

## About this research note:

Technology Insight notes describe emerging technologies, tools, or processes as well as analyze the tactical and strategic impact they will have on the enterprise.

## SaaS: What It Is and Why You Should Care

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Enterprises no longer have to wait for months or years to see benefits and returns from their enterprise application investments. The Software-as-a-Service (SaaS) delivery model provides a faster, less risky, and generally more cost-effective alternative for enterprises to achieve their business objectives. However, this model is not the best alternative in every situation. Before moving forward, IT managers must assess the appropriateness of the SaaS model for their enterprise.



## Executive Summary

The Software-as-a-Service (SaaS) delivery model provides a faster, less risky, and generally more cost-effective alternative for enterprises to achieve their business objectives. However, this model is not the best alternative in every situation. Before moving forward, IT managers must assess the appropriateness of the SaaS model for their enterprise.

This research note outlines the key management and technical issues surrounding the SaaS delivery model. The main topics include:

- » A technical perspective on SaaS, what it is, and how it works.
- » Who is adopting SaaS and for what business needs.
- » The key cost considerations of SaaS.
- » The leading benefits and challenges of using the SaaS model.
- » The early steps to take when considering SaaS.

IT managers considering SaaS must first assess the appropriateness of this model for their enterprise.



## Technology Point

Enterprises are becoming increasingly frustrated with the excessive time, money, and resources required to implement and maintain enterprise applications via the traditional on-premises model. In response to this, a software delivery model that greatly reduces implementation time, risks, and costs has emerged. IT managers must have a clear understanding of the benefits and limitations of the SaaS model in order to make the right decisions.

### *The Rapid Growth of SaaS*

SaaS is by far the fastest growing segment of the enterprise applications market. Pacific Crest Securities, an independent investment bank, estimates that the SaaS market will grow at 25% per year until it reaches \$10 billion in 2009. This is quite high compared to the growth rate of just over 5% per year that is expected for the traditional on-premises model.

## What It Is & How It Works

### *Definition*

SaaS, also called software on-demand or subscription-based software, is a software delivery model that is disrupting the IT industry. In the traditional on-premise or software license delivery model, enterprises purchase an application and build the proper infrastructure to host it in-house. With SaaS, enterprises pay a monthly per-user fee to rent an application from the vendor that hosts it. SaaS eliminates the need for enterprises to perform installations, maintenance, and support. The vendor is responsible for all of these tasks.

### SaaS vs. ASP

Although many people claim they are different, SaaS is just an evolution of the former Application Service Provider (ASP) model that emerged in the late '90s. The technologies that support the model have changed but the fundamentals remain the same.

### *A Technical Perspective*

SaaS applications are usually built on an n-tier, multi-tenant architecture that allows multiple companies to use the same infrastructure, application, and database instance. SaaS vendors design their solutions with strong configuration capabilities with the purpose of reducing, as much as possible, the need for customization. Some vendors don't even offer customization as an option because for them this implies



having to host and maintain a separate instance of the application and database. This goes against the economies of scale that make their business model viable.

### *Not Only for the Small Guy*

SaaS is especially attractive for the small and mid-sized enterprise (SME) given their scarce IT resources and low number of users. However, SaaS is becoming increasingly attractive for large enterprises as well. According to a 2004 survey from [Summit Strategies](#), 31% of large companies (those with over 1,000 employees) were already using the SaaS model, and an additional 28% were either evaluating or planning to evaluate SaaS offerings. Examples of large corporations that are using SaaS enterprise applications with positive results are AOL, ADP, British Telecom, Cisco, Corporate Express, HP, Honeywell, MasterCard, Merrill Lynch, Nokia, Sprint, Symantec, and Xerox.

#### Case Study

By subscribing to an e-commerce on-demand solution from Vendra, [British Telecom's \(BT\) Retail online store](#) was able to quickly realize cost savings in IT and content management. The SaaS solution achieved a 244% ROI within only five months.

### *Deciding What to Rent*

Until now, enterprises have adopted SaaS solutions mostly for less critical front-office business functions (e.g. Customer Relationship Management). However, this trend is quickly changing because SaaS vendors are maturing and delivering robust solutions for nearly every business function. An example of this is the increasing number of application categories and vendors available at the [SaaS Showplace](#), a SaaS resource center from the consulting firm [THINKStrategies](#).

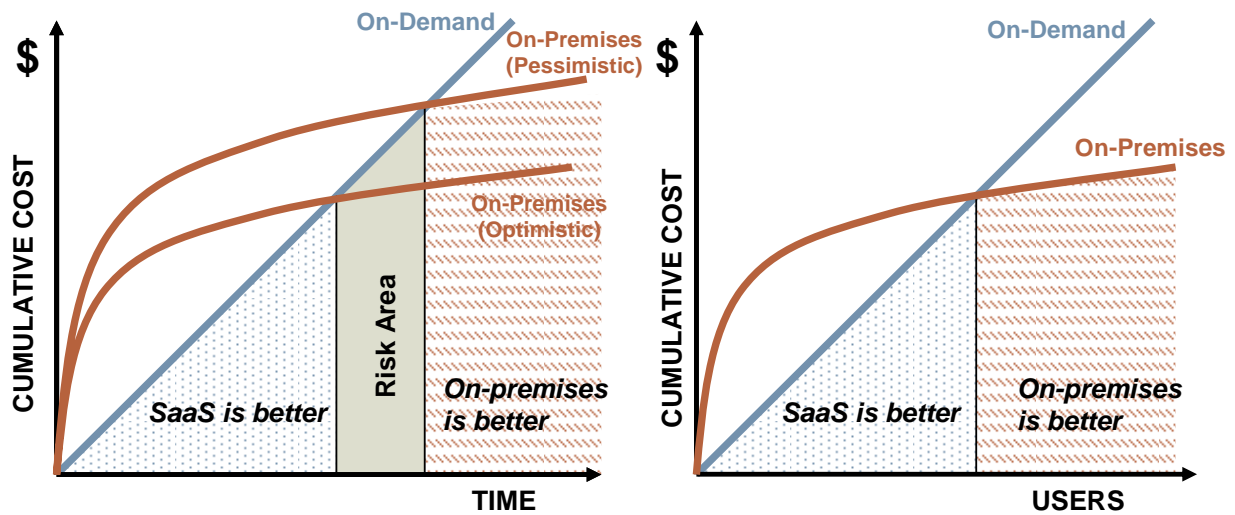
SaaS is a good starting point for getting into a new software area, as long as the model is a good fit for the enterprise. Info-Tech believes it is time for companies to start considering SaaS solutions for all kinds of business needs.

### *Cost Considerations*

A [2004 study](#) from TripleTree and the Software and Information Industry Association (SIAA) concluded that the SaaS model delivers a Total Cost of Ownership (TCO) five to ten times lower than the traditional software licensed delivery model. Although these statistics exemplify the cost-effectiveness of the SaaS model, these must not be taken as an absolute truth. A large user population or a long period of time are factors that can make the traditional on-premises model more economical than the SaaS model. Figure 1 illustrates how these two elements influence TCO.



Figure 1. Influence of Time and Number of Users in the TCO



IT managers must understand that time and number of users affect TCO in different ways. While the impact of number of users on TCO is very predictable, the impact of time is not. This is because over time, unexpected events such as expensive hardware or software upgrades could suddenly increase the TCO of the on-premises module (see Risk Area on the left graph of Figure 1). This risk is largely mitigated under the SaaS model.

### Elements of the TCO Calculation

When performing a TCO calculation to compare the traditional model with the SaaS model, IT managers must consider the following major cost categories:

Table 1. TCO Comparison of Traditional Model vs. SaaS Model

Costs	Traditional Model	SaaS Model
Hardware/Infrastructure	✓	
Communication	✓	✓
Software	✓ (Licenses)	✓ (Subscription fees)



Costs	Traditional Model	SaaS Model
Implementation	✓	✓
Management/Maintenance	✓	
Support	✓	

### *Switching to On-Premises Can Be an Option*

A good alternative is to start using the system on-demand and switch to on-premises when the number of users and the maturity of the organization justify it. IT managers that foresee this as an option for their enterprise must only consider vendors that offer their solution both on-demand and on-premises.

## Key Considerations

### *Analysis of SaaS*

The following table outlines the advantages and disadvantages of the SaaS model:

**Table 2. Pros and Cons of the SaaS Model**

Advantages	Disadvantages
<ul style="list-style-type: none"><li>» Very fast time to market. A 2004 study from TripleTree and the SIAA concluded that SaaS deployments are 50% to 90% faster than traditional deployments.</li><li>» In most cases, SaaS delivers lower TCO and higher ROI.</li><li>» Enterprises can dedicate their scarce IT resources to corporate initiatives that add more business value.</li></ul>	<ul style="list-style-type: none"><li>» Customization is either not possible or very expensive. Companies need to assess if their requirements can be met with the configuration options of the SaaS solution.</li><li>» Integration with other applications is more challenging.</li><li>» There have been reliability problems with some SaaS products. However, Info-Tech doesn't see this as a big issue going forward because key vendors are constantly improving</li></ul>





Advantages	Disadvantages
<ul style="list-style-type: none"><li>» Lowers operational risks, if a reliable and solid vendor is selected. The enterprise doesn't need to worry about maintenance, upgrades, administration, or support issues.</li><li>» The company can try the solution before investing in it.</li><li>» The company constantly benefits from functionality enhancements and application upgrades at no additional cost or effort.</li><li>» Even if the company wants to host the application internally in the long term, SaaS allows it to try it before buying it.</li><li>» Easily scalable and highly configurable.</li></ul>	<p>their infrastructure to minimize downtime risks.</p> <ul style="list-style-type: none"><li>» Since data is stored at the vendor's site, data security and privacy can be an issue. To mitigate these risks, companies must only subscribe to applications from vendors that are <a href="#">SAS 70</a> Type II certified.</li><li>» Requires a larger bandwidth than the traditional on-premises model.</li></ul>

## Key Takeaways

1. **Investigate vendors.** Visit SaaS Showplace to get an idea of the SaaS application categories that exist and the vendors that serve them. Make a list of possible vendors and get familiar with their offerings, pricing options, bandwidth requirements, and implementation methodology. Without getting into too much detail at this point, gather the same type of information for traditional on-premises packages.
2. **Assess economic viability of SaaS.** With the information gathered up to this point, perform a preliminary, high-level TCO analysis to compare the economics of on-demand versus on-premises. Given the growth perspectives of the company, identify the potential number of users that the application will have over the next three to five years. Use Info-Tech's "[On-Demand vs. On-Premises: TCO Calculator](#)" to help with this analysis.
3. **Determine if SaaS is appropriate for the enterprise.** To determine if SaaS is a good fit for the enterprise, use ITA Premium's "[SaaS Appropriateness Assessment](#)" tool.



4. **Don't let the business walk alone.** The SaaS model characteristics of easy adoption and little reliance on IT give business units the power to get an application without IT intervention. This often happens when IT doesn't have the resources or the time to tend to an important request of the business unit. IT managers should not oppose SaaS just to protect IT's position in the enterprise. If they do, the business will simply decide to go on with the initiative without involving IT. This can be risky for the enterprise. Instead, IT decision makers should see SaaS as an opportunity to quickly add business value to the enterprise. They should get involved as much as possible with the initiative, educate other decision makers about the model's challenges, and get ready to incorporate the SaaS system into existing IT processes.

## Bottom Line

Given the right circumstances, SaaS provides a faster and more cost-effective alternative for enterprises to achieve their business objectives. IT decision makers that want to consider SaaS must first assess the appropriateness of this model for their enterprise.