WHITE PAPER

Processing invoices in the cloud or on premises – pros and cons

Just what is the cloud, and where is it?

"Go to the Cloud". The catch phrase was coined by Microsoft, and it conveys the feeling that the cloud can fix everything without really explaining what it means. Messaging has led many to think of "the cloud" as another term for the Internet and to think that SaaS and cloud are the same. By definition these terms are commonly described as follows:

Software as a Service (aka SaaS), sometimes referred to as 'software on demand', is software deployed over the Internet and typically on a pay-as-you-go basis. This approach is part of the utility computing model where all of the technology is in the "cloud" and accessed over the Internet as a service.

Cloud computing is a model for enabling on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly engaged and released with minimal management, effort, or service provider interaction.

These definitions are fairly generic and still do not help Accounts Payable decision makers fully understand the difference. The easiest way to think about this, in trying to get to the bottom of this SaaS vs cloud confusion, is that SaaS-based AP solutions run in a cloud environment. In other words, SaaS is a business model and cloud is the hosting option.
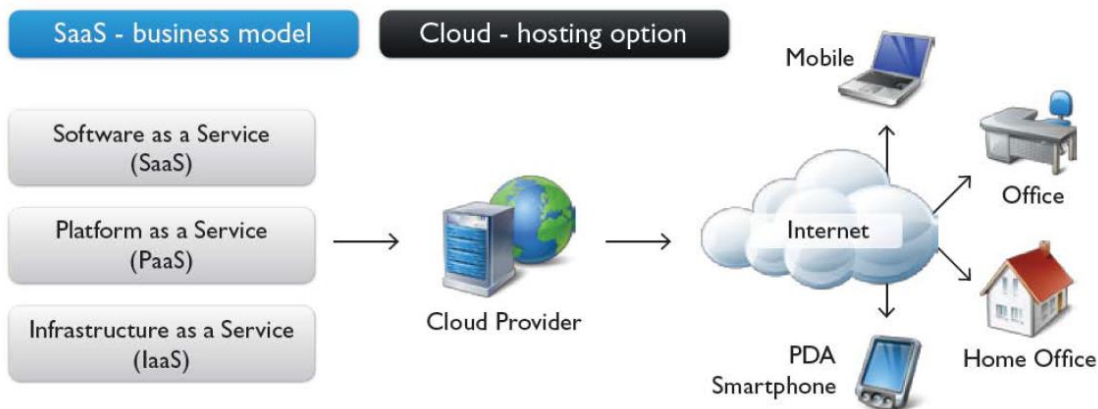
Technology today gives organizations a great deal of choice. Advances in computing power and storage capabilities at a fraction of the cost two decades ago, have made it possible to choose from a number of options.

Successful deployment of technology depends on an understanding of what is needed and why. Applications and services need to be run where they are most efficient and not just because cost is the most attractive option.

Some business reasons for and against cloud deployment

Gartner has provided reasons to employ cloud solutions as well as reasons to tread more carefully:

Factors Promoting Adoption

- Vendors adding local-language capabilities to their solution portfolios fuel SaaS growth globally.
- The benefits of less upfront capital investment make SaaS an attractive alternative in emerging regions.
- A shortage of skilled professional resources within internal IT departments and system integrator organizations contributes to adoption.
- An increase in the number of executives as buyers or influencers also drives growth.
- Increasing familiarity with the Internet, improvements in security and broader acceptance of a service alternative reduce earlier barriers to adoption.

Factors Limiting Adoption

- Limited broadband availability and network instability in specific countries restricts growth.
- Regulations governing data privacy and protection vary by country and might restrict adoption of some vendors' solutions in certain areas.
- Unmet expectations for rapid deployment can dampen the inclination for future purchases.
- Current satisfaction with existing on premises solutions and investments in applications, capital and organizational expertise limit SaaS growth.
- Continual concerns about downstream integration requirements as the requirement to interoperate with back-end systems grow could limit additional installed-base purchases.
- The difficulty and limited flexibility of customization creates issues and restricts adoption for many.

Gartner has also made a survey focused on identifying usage patterns and key trends for SaaS within the enterprise application and vertical specific software markets covering 9 countries, 12 vertical markets and 3 major regions:

- In excess of 95% of organizations expect to maintain or increase their investments in SaaS and over 33% have migration projects underway from on premise to SaaS.
- Over 33% cited issues with SaaS deployments - integration issues and network instability
- Most organizations still lack policies governing the evaluation and use of SaaS

Security considerations

If your data volumes, integration needs, or custom requirements are very high, then on premise might be the option for you. On premise means you have your own completely separate environment, so if you need to create a very high-speed or extremely complex integration, for example, you can do so. Also, if you need to customize the software (beyond the capabilities of the online version), on premise might be the way to go. In most cases, it has to be an extreme customization in order to justify on premise.

On premise

Within your own network, you have control of the levels of security and access protection of your data. You know where it is stored and who has access to it, or at least, you should. When you require local control of security when storing or processing sensitive information, an on premise solution is the better option.

Cloud

You are relying on a third party's systems to provide adequate data protection. They may have data centres in different countries so you need to understand where your data will be stored and how it will be protected. The Microsoft Azure data centres work on a vastly different scale compared to the average company, and use layers of defence that would not be feasible for a small to medium-size business to implement, so the level of security may actually be stronger than your company is able to implement with an on premise offering.

The way to go is heavily dependent on the level of control that you require when working with sensitive data. You need to take into consideration that without the use of specialized software all information is sent in plain text across the Internet – meaning that for instance email is an inherently insecure protocol. Some organizations are very sensitive as to how and where their information is processed, and may or may not be comfortable with queued information being stored in the cloud until either processed or deleted.

Versatility considerations

Online means "available via the internet". You do not install programs on your servers; rather they are installed in a data centre somewhere, managed by Microsoft or a third party. When you want to use the program, you connect to it via the internet.

Even in pure SaaS products, there are many differences. Some Accounts Payable SaaS products are really SaaS hybrids because they are not really multi-tenant, not truly configurable, and really do come as a pre-packaged AP solution that does not have much flexibility for customization. On the other hand, SaaS products have come a long way in the AP automation market to the point that SaaS is growing by 40% whereas on premise models are in decline.

The reality is that SaaS is here to stay and that true SaaS models today provide the same customizable capability as on premise solutions. Some older, "retro-fitted" systems have a limited online version available with reduced functionality. But if a system is designed "from the ground up" to be available online, then there is very little or nothing that you cannot do online that you can on premise.

Financial considerations

Good SaaS AP solutions can have the same functionality and customization as on premise models with the primary difference being that SaaS models are significantly less expensive, which allows their AP clients to achieve ROI much faster.

On premise

You have to buy the software licenses up front and find or purchase the hardware needed to run it, unless you choose to load the software onto an existing server that has available bandwidth. So the initial outlay is likely to be high. There will be an annual maintenance cost, typically 20% – 40% per year of the original license cost. Additionally, there will be ongoing costs associated with maintaining the on premise solution, including eventual replacement of the hardware, and any necessary management of the solution itself.

Cloud

Annual licensing and no requirement for in-house hardware make the start-up costs lower. The cloud-based infrastructure and software are usually maintained at a fixed annual cost, allowing companies better budgetary planning. Annual costs for cloud-based solutions tend to be higher than software maintenance agreement (SMA) costs so the long-term cost of cloud-based invoice processing may be higher.

The cloud solution typically will have lower initial costs but may cost as much or more over the long term, dependent on the cost of maintaining the on premise solution over the long term. On the other hand, the total cost of ownership should also include salaries, so the financial consideration may boil down to the question of whether you need more people to staff an on premise solution.

Implementation considerations

The importance of implementation speed depends on the company's need for the solution. If getting it in place as soon as possible is a priority then the cloud becomes an obvious choice. If there is less urgency then this decision point can be given a lower priority.

On premise

Acquiring and setting up the hardware and any infrastructure, then obtaining and installing the software can take time, especially if there is lead time to procure new servers at the best price. Then there is the time required by your IT resource to install and configure the solution. If your existing server has available bandwidth you might install the software on that server, saving the time of sourcing and installing new hardware.

Cloud

Usually takes minutes once the decision is made.

Maintenance and support

On premise means literally "on your premises". In other words, you purchase a license to use software and install it on your servers and PC's and laptops. You have an IT department (internal or external) that takes care of all the on premise systems you have and the underlying servers, network, communications to the outside world and so forth.

With an on premise system, you may decide to upgrade the system periodically, but then again you may not. If you do upgrade, your IT resources will install the latest version (again, on your premises) and run the update/conversion routines to bring it all up to date. If you do not upgrade, you can usually continue to use the old version of the software indefinitely (until one day it is incompatible with something).

Cloud systems relieve you of most maintenance obligations. You probably will not need to invest in servers. You probably will not need to increase your IT resources. The "infrastructure" elements that benefit from the scale of hosting providers like Microsoft, Amazon, et all, are handled for you. They handle security, backups, fire suppression, disaster recovery, redundancy, high-speed internet access, scalability and so on. In fact, your hosted system will have much higher levels of security, redundancy, backups, scalability and so forth than you could reasonably provide for your own (on premise) system.

Technical knowledge

On premise, an internal technical staff or an outsourced IT provider needs sufficient knowledge to set up the hardware, install and configure the software. They will also be required to manage software updates and ongoing configuration changes.

With the cloud, you need access to far less technical knowledge, though it pays to have some awareness of the solution to get the most from its use.

If people with relevant technical skills are scarce or come at a premium, implementing a cloud-based solution with little or no ongoing maintenance requirements may be appealing.

Continuity

If you have a hardware or software failure on premise, your applications may be down until you can resolve the issue. Power outages, natural disasters, viruses or malware, or other problems can potentially have a large impact. These risks can in part be mitigated by redundancy but that will significantly increase the infrastructure costs.

Cloud solutions are normally hosted on multiple servers in more than one data centre, so the chances of them all failing at the same time are very small. Once your invoice is in the cloud, it can be accessed from anywhere, which should make your disaster recovery planning much simpler.

The bottom line

There are many advantages to cloud-based solutions, especially for small or medium-sized organizations where IT resources are limited. Cloud-based solutions are faster and less expensive to implement, and the simple annual fee makes budgeting easier. On premise software may work out to be less expensive in the long term, depending on the level of maintenance costs required for the on premise hardware and software, as well as differences, if any, in production staff.

While many competing vendors are abandoning their traditional software products in favour of cloud-based solutions, ROCC believes that there are balanced arguments for both deployment models – the local control and security possible with an on premise solution, versus the reduced management allowed by the cloud. As a result, ROCC's development strategy is to support and enhance both deployment options to provide companies with real choice for the long term.