



Software As A Service for Enterprise Resource Planning

What is ERP hosting? How can we evaluate if SaaS is right for a given business?

The accepted definition of “*Cloud Software as a Service (SaaS)*” according to the *National Institute of Standards and Technology* is a service in which “the subscriber uses the provider’s applications running on a cloud infrastructure. The applications are accessible from various client devices through a thin client interface such as a Web browser. The consumer does not manage or control the underlying cloud infrastructure, including network, servers, operating systems, storage, or individual application capabilities. It might be possible for the subscriber to specify application configuration settings.”

In simpler term, hosting is a software deployment and subscription model in which instead of an application residing on the customer’s onsite servers, it instead resides on the provider’s remote servers. The application is conveyed via the Internet. With this model, the solution provider generally configures, maintains, supports, and upgrades the application. Included in this service are disaster recovery and backup services. In other words, SaaS is a business service, providing the software and managing it for the customer.

Hosting is referred to by different names, including application service provider solutions (ASP), software on demand, cloud ERP, and software-as-a-service (**SaaS**).

Like with most things, there are advantages and disadvantages to SaaS for small and medium sized businesses. Let’s take a look at them.

The Advantages of SaaS

Financial Value

Dollar investment

SaaS, at least partially, replaces long implementations, with predictable, regular monthly pricing, which is usually calculated on a per-user, per-month basis. The results is the achievement of many business benefits associated with using a software solution, which were previously available only to large enterprises with enormous IT budgets. It also results in a lower total cost of ownership, at least for the first five or ten years. The competitive advantage is no longer totally with large enterprises. This allows smaller organizations benefit from a level playing field and often neutralizes the technological



advantage that their larger competitors have enjoyed for years. Finally, there are no annual maintenance charges, which are typically 20% of the list price of the vendor's software.

Time Investment

SaaS can be implemented more quickly installed than on-premises software. The most efficient way to proceed is for your consultant and you to configure the software for trial use yourselves. This allows you to try the software before you buy it. This will give you a good sense of how it will work for your business, and how long it might take to fully implement. Taken together, this means the payback period is much quicker, and the ROI could be much better than with "in house" software.

Easier Upgrades

New software releases and upgrades are usually included in the "per-user, per-month" fee. This happens automatically at the hosting location, behind the scenes.

Operational Efficiency

Implementation

The software is installed in your office. It's already installed at the host site ready for you log in. There is no additional hardware to manage. The SaaS provider manages the software and data in a remote data center infrastructure for the SaaS customer.

Customization

SaaS solutions can typically be modified as easily as onsite software (or more easily), to fit the needs of the business, usually by the system integrator's programmers. Other SaaS solutions target end users with easy-to-use configuration capabilities that allow non-programmers to easily modify their look-and-feel or their business processes. For example, screens and reports can be modified without traditional programming, through the use of "screen builders" and "reportwriters".

Access

SaaS allows anyone with proper credentials to access the system from anywhere. No VPN software or setup is required. Because they can be accessed through any Internet connection, hosted systems can be especially valuable for companies that have remote users, such as salespeople.

Minimizes Impact on Internal IT Resources

Hosted ERP systems often require fewer technical resources than onsite ERP solutions, because the hosting provider manages the software, hardware, and network administration. This minimizes additional pressure on the organization's IT department, allowing it to re-deploy IT resources to focus on improving business processes in relation to the system.

Expandability



One of the more important, often overlooked, benefits of hosted ERP, is the fact that they are easily scalable and flexible to meet changing business requirements. This is sometimes called “rapid elasticity”. Adding or removing users can be done on demand. It’s all accomplished with a simply change in the monthly subscription fee. This flexibility is particularly beneficial for growing, or seasonal businesses, that need to move quickly to alter the number of users to meet changing business requirements. It is a completely scalable business resource that never requires a big capital infusion.

The Disadvantages Of SaaS

Internet connection is necessary

Almost every business that is large enough to consider employing enterprise software, already has an internet connection. However, operations could be impacted if the internet connection is down. A second, independent connection may be prudent. If this is a big concern, make sure that your provider can address this need.

Throughput

In general, SaaS applications run at slightly slower speeds than client/server applications. Although their speed is still pretty good, you'll need to be prepared for the possibility of a less-than-instant computing environment. If this is a big concern, which it very well may be for businesses with a large number of transactions, make sure that your provider can address this need. A visit to a user site with a similar number of transactions and users may be in order.

Reliance on another company

With SaaS, you are depending on on the provider to keep your business up and running. If they are weak in this area, it can really affect the business. For the most part, a reliable provider can usually do it better than most companies. You should, however, be aware of the implications and make sure the hard questions are asked.

No direct control of the data

Every vendor marketing their product will tell you that they will be there to support you for years to come. What if they go out of business? This can happen to any company. This applies equally for SaaS companies and for traditional software companies as well. What about control of the data? Can it be downloaded? It’s important that you ask the tough questions. How safe is my data? Can anyone else host the application and my data? The difference is that when a traditional software company goes under, the most you lose is the years of support you were expecting from the vendor. When your SaaS provider goes under, the implications surrounding your vital business data can be more profound.

Security



If the data will be entrusted to someone else, you will want to consider how “secure” you feel with SaaS. Most security breaches occur because of disgruntled internal employees that end up selling or releasing the data when they are fired, or when they quit. Having your data managed and stored by the experts can be a good thing, as long as you verify that they take it as seriously as you would. Again, we must ask the difficult questions.

False impressions about SaaS

As is often the case with any relatively new technology, many false impressions have surrounded hosted ERP solutions. Here are some of the most common.

Hosted ERP solutions provide only basic ERP functionality

Modern SaaS solutions now encompass the same functionality as on site ERP. Hosted ERP providers now provide standardized software offerings whose functionality rivals that of the rich functionality provided by onsite deployments. In fact, some vendors offer the same functionality, whether on-site or hosted.

Hosted ERP solutions can't be customized

Hosted ERP providers know that a one-size-fits-all approach does not work when it comes to meeting the information needs of businesses. Most hosted ERP solution providers are able to customize the hosted solution to ensure it meet the needs of the customer, including adapting it to the unique processes of an industry. Easy-to-use configuration tools allow even nonprogrammers to modify the look and feel of their software or readily adapt it to meet their unique business processes.

If the internet goes down, our business goes down

Some businesses worry about Internet reliability and the potential of service outages. The stability of the Internet has improved dramatically over time, both in reduced numbers of outages, and shorter outage durations. Many hosted ERP providers safeguard against outages by contracting with two or more separate ISPs. In addition, many hosted ERP contracts have provisions for minimum up-times, with guaranteed standards that often reach beyond 99%.

With a hosted ERP solution, our data isn't as secure as if it was onsite

Managers of businesses contemplating a hosted system want to know how secure the data is. Data security and privacy are legitimate concerns no matter whether an organization subscribes to a hosted



ERP solution or licenses ERP software and implements it onsite. In any deployment model, sufficient safeguards need to be in place to ensure the safety of critical data.

Due Diligence

If you are considering a hosted ERP solution, you will want to cover the following bases.

The vendor must describe the security used to ensure that critical data is safe.

The solution provider should use a combination of IDS (intrusion detection system) and IPS (intrusion prevention system) products, and employ malware protection at various network layers. It should also utilize DPI (deep packet inspection) or an application-level firewall technology that scans all levels of packet transmission. It should also use SSL (secure socket layer) or https-encrypted transmission to ensure Internet security.

Is the production equipment housed in a state-of-the-art facility?

Your prospective vendor's data center should be secure, be constructed with cement or steel fortifications, and have no windows. It should also be located somewhere that is not prone to weather interruptions.

Have the vendor describe the physical security arrangements of their facility. Are they in place 24 hours a day, 365 days a year?

The potential hosted ERP solution provider should have in place, well-defined and robust security arrangements, at all times.

Do they offer full hardware redundancy to in case of a power failure?

Both the data center and backup location(s) should have redundant power supplies, such as battery and diesel generators, to mitigate a power failure.

How often is the data backed-up, and where are the backups stored?

The hosting provider should have in place data backup procedures that include offsite storage in a secure location, not in the main data center.

Have the vendor describe their privacy policy?

They should have a well-defined and clearly articulated privacy policy. It should state who has access to various types of information. It should also describe the organization's standard operating policies and procedures for ensuring privacy.

Do they have an independent organization conduct periodic vulnerability scans?

The prospective solution provider should commission frequent routine and unannounced security audits.

Does their staff monitor 24 hours a day, 365 days a year?



Your prospective vendor should have the right people on staff to perform this function.

Conclusion

SaaS has proven to be a viable option for many businesses. It's not the proper solution for all businesses, however, and could prove difficult to accomplish. It may be prudent to engage an independent ERP consultant to help navigate this important area.