

THINKstrategies



A Whitepaper for Independent Software Vendors (ISVs)

Migrating to a SaaS Model: A Roadmap to Success

An Independent analysis published on behalf of Verio.

VERIO
An NTTCommunications Company

Executive Overview

A confluence of market forces are driving organizations of all sizes to adopt a new generation of web-based, on-demand, Software-as-a-Service (SaaS) solutions to meet their changing business requirements.

These organizations are adopting SaaS solutions of all kinds, ranging from 'front-office' applications, such as customer relationship management (CRM) systems; to 'back-office' applications, such as accounting and financial systems; to collaboration; IT management solutions; and industry-specific applications.

The rapid growth of SaaS is attracting a proliferation of new and established independent software vendors (ISVs) seeking a share of the market. This 'cloud rush' is putting greater pressure on aspiring SaaS providers to quickly develop and deliver highly differentiated solutions at the lowest possible cost. And, it is also forcing them to make important decisions about how to properly deliver their services to ensure they are reliable, secure and high performing.

For most SaaS start-ups and established ISVs migrating to a SaaS model it doesn't make economic or business sense to build their own hosting facilities to deliver and support their SaaS solutions.

Instead, smart SaaS vendors are teaming with proven hosting companies who can provide a cost-effective and scalable service delivery infrastructure so the SaaS vendor can focus on developing and marketing a differentiated solution.

The leading hosting companies provide a full lifecycle of enablement capabilities, technical skills and strong 'ecosystem' of business partners to help aspiring SaaS vendors succeed.

This whitepaper will examine today's SaaS opportunities and challenges, and will show how a hosting company, such as Verio, can help ISVs capitalize on the rapidly evolving market opportunities.

The Market Forces Driving the Growth of SaaS

A convergence of four key macro-market trends is driving companies of all sizes to adopt SaaS solutions to support their increasingly dispersed employees, better serve their decreasingly loyal customers and better coordinate with their widening array of corporate partners.

These market trends include,

- Changing economic conditions
- Changing competitive forces
- Changing workplace requirements
- Changing technology requirements

The current financial crisis has impacted businesses of all sizes, causing layoffs, tightening budgets, and forcing decision-makers to re-evaluate their capital investments and refocus their limited resources on their core competencies.

The competitive landscape is also being reshaped by globalization and eCommerce which have opened new market opportunities, but also lowered the barriers to entry in nearly every industry resulting in greater competition and lower customer loyalty.

The workplace is also being redefined by more dispersed and tech-savvy workers who are more mobile and adept at leveraging technology to perform their day-to-day jobs. Broadband networks and mobile technology are enabling employees to work anywhere. But, they also need greater access to information, traditionally hidden behind the firewall, in order to perform their jobs.

These trends are forcing organizations of all sizes to re-think how they leverage software and technology to better support their rapidly changing business requirements to achieve their corporate objectives.

Traditional, legacy on-premise applications and systems were not designed to respond to these challenges. Instead, they were architected with a highly centralized organization in mind. They have also proven to be too expensive and cumbersome to acquire, deploy and maintain to meet organizations' changing needs. As a consequence, many enterprise on-premise applications have failed to produce the return on investment (ROI) that organizations expected and have required a higher total cost of ownership (TCO) to keep them up and running.

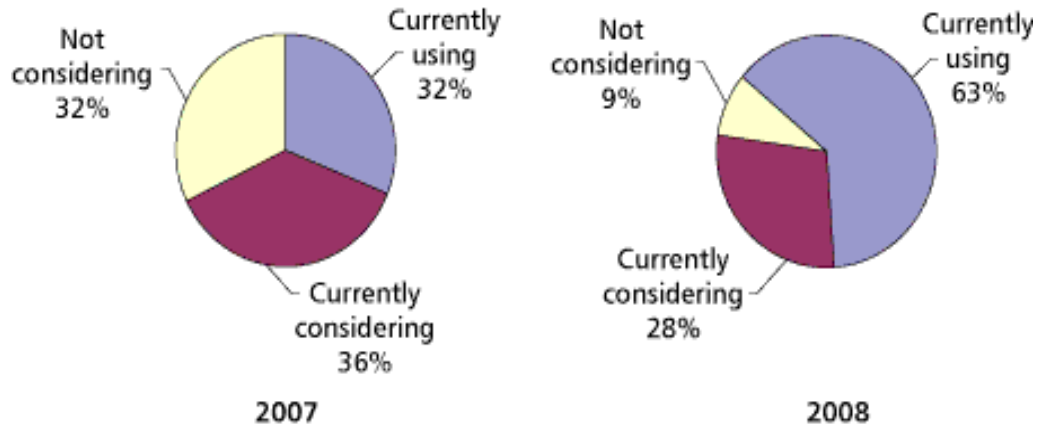
Because most organizations cannot afford these inefficiencies in today's tough environment, a growing number of organizations are adopting a widening assortment of SaaS solutions to address varying business needs.

'On-demand', SaaS solutions leverage the web to give users anytime, anywhere access to business applications. These solutions can be deployed quickly without the upfront capital investments and ongoing support costs associated with traditional, on-premise software. As a result, SaaS solutions offer a quicker time to value at a lower cost of ownership.

THINKstrategies has seen a steady increase in customer interest and adoption of on-demand SaaS solutions. Our most recent survey of over 100 mid- and large-scale enterprises worldwide conducted in October 2008, in conjunction with

Cutter Consortium, found 63% of the companies surveyed had adopted a SaaS solution, *nearly double the percentage in 2007!* (See, Figure 1.)

Figure 1
Percent of Companies Using and Considering SaaS Solutions



Source: THINKstrategies/Cutter Consortium, 2008.

Our findings have been validated by a recent study by McKinsey & Co. and Sandhill.com which found 74% of the CIOs they surveyed are either using or willing to consider SaaS alternatives to meet their IT and business needs.¹

Our survey also found over 90% of those already using a SaaS solution are satisfied with the quality of the solution, plan to expand their use of SaaS and would recommend a SaaS solution to their peers.

It is for these reasons that companies of all sizes are adopting SaaS and cloud computing at an accelerating rate. As a result of these trends, IDC forecasts the SaaS market will experience a 24.4% compound annual growth rate (CAGR) and will exceed \$15 billion in 2012.² In comparison US IT spending growth will be low single digit in 2010 and then advance at a compound annual growth rate (CAGR) of 6% over the same forecast period, according to Business Monitor International's "United States Technology Report Q4."

¹ "Enterprise Software Customer Survey 2008", McKinsey & Co. and Sandhill.com, http://www.interop.com/downloads/mckinsey_interop_survey.pdf.

² "Worldwide Software on Demand 2008-2012 Forecast and 2007 Vendor Shares: Moving Toward an On-Demand World" (IDC #213197, July 2008).

'Cloud Rush' Poses New Challenges for ISVs

The growing demand for SaaS solutions is attracting an increasing number of ISVs to the market, creating a 'cloud rush' effect which THINKstrategies believes will inevitably result in a shake-out and consolidation in the SaaS industry.

A clear barometer of the proliferation of players entering the market is THINKstrategies' SaaS Showplace (www.saas-showplace.com) which now has over 1200 providers listed across 80 application industries and enabling solution areas. Even in the best of times, few markets can support this many vendors. And, today's credit crunch is making it especially difficult for a growing number of start-ups as well as some established vendors to survive.

The aspiring SaaS providers who do survive an inevitable industry shake-out will be those who develop clearly differentiated solutions and deliver them in a cost-effective and reliable fashion.

These are not easy objectives because the SaaS model changes many of the fundamental rules of the software game. First, it puts the burden of customer success on the shoulders of the vendor, fundamentally changing the nature of the customer/vendor relationship. In the past, the customer was responsible for deploying and maintaining their business applications, and the ISV simply had to respond to technical questions and periodically issue software updates and upgrades.

In the SaaS model, the vendor is responsible for ensuring the availability, reliability, security and scalability of the software solution. With the pay-as-you-go subscription pricing model, if the vendor fails to meet the customer's expectations, it is at risk of losing the customer. In addition to the threat of also hurting its reputation in the market, the SaaS vendor may also be liable to pay a penalty for failing to fulfill its obligations under a service level agreement (SLA).

The pay-as-you-go subscription pricing model poses additional financial pressure on the SaaS vendor. The subscription pricing model allows organizations to incrementally adopt SaaS solutions and avoid the upfront capital investments associated with perpetual software licenses. The SaaS subscription pricing model also means ISVs receive less upfront capital to finance the development and delivery of their SaaS solutions. This requires SaaS companies to change their fundamental philosophy and approach to how they architect, support, and deliver their software application. In the on-premise model, software companies were able to build and maintain their own IT infrastructure and had the upfront capital needed to fund those expenses. In the SaaS model, software companies will need to reduce their IT infrastructure costs to remain competitive. As a result many will leverage the performance and economies of scale made available through hosting service providers, also referred to as Cloud or Virtual IT service providers, to achieve the scalability and reliability they need at reduced costs.

In addition, most established ISVs are migrating from an on-premise, single-instance, packaged software architecture to a multi-tenant architecture which makes SaaS more scalable and profitable. Re-architecting these applications takes specialized software development skills and service delivery capabilities. It also requires sophisticated service provisioning, monitoring, metering, hosting capabilities, and the ability to rapidly scale.

SaaS vendors must also demonstrate that they have sufficient security policies and procedures in place to safeguard customers' sensitive corporate data. These policies and procedures must also be properly certified, a process which can cost thousands of dollars and take months to attain SAS 70, PCI or other necessary certifications.

Given the competitive landscape and economic climate, most ISVs cannot afford to make these investments to simply put the right service delivery infrastructure and proper certifications in place. Instead, they must focus their resources on building the best SaaS solutions possible at the most competitive price to satisfy escalating customer expectations and remain competitive.

It is for these reasons most aspiring SaaS providers are turning to proven hosting companies to support their service delivery requirements.

These SaaS companies find that it is more advantageous for them to leverage the technical IT expertise and economies of scale that a hosting service provider can offer. Successful SaaS providers leverage the strengths of an experienced hosting service provider which allows them to remain focused on their core business of developing great software applications while accelerating their time to market and reducing their capital expenses.

The following section will examine the key criteria SaaS providers should use to select the right hosting company to meet their needs.

Key Criteria for Evaluating and Selecting a Hosting Partner

When considering a hosting service provider to partner with for hosting your SaaS solution there are many important criteria you should evaluate. Below is a list of some of the most important criteria you should consider.

- 1) **Financial strength** and proven track record of performance – has the company been in business at least 10 years or longer? Are they financially stable, will they be around for the long-term?
- 2) **Products and service offerings** – does the company provide the range of services you need to support your application and architecture requirements?
- 3) **Technical support** – does the company provide technical support and sales engineers that can help you build the architecture environment you will need? Will you have access to certified and highly trained IT experts to answer your questions? Will you have direct access to 24x7x365 support? How can you contact their technical support – chat, phone, email? What is the average response time to technical questions?
- 4) **Service Level Agreements (SLAs)** – what are the specific service level agreements you will receive, how will service levels be measured and how will you be compensated if there is a breach?
- 5) **Technology** – does the provider use the latest technology, do they offer high performance and reliability, do they have the ability to scale rapidly? Do they own and operate their own datacenters? Are their datacenters state-of-the-art using the latest technology and security measures? Do they do proactive monitoring of their servers to avoid problems before they occur? When a

problem does occur what is their average mean time to repair? Does the company monitor and guarantee network performance?

- 6) **Global presence** – does the company have global datacenters and sales offices? In what countries? Does the company own and operate their own global IP network?

All of the criteria outlined above are important in your evaluation and selection of a service provider, but perhaps the single most important consideration will be the hosting providers' datacenters and underlying product technology since this will serve as the foundation of your SaaS delivery platform.

The key elements of a reliable and cost-effective data center are:

- Hardware platform (virtualization, etc.) and rack architecture (Blades, etc.)
- Network equipment
- Physical security and intrusion detection
- Redundant power and cooling (back-up generators and power supplies)
- Redundant Internet connectivity
- Data Backup/Restore procedures
- Proactive onsite and remote monitoring, management and resource tracking

When evaluating a hosting service provider's datacenter, below are some key questions to consider:

- **Physical location** – Are they located in the markets you operate?
- **Facilities** – Do the facilities utilize state-of-the art cooling and redundant power supplies in case of a power outage? Do their datacenters include back-up generators and alternative power sources to ensure continuance operation in case of a power failure?
- **Security** – Does the facility utilize multiple levels of security including security access cards, biometrics, video surveillance, and locked server cages or closets with individual keys? What measures and policies do they have in place to ensure your data remains secure?
- **Technology** – Does the datacenter include the most current server, router, network, and software technology to ensure the highest computing performance?
- **Network & Server Monitoring** – What level of network and server monitoring does the datacenter include? Does the datacenter take proactive measures to diagnose potential problems before they can occur? Is there round-the-clock monitoring with onsite staff to address any problems should they occur?
- **Recovery Time** – When there is an outage, what is the datacenter policy in getting the datacenter and servers back up? What is their mean time to recovery (MTR)?
- **Service Level Agreements (SLAs)** – What service level agreements are in place to guarantee uptime performance? How are SLAs monitored, tracked, and reported? What is the remediation process and policy if service levels should fall below stated SLAs?

In addition to evaluating the right hosting provider, you will also need to determine the right deployment architecture to support your business objectives and your end-customers. There are multiple SaaS deployment and architecture options to consider, including:

- Single-instance/Multi-tenancy
- Multi-instance/Single-tenancy
- Single-tenant with virtualization

Single-instance/Multi-tenancy refers to a [software architecture](#) where a single instance of the [software](#) runs on a server, serving multiple client organizations (tenants). With a multi-tenant architecture, a [software application](#) is designed to virtually [partition](#) its data and configuration so that each client organization works with a customized virtual application instance.

Multi-instance/Single-tenancy is where multiple instances of the application are set up on either one or multiple dedicated servers to support a single client.

Single-Tenant with Virtualization because the principle of multi-tenancy is not universally accepted or supported within the software industry, offering a single-tenant alternative via virtualization may be a source of competitive differentiation.

Hosting vendor, Verio, has produced the following table to help ISVs understand the tradeoffs between these architectural alternatives.

Table 1
Relative Design Complexity/Effort for Various Design Elements
(Table Key: Low = Most Desired, High = Least Desired)

Issue	Virtualized Single-Tenant App	Multi-Tenant App	Single Tenant/Multi-instance
Data Isolation Needs	Low	High	Low
Preferred/Required Scaling Techniques	Low	Medium	Low
Software Update/Management	High	Medium	Low
Customer Customization	Medium	High	Low
Integration with other SaaS Apps	Medium	Medium	Medium
Tiered/Variable Pricing/Service	Medium	Medium	Medium
Tiered/Variable SLA	Low	High	Low
Overall Efficiency	Medium	Low	High

Reaping the Benefits of a Positive Partner Relationship

There are a growing number of ISVs successfully migrating to a SaaS model. Accrisoft is a good example of how an ISV can leverage a hosting company's service delivery infrastructure and support capabilities to achieve its SaaS objectives.

Accrisoft

Accrisoft is a SaaS provider which provides small and medium-sized businesses (SMBs) access to more than 80 web-based, turnkey modules including billing, e-mail marketing, calendaring, collaboration, content management and website design. They market the Accrisoft Freedom product through both resellers and a direct sales force.

Accrisoft needed to find a reliable and comprehensive hosting solution that would enable it to scale its operations economically while focusing on its primary SaaS business.

Accrisoft selected Verio's hosting services because of their high performance and reliability. Verio is a leading hosting service provider that supports the needs of SaaS ISVs by providing the highly reliable IT infrastructure they need to confidently deliver applications to customers around the world. Verio offers SaaS ISVs a wide range of affordable computing options to support their specific business objectives and end-customer requirements. Accrisoft uses the full range of Verio hosting services including its Shared offerings, Virtual Private Servers (VPS) and Managed Private Servers (MPS).

By using Verio's hosting services, Accrisoft has been able to successfully match end-customers' business requirements with the right solution to support their needs at the most economical price, and easily upgrade customers as their requirements grow. As a result of leveraging Verio's hosting services, Accrisoft has achieved the following business benefits,

- 15-20% increase in new customer acquisitions and
- 21% increase in annual sales revenue accomplished by leveraging the strength and reputation of Verio and NTT Communications.
- Less than 9% customer churn rate attributable to high customer satisfaction resulting from the consistent reliability and performance of the Verio solutions that host the Accrisoft software services.

Accrisoft also estimates it has saved an average of \$1.3 million dollars a year by not having to maintain its own hosting operations and being able to focus on its core SaaS business.

"Our primary focus is our customers and resellers. Verio consistently exceeds our expectations for service and reliability which empowers us to serve our resellers and customers with excellence," said Jeff Kline, President and CEO for Accrisoft.

Summary and Conclusions

The SaaS market is growing rapidly in response to unprecedented business challenges. The growth of SaaS is attracting an increasing number of ISVs seeking to respond to their customers' changing business requirements and capitalize on this new service model.

Successfully making the transition to SaaS requires more than simply re-architecting an ISV's software products to reside on the Web. It also entails a complex set of enabling technologies and service delivery capabilities in order to provide reliable, secure and scalable SaaS solutions which meet their customers' evolving needs.

Escalating competition in the SaaS market is forcing ISVs to leverage the expertise and experience of proven hosting companies, such as Verio, to accelerate their software development process, accelerate their time to market while reducing costs, and strengthen their service delivery capabilities to remain competitive in the market.

By teaming with leading hosting companies, like Verio, ISVs can better meet their customers' needs in a cost-effective fashion to ensure their long-term success.

This independent analysis was published on behalf of Verio.

About Verio

Verio is the leading provider in delivering online business solutions to SMBs worldwide. Distributed through its global network of OEM and viaVerio channel partners, Verio's solutions provide web hosting, application hosting and SaaS that enables SMBs to drive online success. Verio is a subsidiary of NTT Communications, one of the largest companies in the world and supports its operations with their highly reliable and scalable Global IP Network providing customers and partners with access to business solutions in more than 200 countries. In January 2009, Verio was named "Best Web Hosting Company 2008" by HostReview.com. For more information, visit: www.verio.com.

About THINKstrategies, Inc.

THINKstrategies is a strategic consulting services company formed specifically to address the unprecedented business challenges facing IT managers, solutions providers and investors today as the technology industry shifts toward a services orientation. The company's mission is to help our clients re-THINK their corporate strategies, and refocus their limited resources to achieve their business objectives. We help enterprise decision-makers with their sourcing strategies, IT solutions providers with their marketing strategies, and VCs with their investment strategies. THINKstrategies is also the founder of the Software-as-a-Service Showplace (www.saas-showplace.com) the largest and highest ranked, vendor-independent, online directory and information resource center of SaaS solutions. For more information regarding our unique services, visit www.thinkstrategies.com, or contact us at info@thinkstrategies.com.