Outsourcing With ASPs in the Internet Age

By Stewart McKie
Business Finance
November 1999, Page 61

Companies can either buy or rent business application software, such as enterprise resource planning (ERP) systems. Renting, or outsourcing, the software from an application service provider (ASP) has many pros and cons. Here's how to decide whether to manage applications in-house or hand them off.

What to Expect From an ASP

- *Web-site hosting and e-mail storage and routing services;*
- *ERP and other complementary business application hosting;*
- *Configurable e-commerce storefronts for selling on the Web;*
- *Access to procurement trading hubs for buying on the Web;*
- *Support for EDI (electronic data interchange) or other electronic transaction transmission;*
- *Secure Internet access to application servers (e.g., via a virtual private network, or VPN);*
- *Highly configurable application-level security to limit functional access;*
- *Template-based ERP system setup functions to reduce implementation time;*
- *Online training courses, manuals and frequently asked questions (FAQ) documents;*
- *Online application support via real-time Internet chat, e-mail and self-service help desks;*
- *Use of "failover" backup servers to provide application uptime 24 hours per day, 7 days per week, 365 days per year;*
- *Automated offline data backup scheduling for disaster recovery;*
- *Automatic load balancing to ensure optimum application accessibility under user load;*
- *Simple "add a new user" Web sign-up;*
- *User-based monthly application rental fee and low initial system setup fee (if any);*
- *Regular statistics showing user activity by application for usage analysis;*
- *Delivery of application reports, documents and alerts to users via e-mail;*
- *Electronic workflow via e-mail or a Web browser;*
- *Service level agreements (SLAs) to ensure that mutually acceptable service standards are met;*
- *Capability to automatically upload data to and download data from applications.*

Application service providers (ASPs) are the latest twist in the ongoing development of outsourcing as a means of deploying business applications. Outsourcing business applications reduces the burden on internal information systems (IS) resources; lets organizations use new business applications faster; and enables a smoother and more predictable cost model for running the applications over time.

ASPs combine traditional outsourcing principles with the Internet to offer a compelling alternative to buying shrink-wrapped software and implementing it in-house. Renting applications for a monthly fee from an ASP is certain to be part of the future of every business in the Internet age, so now's the time to understand how ASP-based outsourcing could figure in your company's technology planning.

A Brief History of Outsourcing

In the early years of business computing, outsourcing was known as "time-sharing." Expensive and complex mainframe computers were beyond the reach of all but the largest corporations. Consequently, many businesses shared the processor time of an off-site mainframe that was managed by a third party. This time-sharing, or "bureau," service typically rented the mainframe for relatively easy-to-manage tasks, such as payroll processing or receivables billing. Mainframes were used mostly for number intensive data processing rather than managing complete applications. When affordable minicomputers and personal computers arrived on the scene, demand for time-sharing dropped, and many processing tasks were brought in-house.

Time-sharing was not scaled back because it was a bad idea, but because PC technology reduced the costs of processing tasks internally. The practice of outsourcing tasks that are not part of an organization's core competency remains a sound one. However, today's business environment calls for timely, interactive access to applications and management information, something time-sharing lacked. Until the Internet came along, there was no cheap, nonproprietary means for a desktop computer to communicate with an off-site application host system and no standard client environment that could interact with the remote application.

The Internet provides a publicly accessible infrastructure that connects users to off-site application servers. Desktop Web-browser software provides a standard way to interact with an application hosted on a Web server. And neither the Internet nor browser software adds much cost to the outsourcing equation. Using this technology, software vendors and Internet Service Providers (ISPs) are reviving outsourcing for information management. Software vendors are providing "rent-an-application" services, and ISPs are expanding their business models to differentiate themselves in what has become a highly competitive environment.

What Is an ASP?

Conventional ISPs manage Web servers and e-mail servers that are connected to the Internet. These servers host Web pages for businesses and individuals and route e-mail messages. An ASP simply extends this model to include software programs, from a payroll or human resources module up to a full enterprise resource planning (ERP) suite. In addition to hosting Web pages and e-mail, ASPs use servers connected to the Internet to host applications. ASP customers can interact with a remotely managed application module or suite of modules via Web-browser software on an anytime, anywhere basis.

Simply hosting the application software remotely is only part of the job of a full-service ASP. The ASP has to perform a role that combines the responsibilities of an ISP, a traditional outsource service provider and a value added reseller (VAR) from which you   might have purchased a non-customized software application. (See What to Expect From an ASP, above.) In the near future, more ISPs will become ASPs; ISPs will partner with software vendors and VARs to offer ASP-like services; and vendors and   VARs will simply become ASPs. Buying prepackaged applications for in-house use, rather than renting them over the Internet, may become a thing of the past.

ASP Outsourcing Benefits and Drawbacks

Outsourcing something like an ERP application to an ASP has many benefits that apply to any type and size of business. The ASP maintains the hardware server "farms" (large facilities of servers) required to efficiently host complex applications and removes the need for companies to buy, maintain and upgrade in-house hardware. The ASP can make sure that the latest versions of applications are available to enterprisewide users without the need for costly site-by-site in-house upgrades. Using an ASP-based ERP system also means that the only client software required on the user's desktop is a Web browser, which eliminates the need to manage client software on a desk-by-desk basis. These three benefits alone could reduce the IS staff needed to manage an in-house ERP system by one or more full-time positions.

IS cost reductions are not the only reason why ASP outsourcing is attractive: ASP customers can sign up new users or workgroups for an application at almost a moment's notice without the need for complex infrastructure and implementation-resourcing planning.

New users can access the application without expensive upgrades to the local technology environment. This means businesses can get new applications, such as sales force automation or customer relationship management software, up and running faster; can bring on more users or users from remote offices more quickly; and can adapt more easily to merger and acquisition activity. Small businesses and geographically dispersed multinationals alike can capitalize on the benefits of application service providers. The basic pricing model of an outsourced ASP application, which usually includes an initial setup fee plus a monthly rental fee per user, simplifies cash flow management. The fees don't change from month to month because such variables as cost peaks due to upgrades are factored into the cost. Small businesses can afford big-ticket applications that would be too costly to buy outright and implement.

And ASP clients don't need to worry about operating system, database or application user-license fees and compliance because the ASP bundles all the license fees within the single monthly fee. However, there are some clear drawbacks to the ASP outsourcing model. Switching from an internally managed and accessed local- or wide-area network (LAN or WAN) to the publicly managed and accessible Internet means that access to outsourced applications may be subject to influences beyond your control. For example, heavy Internet traffic may slow application response times, and malicious hackers could get hold of accounting, employee or customer data. Furthermore, not every application available today has a complete or thoroughly field-tested Web interface, something that could restrict its availability to users. Also, a complex   system such as an ERP suite requires considerable time to configure to a company's specific business needs, and integrating an ASP-managed ERP system with complementary in-house systems, such as a customer relationship

management system, could prove challenging. Using an ASP doesn't make sense for companies that need to have a packaged application extensively modified for their specific needs. The objective of an ASP is to have every customer using the same code base, not to manage dozens of different customized versions. Since ASPs are in their infancy, service options and expectations are in a state of flux (see 10 Questions to Ask Your ASP below), so make sure the ASP offers a clear and comprehensive service level agreement (SLA).

---

10 Questions to Ask Your ASP

- **Is the application stored on a dedicated or shared server? Dedicated servers cost more, but contain only your application so traffic-load spikes from other users will not slow your access.**
- **How does the ASP ensure data security and availability, service reliability, and scalability?**
- **How does the ASP manage data backup and disaster recovery?**
- **Does the ASP offer a secure connection such as via a virtual private network (VPN)?**
- **Other than a Web browser, what hardware/software, if any, is required at your company's site?**
- **Who provides first-line support for the application: the ASP or the vendor?**
- **Does the ASP provide implementation and training services? If not, who does?**
- **How is the software upgrade process managed by the ASP?**
- **What happens if the Internet connection goes down or data is lost?**
- **Does the ASP provide clear reports detailing application access and usage statistics?**

ASP Technology Requirements

While the technology requirements for running an outsourced application over the Internet are daunting for the ASP, they are relatively straightforward for the application user. Depending on the design of the application being outsourced, your company should need no in-house application servers or database servers to support the application. Similarly, if the ASP is hosting a properly designed browser/server application, it should demand nothing more than a Web browser on each device (PC, laptop, handheld, mobile phone, etc.) that needs access to the application. Clearly, every user of the outsourced application requires secure access (via a firewall) to the Internet and, ideally, should have a full-time, high-speed connection using a virtual private network (VPN) managed by the ASP. Users also must have e-mail since this is how the outsourced application delivers reports, documents and business alerts, facilitates workflow participation and maintains a support dialogue with individual users. Given the fact that most businesses already have access to the Internet and e-mail, they won't require much new or even upgraded technology to take advantage of an outsourced application.

It may be too problematic to convert an existing in-house application to an ASP right now. But the next time your company is considering implementing a new application in your business, it may pay to consider outsourcing via an ASP as an alternative to an in-house implementation.

Next month: The surprisingly wide range of applications already available for outsourcing from ASPs.

Some ASP Resources		
Vendor	**Resource**	**Web Site**
ASP Industry Consortium	ASP industry news and trends	www.aspindustry.org
ASP Review	ASP quarterly report and biweekly e-newsletter	www.aspreview.com
Farleit Ltd.	ASP News Review newsletter	www.aspnews.com