Application service providers – the great leap forward?

Application service providers provide hosted software services via the web. Anne Quérée reviews their pros and cons for treasury management.

The term 'application service provider' (ASP) seems to have been first coined by research firm IDC. It defines ASPs as "service firms that provide a contractual service offering to deploy, host, manage and rent access to an application from a centrally managed facility". Last year, IDC predicted that the worldwide market for all ASP services would grow to about $7.8bn by 2004, a compound annual growth rate of 92.2%.

Riding on these predictions are the hopes of many software companies that have invested to create ASP services. Among them a number of the established treasury systems providers have moved quickly to add ASP options to the more traditional model of licensing and to install their treasury software on hardware owned and operated by their customers.

ASP services are a form of outsourcing. But, in the context of treasury management, it is important to distinguish between outsourcing the management of the software application and outsourcing particular treasury management tasks, such as foreign exchange execution or liquidity management. Some companies which offer the former are also either considering or involved in the second – usually with partners. But in this article, we will look only at issues surrounding ASP treasury offerings – hosted software services.

Another point worth making upfront is that the ASP treasury market is new and, as such, is growing and changing daily. For this article we spoke to a group of suppliers who are already marketing solutions – some have customers who have been up and running for a few months, while others are at an earlier stage in their marketing efforts. All are established players in the 'traditional'

> Another point worth making is that the ASP treasury market is new and, as such, is growing and changing daily

treasury software market. We do not claim to have spoken to every vendor who has – or claims to have – an ASP treasury service, but those represented here provide a reasonable view of what is currently available.

Our purpose is to provide some clarification of what ASPs can offer to treasuries, as well as a starting point for the 'buy or rent' decision now facing those looking to renew an existing treasury system or acquire one for the first time.

The following treasury system providers responded to our questionnaire and/or answered supplementary questions by telephone: Alterna Technologies (www.alterna.com); Richmond Software (www.richsoft.co.uk); SunGard Treasury Systems (www.sungardtreasury.com); Treasurynet Limited (www.treasurynet.co.uk); and Trema Group (www.trema.com).

What kind of companies will ASP treasury services suit best?
The received wisdom is that ASP services are particularly appropriate to the needs of medium-sized and smaller businesses. Most respondents agreed that their treasury offerings addressed firms typically smaller in size than their usual customer base, and for two main reasons:

● first, these companies might previously have been excluded from purchasing a treasury management system due to the cost of licensing the software in the usual way; and
● second, using the ASP model, preconfigured software versions can be delivered to larger numbers of users more cost-effectively, because time-consuming implementation is not required.

Treasury management software will never be a mass market product, but ASPs should allow suppliers to reach more companies than before. This is obviously an attraction to suppliers, not least because companies that license treasury management systems are not going to be in the market again for some years. So ways of reaching more first-time users are obviously important.

But several of the respondents felt that ASPs could also address the needs of larger corporates, and the reasoning here can be summarised as 'technology independence'. Mark Taylor, Chief Operating Officer at Alterna Technologies, says that it is not a function of size that determines whether companies use ASP services. And Colin McDonald, Sales and Marketing Director at Richmond Software says: "Internal IT structure barriers or lack of IT resources may (in the past) have imposed limitations on potential clients' product selection." In other words, ASPs might allow the treasury to choose the application software that suits its needs without having to either maintain specialist IT staff, or ensure the treasury system complies with the same technology platform as other in-house systems.

In general, respondents had been encouraged by the interest shown by these larger companies. One commented that such users are characteristically

Technical architecture and functionality

What is the technical architecture for ASPs?

The technical architecture of an ASP service is, by its nature, fairly standard. The application software resides on a server at the host site, as does each customer's discrete data. (Some companies and suppliers prefer a separate, dedicated server for each client). The host server should be protected by a firewall and there will likely be a firewall between the internet and the corporate client as well. Users access the service via their internet service provider or via a wide area network/corporate intranet.

SunGard's Principal Business Consultant Ken Lillie, also distinguishes between what he calls 'technical ASPs' and 'direct ASPs'. The first is a tailored, user-specific service, hosted by the supplier. The second (for example, SunGard's e-treasury.com) is when a user simply 'plugs in' to the central database of the supplier, enabling a very quick implementation for a small treasury or a larger treasury with many specific transactions.

Aside from security issues (see below), the likely performance and reliability of ASP services require careful investigation because:

- using an ASP puts performance beyond the immediate reach of the treasury; and
- the web is, after all, sometimes clunky and unresponsive.

From a technical perspective, the respondents answered these concerns in the following ways:

- **speed of access** – ASPs need to provide high-speed access between their servers and the internet. (As an example, through its hosting arrangements, Treasurynet has access to a 600-megabit backbone connection to an internet node.) But services will only be as fast as the slowest link. Most corporates have a reasonably fast connection to the internet on their side. Some users have found ASP operation much faster than running the same software on a LAN;
- **'look and feel'** – there are technical as well as functional differences between the different systems delivered by ASPs. Treasurynet, for example, claims its offering was written specifically to operate over the internet/corporate intranet and is not a modified version of a Windows client/server (LAN) system. It uses Microsoft Active Server Pages and client HTML with Java scripting. "This architecture allows the system designer to use both server-side and client-side processing which is extremely important to achieve optimum performance and usability over a wide area network," says Geoffrey Corston, Director of Treasurynet.

  Richmond uses Citrix Metaframe to deliver a service that looks and operates like a Windows product. According to Richmond Software's Sales and Marketing Director, Colin McDonald: "This ensures only the required data is delivered across the line."

  SunGard, which has acquired a number of previously competing treasury management systems (notably GTM and Quantum), can deliver its entire product suite as ASP services.

  Alterna's Auros is primarily a transaction processing 'engine'. It was built for web/intranet operation, and integration with other in-house systems and external systems is a particular focus; and
- **reliability** – do not assume that your treasury ASP is hosting the service at their own site. Co-locating (also known as 'web-farming' or 'web-hoteling') is becoming the norm. This involves locating servers at remote sites where many businesses can share the costs of specialist physical and hardware security (back up servers at linked locations, emergency generators, CCTV, etc) as well as high-speed communications. Respondents argue that this means service reliability can be well above anything achievable by an in-treasury located system, where there will usually be one server plus back-up and minimum technical support in case of problems.

What functionality do ASPs offer?

Obviously, the functionality available varies between systems and suppliers. In general, where ASPs are particularly targeting medium-sized companies with ready-to-go services, it might be supposed that they offer tailored versions of their 'mother' systems. This is true in the case of Trema, for example, whose Finance KIT software offers extensive functionality that can require considerable set-up. Trema will be offering a number of pre-configured versions via its ASP service to suit different businesses and industries.

Richmond stresses it can offer the full functionality of its Millennium product range and SunGard makes the same claim across its product suite. Its direct ASP service, e-treasury.com, offers basic cash management functionality. For the time being, this service is only suitable for US companies or other companies wishing to manage US-based activity.

Security issues

First, consider the security of the application itself – any company that has already used a treasury or a payment system should be clear about the issues involved here and have made their own decisions about minimum requirements for access profiles, password changes, separation of duties, audit trail and so on.

Then there are two additional factors to consider in an ASP environment – security of service providers and the security of the networks, including the internet, that carry data.

Mark Taylor, Chief Operating Officer at Alterna Technologies, makes the fair point that most fraud is internal. "Having hardware and systems externally mitigates this risk," he suggests. He points out that external specialist providers can do more to protect systems than internal ones. Strict service level agreements can also help by defining legal responsibilities in advance of any security breach. Although this is not a solution, it provides a degree of comfort. And third party testing/quality assurance might also be helpful.

Security is still an emotive issue where the internet is concerned – doubts have recently been renewed by some well-publicised security breaches at internet retail banks. These problems have tended to manifest themselves in the kind of completely unprotected environments – lacking virus protection, let alone firewalls – characteristic of many home computing set-ups. In fact, internet security is now reasonably understood and clear methodologies and tools are available to provide adequate security in most situations. Most businesses have such methodologies and tools in place. They include firewalls, secure sockets layer combined with strong encryption, and server certificates.

There are, though, perhaps two risks that do not occur on closed networks. One is new viruses – the speed with which the so-called 'love bug' spread earlier this year was humbling.

The second is machine independence. If, as our respondents suggest, ASP services offer flexibility because they can be accessed from any location /machine, then there must be risks here, since it is not possible to control the security environment outside the organisation. There is a trade-off to be made. It may be that, to achieve adequate security, companies need to restrict access to an agreed number of machines/locations, or introduce some additional security procedures in the form of individual digital signatures to authenticate the user. ∎

open to new ways of working.

What are the main benefits to users of the ASP model?

The most obvious benefit of using an ASP is that there is no lengthy implementation process to schedule, cost and project manage, since ASP services are accessed from a standard web browser. Adding more users or sites should also be quick and easy. That said, there will, of course, be some initial set-up work – your data will have to be loaded on the ASP's server and security procedures set up, tested and approved.

That no capital investment is incurred is obviously a key selling point from the supplier's point of view. Users will be concerned to ensure that total costs of ASP services compare favourably with licensed software. In this regard, the respondents variously pointed out that:

● no special hardware investment is required, such as high-specification PCs or in-house servers; and
● similarly, no dedicated IT resources are needed to support either implementation or day-to-day operations.

Director of Treasurynet Geoffrey Corston comments: "Installed model applications have become technically over-complex in order to comply with a range of operating systems, network environments and database management systems. Concentrating suppliers' resources on the functional end of applications leads customers to obtain better value for money."

According to SunGard's Patrick Coleman, Regional Sales Manager of UK and Ireland: "The SunGard ASP offering is also about providing customer choice, and extending our service offering to a broader range of enterprises.

For example, the service would appeal to an organisation which may be uncertain about the benefits of a full implementation, and which, by taking an ASP service will be able to gain some of the benefits of a system without the up-front cost of ownership. Later they may decide a full service or in-house solution is more appropriate."

Clearly, users will need to cost all parts of ASP offers carefully to ensure best value is obtained. (See also costs, below.)

The respondents also cited increased operational flexibility as a key benefit of ASP solutions. For example, ASP services will be accessible from any PC with a web browser; new users can be easily added; upgrades can be managed remotely; and the services are highly scalable. Trema Group's Stellan Råberg, Director of Business Development suggests that ASPs could make it easier to integrate new organisations following mergers or acquisitions, and that standard configurations can provide an easy match to particular circumstances without the need for lengthy set-ups.

Operational issues

Råberg suggests that there are three components to an ASP offer: the treasury system functionality itself, application support, and the hosting services.

Application support and the arrangements for hosting the services raise some new issues for those considering ASP services. Råberg points out that most installed treasury systems licences include Level 2 support – in other words, some technical support for the system will always be available in-house.

But in an ASP environment, the economic model is built partly on companies being able to save themselves these internal support costs. So users will probably need their service provider to be ready with Level 1 support – ie, to support every enquiry or problem a user may have. Trema is investing to offer this level one support via its knowledge centre.

The hosting arrangements also need to be explicit and well understood. For example, where will the servers be housed? (It can make a difference to costs and performance.) What are the arrangements for scheduled downtime – and the penalties for unscheduled downtime? Is support available 24 hours a day? The questions are familiar, but the relationships may now be more complex and less close.

Costs

Treasurynet charges a monthly subscription based on transaction volumes. All the other suppliers in our survey charge an upfront fee plus a monthly subscription. SunGard's basic service, for example, eTreasury.com, advertises a one-off fee of $3,500 and monthly subscription of $1,000 on its website.

The charges variously include an element for software licensing, number of users and system set-up.

Some suppliers mention functionality as a variable in the upfront fee, while others consider this an element of the monthly subscription. Other factors affecting pricing mentioned by different respondents include: square footage for hardware at hosting sites; communications infrastructure and maintenance; size of database; complexity of banking interfaces; and accounting system connectivity.

Any cost-benefit analysis of ASP versus 'traditional' licensing of treasury management software will be complex, as it will need to include all these elements and a calculation of resource savings in-house. One consideration here is maintenance of desktop software.

According to SunGard's Coleman: "Deployment of web-based applications is $5,000 to $7,000 cheaper per desktop than distributing applications using conventional methods." He says these figures are over a five-year period and assume "large numbers of users though".

Given that one of the benefits of ASPs should be the flexibility they give users to scale-up or change providers as their requirements change, it will be important to ensure that entry/upfront costs are not too high relative to the monthly charge, since this element will have a 'tying in' effect.

Is the hype justified?

The ASP is currently only rivalled by that other acronym, WAP (wireless application protocol for mobile internet access), in its ability to attract hype, perhaps because both developments represent steep changes in technology, similar to that experienced in the 1980s as a result of client/server architectures. There is no question that the ASP is an important and exciting development – as well as being a useful marketing tool.

But when we asked respondents why they thought ASPs were appropriate to the treasury systems market, they stressed the bottom line benefits outlined above. This is obviously where treasurers, too, will be focusing part of their attention – ASPs should remove some wasteful overhead for the treasury department, along with many of the technical headaches. But choices about functionality, connectivity and reliability are the same as they always were. ■

Anne Querée is a freelance journalist and business writer.