



**OpSource™**  
The Business of Web Operations

## **Enabling Software as a Service**

**WHITE PAPER**

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## Introduction

A profound shift is occurring in the way that enterprise applications are purchased and delivered. The traditional model of application deployment, in which the customer acquires a perpetual license and assumes responsibility for the software's implementation and ongoing management, has many disadvantages for end users. Increasing dissatisfaction with the costs, complexities, and length of time that it takes to recognize value from their investments have pushed software buyers to demand alternative models of application delivery, such as **Software as a Service (SaaS)**. This paper will provide an in-depth analysis of the evolving industry and offer recommendations to software companies on how they can transform their businesses to better meet the needs of customers, take advantage of new revenue opportunities, and avoid losing market share to competitors.

## Software Consumption is Evolving

Multiple factors have converged to accelerate the adoption of the SaaS model. From an end user perspective, SaaS is attractive because it enables them to simultaneously minimize costs and maximize performance. Traditional software delivery has left buyers of enterprise applications disgruntled by resource-intensive deployment cycles that take years and often yield mediocre results. SaaS, which allows customers to purchase applications on a subscription, or "pay as you go" basis, dramatically reduces upfront costs and enables the immediate recognition of value. If the software does not meet objectives, the customer can stop using, and paying for it.

The inherent flexibility of the SaaS model is a significant benefit for the end user. Due to the rapid pace of technological innovation, the requirements of today's businesses are constantly changing. Many companies have essentially found themselves "stuck" with expensive packaged or custom software solutions that no longer meet their needs. Over time, this accumulation of "shelfware" has heightened resistance toward new investments in enterprise applications. SaaS eliminates the risk of obsolescence associated with traditional software implementations and provides immediate access to functionality.

Finally, SaaS transitions the burden of deployment and management from the end user to the software vendor, and forces vendors to take responsibility for the performance, security, and stability of their applications. In sharp contrast to the traditional model of application delivery, in which customer IT departments are handed a gold disk and tasked with installing the software and ensuring that it runs properly, SaaS meets the needs of many of today's organizations to enhance application performance without increasing IT budgets. Instead of trying to fix problems internally with more people, and more equipment, or through the purchase of expensive professional services support contracts from software vendors, SaaS enables end users to lower the total cost of ownership of their application(s) considerably and maximize the potential for return.

Industry analysts have identified the transition that is occurring in the software marketplace and are actively tracking this growing demand for SaaS. Gartner predicts that by 2008 over 50% of software licenses purchased will be via service<sup>1</sup>. Like it or not, it is clear that SaaS is a disruptive technology that has already begun to change the landscape of the software industry, and vendors that choose to ignore this fact will likely find themselves unable to compete in the future.

## What Does This Mean For Software Vendors?

The challenges associated with the successful delivery of SaaS can be daunting for the average ISV. SaaS requires revised business models, re-architected code, and instant proficiency in an entirely new set of operational disciplines: 24x7 systems management and call centers, hosting and networking, security, disaster recovery, and more. Most software companies are aware of the significance of the SaaS model, but are struggling with at least one of three foundational aspects of SaaS delivery: business model, code, and/or 24x7 operations.

Before a vendor can bring a SaaS offering to market, the vendor must determine how to price the product. Various metrics can be used—per user, per transaction, per page view, etc. The software company must also determine how to bill its customers. Will customers be billed monthly? Annually? Will upfront payments be required? What will the terms of service be? In addition, the software company must reexamine sales compensation structures.

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<sup>1</sup> [Software as a Service Will Be Business Model of Choice by 2008](#), Gartner, 19 October 2004.

The software company must also consider the recoding of its application(s). Is the current application single-instance, multi-instance, multi-tenant? What level of code changes must occur before the application can be delivered as a SaaS offering, and what resources will this entail? In order to deliver SaaS, software must be web-enabled with all functions carried out by the user using a web browser. If the vendor has a client-server application, the functionality implemented in the client must be replaced with HTML, and possibly other technologies, that can be displayed by a web browser over the Internet. In order to gain operational efficiency, software needs to be multi-instance. Moving from single-instance to multi-instance involves loading multiple copies of software on a single set of servers, enabling vendors to share the cost of a server across multiple customers. Additional productivity enhancements and economies may be gained by moving to multi-tenant SaaS, or replacing proprietary commercial software with open source software. Web services provide an opportunity for integration with other applications and data flows.

Last but not least, the ISV must build a scalable SaaS infrastructure and develop a core competency in performing the tasks and activities that ensure that an application is reliable, available, and secure. Customers will simply not purchase SaaS from a vendor if they lack confidence in that vendor's ability to maintain data with the utmost security and recoverability. Software companies that are providing SaaS must keep up with the latest security technologies as well as perform regular backups and provide offsite storage. End users will also expect their applications to be available to them 24x7. If the ISV does not already staff an around-the-clock call center, who answers the 2am support calls? SaaS customers will insist that vendors provide Service Level Agreements (SLAs) guaranteeing application performance and availability, and the vendor must have the mechanisms in place to actually deliver on these SLAs.

Despite all this, the unfortunate truth is that customers will not necessarily reward ISVs for the ability to provide secure and reliable SaaS offerings, as security and reliability are assumed to be integral characteristics of any SaaS offering, but an ISV that fails to execute in these areas can definitely anticipate losing customers. Given the triumvirate of challenges associated with SaaS delivery, as well as the discrepancy between financial risk and potential return, what's in it for the software vendor?

In reality, SaaS is not only advantageous for the end user—software companies also benefit significantly from the broadened sales opportunities and enhanced competitive differentiation made possible by this new model. SaaS eliminates end-of-quarter discounting pressures and enables ISVs to enjoy predictable recurring revenue streams. In addition, SaaS helps software companies reach new customers. By offering SaaS as an option, large, established companies can move down market and capture revenue from the small and medium sized businesses that may not have been able to afford perpetual licensing in the past. In turn, smaller software companies and newer entrants that are exclusively delivering SaaS will more effectively compete with the larger vendors.

### **SaaS Delivery Options: Build vs. Buy**

Considering that end users are demanding it, competitors are already providing it, and most, if not all, software companies know that their future viability depends on it, what options are available to the ISV for efficiently overcoming business model, code, and operational stumbling blocks to launch a quality SaaS offering?

For software companies, there are two choices for SaaS delivery: build or buy. In order to create a SaaS-supporting infrastructure from the ground up, the ISV must invest heavily in hardware, software, networking and colocation equipment, etc. Furthermore, not only must the ISV build a baseline infrastructure, they must ensure that the infrastructure will scale as the user base expands. This requires significant capital and operating expenditures, generally ahead of demand. Combined with the necessity of developing expertise in a variety of activities that lie outside the core competency of most software companies—systems management, security, disaster recovery, change management, and call center support—bringing a SaaS offering to market can be an expensive, risky, and time-consuming proposition.

The difficulties associated with delivering SaaS have given rise to a new category of service provider: the SaaS enabler. Software companies that opt to work with a third party to bring their SaaS solution to market and/or provide ongoing services to end users should consider several factors during the selection process. Some service providers

that have labeled themselves “SaaS enablers” are simply providing “warmed-over” managed hosting and are not aligning themselves to the success of the ISV.

A true SaaS enabler should combine expertise, tools, and procedures to offer a comprehensive solution that is designed to help the ISV grow their business. The SaaS enabler should have the ability to assist the ISV not just with the operational aspects of SaaS delivery, but with the initial steps that are required to bring a solution to market, such as business model analysis and coding issues. The SaaS enabler should be able to efficiently integrate the ISV’s application into its own infrastructure to ensure a seamless transfer of knowledge, and should have a process for developing deep expertise on the ISV’s application(s) so that it can be supported most efficiently. Finally, in the standard model of application hosting and management, the worse the customers’ systems perform, the greater the service provider’s opportunity to make money. Effective SaaS enablers align their business with that of the ISV to ensure they are incented to drive success.

### **Why OpSource?**

OpSource possesses the necessary operational expertise, developed through hundreds of customer engagements, to help ISVs deliver their SaaS solutions with optimized reliability, security, and performance. OpSource’s global staff is extensively trained and certified in disciplines such as application management, security, and hosting and networking. OpSource On-Demand includes the services of SDMs (Service Delivery Managers) that are specifically trained on the software company’s application(s) to facilitate the effective transfer of knowledge during the integration process.

### **Summary**

It is evident that both buyers and sellers of software have recognized that the marketplace needs SaaS. For the end user, SaaS offers significantly lower cost of ownership, immediate return on investment, and increased flexibility in terms of technology choices. For the vendor, SaaS creates opportunities to reach new markets, take advantage of recurring revenue streams, and compete more effectively with other ISVs. According to industry analysts, it is only a matter of time before revenue from subscription-based licensing overtakes revenue from perpetual licensing, and the impact of this shift on the software industry as a whole will be tremendous. Many software companies will find it difficult to resolve the business model, code, and operational challenges associated with SaaS internally, and will look to a third party for assistance. As the leading enabler of SaaS solutions, OpSource delivers the highest level of service at the lowest cost to help ISVs accelerate time to market and provide superior SaaS offerings to customers. For more information, please visit [www.opsource.net](http://www.opsource.net).

## About OpSource

OpSource™ delivers Software-as-a-Service (SaaS) and Web applications for on-demand companies, with hundreds of applications, millions of users and billions of transactions supported daily. OpSource On-Demand™, the leading Web operations solution, is defining how Web-based software is delivered. By choosing OpSource as their Web application delivery partner, companies are freed from investing in and managing the complex and costly infrastructure and services necessary to deliver applications over the Web. They can instead focus their resources on developing, marketing and selling their applications and services. Further, by using OpSource Connect™ companies can leverage Web services such as OpSource Billing CLM™, OpSource Analytics™ and OpSource End-User Support™ and integrate their applications with other SaaS applications over the Internet as well as with enterprise applications behind the corporate firewall. OpSource On-Demand is suitable for companies at any stage of growth, with any type of on-demand application. OpSource is the only company to offer Success-Based Pricing, a pricing model that allows businesses to begin with a modest minimum commitment and scale expenses as revenues increase.

Headquartered in Santa Clara, CA, OpSource has Web application delivery centers in Virginia, London and Bangalore. For more information about OpSource, visit [www.opsource.net](http://www.opsource.net).



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