has often been misunderstood by both software vendors and business people. The purpose of this document is to clarify what SaaS is, how it works, and what's important when evaluating SaaS solutions.

Let's start by demystifying "the Cloud" and "cloud computing," which are frequently used in conjunction with SaaS. In the simplest of terms, the Cloud refers to the Internet, and cloud computing describes the transition from "everyone buys, installs, and maintains their own software and hardware" to "everyone can access applications on demand through the Internet." Cloud computing offers significantly lower costs and more scalable computing power because computing resources are consolidated and shared by organizations, delivering increased efficiencies while still maintaining strict data security measures.

The term Software-as-a-Service refers more specifically to business software that runs in the Cloud, rather than on-premise at a customer site. Sometimes used interchangeably with the term "On Demand," SaaS applications typically allow customers to license the software and support they want to use without installing or maintaining any software or hardware. In other words, the vendor provides a service that can be subscribed to and accessed over the Internet rather than a physical product that customers have to install and manage on their own.

The Real SaaS Distinction

Because SaaS is typically defined by the delivery model rather than the underlying technology, a number of software vendors that host their applications and allow access via the Internet call themselves SaaS vendors—which is responsible for much of the confusion surrounding SaaS. Nonetheless, "hosted" is *not* synonymous with SaaS. Although real SaaS solutions are technically hosted, they have a secondary key feature that hosted solutions do not support: real SaaS vendors support a single codebase across all customers (also known as multi-tenancy).

In other words, real SaaS vendors develop, support, and deploy a single version of software across all customers, enabling vendors to focus on on-going value-added innovation. Traditional on-premise vendors that host their on-premise solutions and call it SaaS can't offer the benefits of real SaaS because they expend too many resources maintaining multiple versions of both their own software as well as a broad matrix of supporting infrastructure. Because their customers are typically on different versions at any given time, so-called SaaS vendors are also unable to share infrastructure and operational resources to the extent that real SaaS vendors can. As a result, their customers don't benefit from the efficiencies of shared resources that real SaaS solutions provide, and often end up footing the bill for maintenance, upgrades, and customizations.

Additionally, on-premise software vendors are inextricably dependent on their traditional on-premise revenue models, which include: 1) selling as many upfront licenses of their software as possible, and 2) selling annual maintenance services that allow customers to upgrade to the latest version. For this reason, they are reluctant to commit fully to the SaaS delivery model, which undercuts their primary revenue model.

A more expansive definition of real SaaS and why it is different from hosted, on-premise solutions includes the following characteristics:

- Customers share a single version of the software
- Customers share IT infrastructure and operational resources
- Updates are included with the service at no extra charge
- World-class security for data center operations, applications, and data
- Service level guarantees including uptime, backup, and disaster recovery
- Ongoing maintenance and performance tuning
- No perpetual licenses (pay-as-you-go pricing)

Making sure a particular vendor's SaaS solution satisfies all of these characteristics is the best way to make sure you're dealing with a real SaaS vendor that can offer you the benefits of a modern SaaS solution. These characteristics will be discussed in more detail in the following sections.

Why Multi-Tenancy Matters

When evaluating SaaS vendors, a key term you should look for is multi-tenancy, which is critical to enabling vendors to provide the benefits of real SaaS applications.

A multi-tenant architecture exists when a vendor is able to provide a single version of their software and serve multiple customers (tenants) that all use that version. A suitable analogy is that of a power grid: A single power plant can support many customers that can use the power in any way they like. The power plant charges each customer separately based on their usage, but any improvement to the plant benefits all of their customers simultaneously.

An on-premise solution offered in a hosted environment is typically achieved through a multi-instance implementation. This would be analogous to choosing not to leverage the power grid and instead to build and maintain a single power plant for each customer. While each company would still get the power they needed, they wouldn't receive the benefits from a shared system. In this way, multi-tenancy benefits SaaS clients that utilize shared hardware and software resources. Hosted, on-premise providers cannot provide the same group benefits.

Multi-tenancy is an important characteristic in determining whether a vendor is providing a real SaaS service or is a SaaS imposter. The key benefits of multi-tenancy include:

1. All customers are live and secure on the same version of the software. Multi-tenant solutions provide "security walls" between each tenant so each customer is securely isolated and protected from inadvertent access by other customers. No customer data is ever accidentally stored or accessible in another tenant, and access is only allowed through validated user authentication. Multi-tenancy is essentially what enables real SaaS solutions to exist in the first place.
2. Users always have access to the latest innovations available from their software provider with no risk of being isolated on old releases. Access to innovation is available because the real SaaS vendor only has to maintain one version of the software and can upgrade all customers at the same time. This also allows customers to consume innovation faster as new capabilities are released with each update.
3. The system can be configured to adapt to the needs of individual customers without compromising the system upgrade path. In order to serve many clients, most multi-tenant SaaS solutions offer configuration options to meet different needs. Unlike costly customizations that many on-premise solutions offer, configurations are captured separately from the application capabilities, so on-going updates can occur without endangering customer configurations. Configuration capabilities are built into the system and tested regularly, and the SaaS vendor will often guarantee configuration options will work through any and every update. On-premise customizations are not given any such guarantee.

"SaaS-only" Vendors vs. "SaaS Imposters"

Vendors who offer both on-premise and SaaS solutions may not support multi-tenancy, meaning they will expend resources supporting multiple versions rather than driving innovation. Even if they do support multi-tenancy, their SaaS customers may have to wait several years for a new version if the hosted solution is constrained by the release schedule of the vendor's on-premise product. If you are considering a SaaS solution, you should investigate carefully whether you will be able to reap the benefits of real SaaS with this vendor by asking the following questions:

Ask them:	SaaS Imposter	SaaS-only Vendor
Are upgrades/updates included in the SaaS subscription fee?	Additional service fees are required to apply the new software.	Yes, they are included as part of your subscription fee.
Will we always be using the latest and greatest software produced by your development engineers?	Only if you pay for upgrades. You could be on an older version if you choose not to upgrade.	Yes. All customers are always using the latest and greatest version of the software and capabilities.
How often will new versions/capabilities be delivered?	Every 18 months, but customers usually skip releases to save on upgrade costs.	Multiple times per year. Each release is incremental, vigorously tested, and should not cause major disruption to your business or your integrations.
Do you support configuration options or customizations through new upgrades/updates?	We support customizations, but upgrades may destabilize customizations and require additional fees to support. -OR- No customizations are allowed.	Configuration options are provided and fully supported by the vendor through all updates. Only acceptance testing is required on the part of the customer for each update.

If a vendor is selling a multi-tenant SaaS solution as well as an on-premise solution, ask the vendor which approach they think will work better for you. A company selling both approaches will often wind up with a “split personality” because sales into any one model will detrimentally affect the other revenue model. Additionally, if the vendor makes the majority of their money selling on-premise software, it will be very difficult for them to fully commit to the SaaS solution. Be wary, since they will be unable to give you a true, balanced perspective.

Therefore, when considering a SaaS solution, making sure the vendor utilizes a multi-tenant platform and commits fully to the SaaS delivery model is the only way to reap all the benefits that the SaaS model has to offer.

The Question of SaaS Security

The success of the SaaS delivery model depends on airtight security because no organization would store their valuable customer, business, and employee data in an insecure environment. Therefore, SaaS vendors place the highest priority on ensuring the security of their customers' information.

In the early days of SaaS, security arose as one of the largest concerns because the SaaS delivery model was still new and companies felt uncomfortable storing sensitive data outside their own firewalls. However, as the SaaS model has gained traction and spread from customer relationship management to strategic sourcing to human capital management and beyond, it has proven to be highly stable and secure. Although it is advisable to carefully study the reputations and security policies of your business software vendors, the increasingly wide adoption of SaaS business solutions provides a compelling testimony to SaaS security.

There are four layers of security SaaS vendors use to secure customer data:

- Site security – How the physical data center facility is secured as well as backup and disaster recovery capabilities.
- Communication security – How data is transmitted and secured as well as how the network is monitored for signs of intrusion and/or vulnerability.
- Application security - How the server is monitored for signs of intrusion and/or vulnerability, which roles can access which processes, which users can access which data, etc.
- Database security – How data is stored and secured.

Your SaaS vendor should be able to provide detailed security policy information on each of these topics. But before getting into the technical details of SaaS security, there are two questions you should consider:

- **Does the vendor have a reliable reputation?** The best way to evaluate the security of a SaaS solution is by reputation. The company's leadership team is important, as well as what current customers have to say about the vendor.
- **What is the vendor's customer retention rate?** Although it is likely impossible to speak to all the vendor's customers, retention rates are very informative. Ideally, the retention rate should be in the high 90th percentile. A lower retention rate should raise serious questions about the reliability of the vendor.

When speaking to a potential SaaS vendor about the more technical aspects of security, you should request details around the following topics:

- Data protection – This refers to managing and safeguarding the collection, transfer, and storage of data. In the context of European laws, the term is usually referenced with respect to uniquely identifiable data relating to an individual ("personal data") as opposed to business data. In the United States, the term "data privacy" is more commonly used than the term "data protection," although such terms are often used interchangeably.
- Authentication – How users and external web services are authorized to access and process data in the system.

- Data storage – Users should have secure access to their data at any time and the vendor should have data backup and restoration policies and procedures in an event of an emergency.
- Service Level Agreement (SLA) – A document that describes the vendor's responsibility to the client, including how data is protected, client rights, and vendor responsibilities.
- Certification - A SaaS vendor should be able to provide a SAS-70 Type II report. If the vendor can also show ISO 27001 certification, this demonstrates exceptional diligence around data security.

More about SAS-70 and ISO 27001

SAS-70 is the American Institute of Certified Public Accountants (AICPA) Statement on Accounting Standard (SAS) number 70. The SAS-70 Type II report describes the controls a service provider has in place when hosting or processing data belonging to another organization. These controls are defined by the vendor and audited by a third party for compliance.

ISO stands for the International Organization for Standardization. ISO 27001 is the only internationally accepted security standard focused on best practices for security. ISO-27001 security controls are strictly defined and audited by a third party for compliance.

The TCO and ROI of SaaS

SaaS solutions are considered so attractive in part because of the potential cost benefits they can provide. But can deploying a SaaS solution really save your company money? As with most things the answer is, of course, *maybe*. Since each business has different needs and each vendor offers a different solution, it will take some analysis to determine whether or not a SaaS solution can offer realistic savings and/or increase business value through what it offers. The most important thing to remember, however, is that often the total cost of ownership is comprised of much more than just the sticker price of the software. Likewise, your return on investment could be comprised of much more than just the dollars and cents that can be counted after the fact. Let's explore some of these components.

Total Cost of Ownership (TCO)

When evaluating the total cost for any software system, consider the following contributing factors on a multi-year basis:

- Cost of the software licensing
- Cost of the hardware required
- Implementation/installation fees, including consulting fees
- Time/costs for old software support while installation is in process
- Cost of creating integrations between systems
- Time and expense to test the solution
- Training and change management costs for users
- Support staff and IT resources to maintain systems and integrations
- Maintenance costs to vendors
- Functional resources (e.g., HR or Finance staff) required to support the solution
- Costs of adding additional systems and infrastructure to complete the desired solution
- Upgrade costs
- Security, backup, and disaster recovery provisions

In most cases, only some of these topics are discussed during pricing negotiations with software vendors. The remaining costs are implicit but can become significant depending on the quality and capabilities of the software purchased. Be sure to consider all of these factors when trying to determine what the true total cost of ownership will be for the vendors you are evaluating.

Return on Investment (ROI)

Return on investment can be very tricky to measure, primarily because the benefits (or costs) of a system are often intangible. How do you measure concepts such as strategic value, operational value, increased productivity, user/employee satisfaction, higher quality service, transparency, and empowered decision making? Unless you start with a baseline, it is extremely difficult to determine whether or not these measures have improved after (or as a result of) a software vendor decision. If at all possible, document the status quo you are dealing with today, and come back later to see if the intangible ROI is as significant as the monetary ROI.

The Impact of SaaS on TCO and ROI

There are several ways in which SaaS can contribute favorably to the bottom line in comparison with a hosted, on-premise delivery model for software:

1. Because the software is delivered as a service, the SaaS vendor can spread the costs for hardware, software, updates, and data center operations across many customers. Rather than building the entire infrastructure on their own, SaaS customers leverage the collective investments of all of the other SaaS customers to ensure top-of-the-line resources, security, and availability, without having to pay all of those costs up front. The cost distribution also allows SaaS vendors to charge customers a lower rate, returning the cost savings back to the customers.

2. New features are rolled into existing subscriptions automatically. The old adage "you only get what you pay for" doesn't apply to SaaS. With a real SaaS vendor, new capabilities are rolled out to existing customers on a periodic basis, typically every few months. This means that over time the value of your investment doesn't depreciate—it actually increases! Continuous innovation within the SaaS solution results in substantial incremental capabilities and functionality throughout the contract period at no additional charge to the customer.

3. Although updates are more frequent, they are faster and take considerably less effort. Most SaaS vendors provide and fully support configuration options for their customers. This means before they release a new update, configurations are tested to ensure stability of the system after the update has been applied. Unlike traditional upgrades that can take months or years to complete, SaaS updates are small, fast, and come at no extra charge. Typically only a short period (average of one to two weeks) of user acceptance testing by the customer is required with each update to ensure stability and minimize risk for disruption of service.

4. Costs are predictable and can often be moved from a capital expenditure to an operational expense on financial statements. SaaS vendors provide their services for a subscription fee which is generally pay-as-you-go. This means customers can account for these costs differently than they would for a typical hardware or software investment. Rather than showing these costs as capital expenditures, SaaS services become operating expenses. Often this can have a favorable impact on company financials.

5. Customers who choose a SaaS solution can free up their technical staff to focus on more strategic infrastructure investments. Utilizing a SaaS solution removes the burden of the IT infrastructure and operations from the customer. Additionally, most SaaS solutions were created leveraging modern technology that provides a more intuitive and productive end-user experience. An advantage of configuration over customization is that functional administrators can often configure the system themselves (with a little training) rather than requiring technical IT support. These combined benefits result in a more focused technical team that can spend its time on strategic corporate projects rather than tactical initiatives.

Although SaaS solutions will likely offer your company significant savings and great value, the only way to know for sure is by conducting a detailed analysis. Many SaaS companies can help you start a TCO/ROI analysis and comparison. There is no guarantee that SaaS solutions will cost less, but don't hesitate to find more information about the true costs and benefits your company could leverage by using a SaaS solution.

Who Should Consider SaaS?

SaaS is a modern business model for application software. Although the SaaS delivery model provides numerous financial, strategic, and computing benefits, using a SaaS solution may require a change in the way you think about business applications, and it may not be for everyone.

One of the biggest questions potential customers have when it comes to SaaS is the issue of customization versus configuration.

Customization means customers can extend the application using tools typically provided by the application vendor. Because customization changes the data structure of the application and alters the delivered codeline, it complicates and can even break a customer's ability to upgrade to a future version. The burden and cost of recoding, testing, and transitioning customizations from version to version lies with the customer.

Configuration allows customers to extend the application without changing the data structure or underlying code of the application so there is no upgrade impact. Changes to the underlying application are delivered by the vendor without disrupting customer business, system configurations, or integrations.

SaaS solutions are designed to be highly configurable. By supporting configuration, SaaS solutions allow customers to tailor business process to meet their individual needs, but they do so in a way that is more structured and reliable.

Supporting configurations also enables SaaS vendors to offer one of its greatest benefits: updating all customers to the latest version without major impact, which provides a significant cost-savings factor when comparing SaaS to hosted on-premise solutions.

The ability to deliver new capabilities, ease the burden of upgrades, and provide cost savings are just some of the many reasons why SaaS solutions are becoming widely accepted by CIOs and business users today.

The bottom line is that SaaS is a real option for any company seeking to accomplish the following:

- Lower IT costs and risk
- Always be on the latest and greatest version of the software
- Enjoy the benefits of continuous innovation and Web 2.0 design
- Access business software at any time from any location with Internet access
- Move away from expensive customization to a best practices paradigm
- Join a growing community of world-class companies that are using SaaS solutions

The Workday Difference

Although a number of business software vendors claim to offer SaaS, Workday provides the only real SaaS alternative to hosted on-premise ERP solutions. Workday offers several business management solutions, including Human Capital Management (HCM), Talent Management, Payroll, Financial Management, and Spend Management, all on a unified core. Designed from the ground up for a multi-tenant, SaaS delivery model, Workday gives customers unprecedented global access for workers and real-time visibility for executives into the state of the business.

Workday Delivers Real Multi-Tenant SaaS

Multi-tenancy is a key feature of Workday and enables multiple customers to share one physical instance of the Workday system in a highly secure environment. Multi-tenancy is enabled through the Workday Object Management Server™ (OMS). The OMS allows servers to host multiple customer tenants simultaneously and builds "security walls" between each of the tenants. Thanks to the OMS, there is no way for any user in one tenant to access the information of another tenant.

Workday releases three updates per year, and all customers go live on the new version within a few weeks of the release. Most customers plan for one to two weeks of acceptance testing. No Workday customer is ever landlocked on an old release, and all customers can utilize new features for the products they purchased as soon as they are live on the new update.

Be Secure with Workday

Workday provides the strictest, best-in-class security for customer data. Among the measures Workday employs:

- A fully secured data center that provides physical security of on-demand servers and networks.
- Robust backup procedures are in place to foster uninterrupted service for all customers.
- Workday performs regular full network and server vulnerability scans.
- All communication with Workday's Business Services must use Secure Socket Layer version 3 (SSL 3) or Transport Layer Security (TLS), the successor to SSL.
- All users must have a valid user ID and associated password to log on to Workday business services. Passwords are stored in the application database using a secure hashing algorithm.
- Only Workday provides non-destructive updates for a complete audit trail of every change.
- Workday encrypts every data value in the Workday database and is the only solution on the market capable of this approach.
- Workday self-certified to the Safe Harbor Program in December 2007 and provides a warranty to customers that we'll maintain our Safe Harbor certification.
- Workday provides support for WS-Security, an industry standard that addresses security when data is exchanged as part of a web service.
- Workday can provide a copy of our Service Level Agreement on request.
- Workday has a current SAS-70 Type II report and ISO 27001 certification.

Workday Adapts to the Changing Needs of Your Business

Workday offers the only business software solution that can adapt and change as your business changes. Through advanced configuration options, a dynamic object model, and a modern user interface, Workday customers are able to accommodate reorganizations, mergers, acquisitions, new regulations, and new accounting rules with ease and efficiency. Workday also provides continuous support for customer configurations as new features are delivered, enabling customers to take advantage of new capabilities quickly.

Workday Delivers Tangible Business Value

Workday customers enjoy a wide range of business benefits. Workday's multi-tenant SaaS approach allows for low total cost of ownership and can provide significant cost advantages versus traditional on-premise software. Additionally, companies can experience compelling productivity gains for HR staff, managers, and employees by leveraging Workday's highly intuitive user interface and embedded best practices to streamline business processes and reduce non-value-added activities. Finally, Workday's embedded operational intelligence coupled with its flexible data model allows companies to enhance decision making through self-service access to real-time information about all the work taking place across the organization.

Visit Workday at www.workday.com for more information about Workday, request an analysis of potential TCO and ROI for your business, or ask any questions about products and services.

workday®

Workday, Inc. | 6230 Stoneridge Mall Road | Pleasanton, CA 94588 | United States
1.925.951.9000 | 1.877.WORKDAY (1.877.967.5329) | Fax: 1.925.951.9001 | www.workday.com