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Outsourced CRM: Why it will increasingly rely on application service providers

Wendy Hewson

Abstract

Over the last two years, hosted software and the application service provider (ASP) model have been one of the hottest topics in IT. This paper looks at the evolution of the ASP and the implications for CRM. Certainly CRM vendors seem to believe that this concept offers potential, with most major companies having announced an ASP strategy.

The key argument of this paper is that the ASP market is split into two very different models: the one-to-one and one-to-many ASP models. Although most analysts combine these models under the ASP umbrella, in practice they are poles apart, appeal to a different sizes of companies, provide different benefits and incur different risks. They also imply fundamentally different criteria for choice of ASP.

What is an application service provider?

The start point is that an application service provider (ASP) will provide software applications on a rented basis. Business applications are delivered to the user through a browser[1] and managed centrally by the ASP on a real-time, online basis. The technology is shared by several users to reduce costs and eliminate the need for the application to be physically located on a single corporate system. ASPs claim to help organisations avoid the upfront costs of purchasing applications and the headache of implementing, maintaining and upgrading them.

Definition

ASPs have roots in business process outsourcing and service bureaux. Organisations of all sizes have been outsourcing call centres, payroll and customer data management etc to service bureaux, a trend which increased in the 1990s as companies decided to focus resources on core competencies and divest or outsource the rest.

From origins in routine batch outsourcing . . .

Over the same period communications between service bureaux and clients have progressed. Originally most bureaux sent users data in flat files or hard copy reports. This meant bureaux were most effective for highly routine batch-type applications, such as payroll processing, that did not need real-time digital communications.

In the early to mid-1990s the advent of client server technologies promised users direct access to the outsourced programmes, reports and analysis. But at the same time, low-speed and narrow analogue bandwidth communications proved to be a significant handicap. The cost and complexity of establishing the technology and networks needed for fast,

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reliable and secure data communications meant that, in general, take up was low.

Now, the advent of the worldwide Net, high-speed data transfer and broadband communications combined with browser technologies have opened up a new vista for advanced service management systems on a virtual or time-shared basis and opened the doors to ASPs.

The one-to-one versus one-to-many ASP model

'It's a totally confused market-place, a free-for-all. Everyone is calling themselves ASPs.'

Rita Terdiman, Gartner Group

Over the last two years the ASP market has evolved to include a bewildering variety of products, services, pricing and delivery models. However, of this array the most important distinction to be made is between the one-to-one and one-to-many ASP models. Although most analysts combine these models under the ASP umbrella, in practice they are poles apart. As explained below, the one-to-one ASP model will appeal to a different size of company, provide different benefits and incur different risks from the one-to-many. It also implies fundamentally different criteria for choice of ASP.

Two very different models

The first difference between one-to-one and one-to-many, as shown in Figure 1, is the extent of the customisation of the software applications provided. Many ASPs began as 'one-size-fits-all' solutions delivered 'out
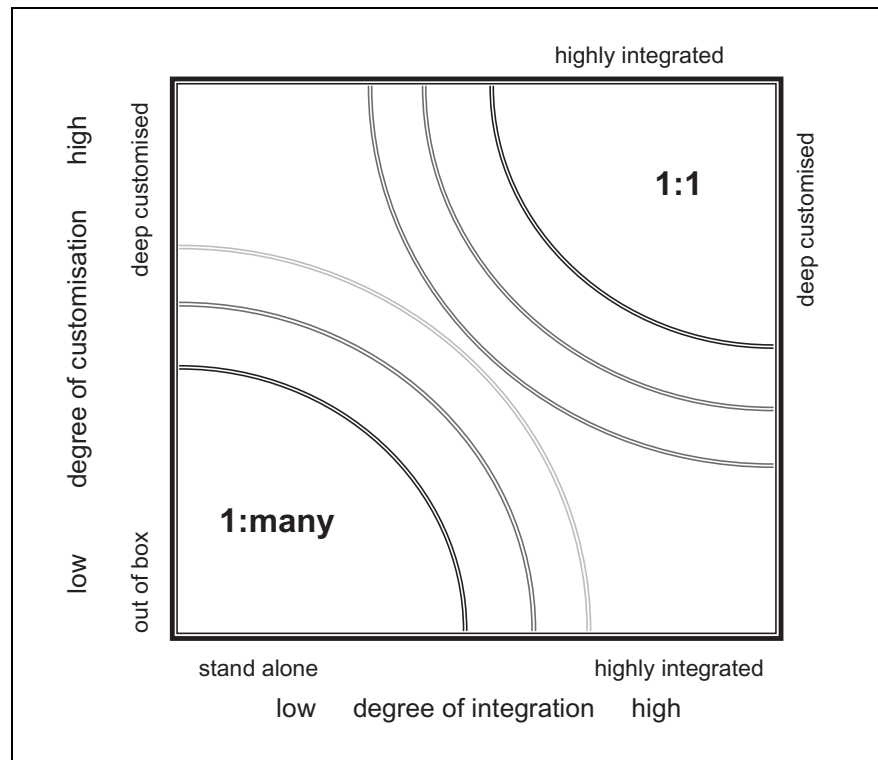

Figure 1: One-to-one versus one-to-many ASP models

of the box'. By way of contrast, enterprise applications and CRM in particular require extensive customisation to reflect company and industry practices. They will be deeply customised, with different configurations for different countries, business units and functions.

The need for integration

The second difference, also shown in Figure 1, is the extent to which the applications are integrated with other applications. Hewson research[2] shows three compelling reasons why the CRM space is moving towards creating solutions that integrate front-office interactions with back-office information.

Ineffective Web strategies

— Failures around Internet initiatives point out the importance of multi-channel CRM programme approaches embracing process and integration. The near panic that occurred in 2000 concerning 'Internet competitiveness' manifested itself in many ill-advised strategies and investment decisions. For many companies the only result was the building of attractive websites with no integration either by manual process or technology to other parts of the organisation. Hewson's own e-business surveys[3] and those of other organisations constantly show how ineffective the deployment of most Web strategies has been.
— New realism in the market shows great interest in strategic investment in 'joined-up' CRM and end-to-end processes. The fact that customer behaviours and expectations have changed forever is inescapable, and this brings dependence on CRM for improved service levels, multi-channel access both to and for the customer and the best possible mechanisms for transacting trade.

A wider definition of CRM?

— Boundaries of CRM are perceived to widen to at least 'involve' supply-chain collaboration, transactional data and analytics. The advance of a much wider definition of CRM will be seen first in the enterprise space and cascade down very quickly through the enterprise market. The impacts of this can already be seen as a number of vendors are punished for having applications that are either too component based or too focused on the Web as a channel or because they are seen as financially unviable. Companies with elegant, integratable architectures such as Chordiant, Point, PeopleSoft, e-Ware and others will do well.

The result is a clear distinction between the one-to-many ASP model which delivers point applications 'out of the box' and the one-to-one ASP model which delivers customised applications integrated to other enterprise systems.

ASP market growth predictions

To understand just how important the ASP model will be in the future, let us take a quick look at the analysts' predictions.

Deloitte Consulting reckons the ASP applications market in the USA will be worth $27bn by 2003. Other analysts are more conservative. Forrester predicts $11.3bn by 2003, IDC $7.8bn by 2004. Ovum's, for 2004, is that European ASP market will be worth $8.7bn and the worldwide market $44bn.[4]

The growth of CRM ASPs . . .

These growth forecasts combine the one-to-one and one-to-many ASP models across all applications. One exception is IDC. Their forecast for high-end ASPs,[5] which can be taken as similar to the definition of the one-to-one model, is that revenues across all applications will rise to $2bn by 2003.

How much of this will be for CRM applications? Back in December 1999 Forrester forecast that CRM will represent 64 per cent of all hosting revenues. AMR Research estimate the CRM ASP market will be worth $5–8bn by 2004.[6] However, these forecasts need a particularly large pinch of salt. The growth of CRM ASPs is affected by two underlying fundamentals.

— The underlying growth in spend on CRM applications. In 2001 we are seeing CRM spend reduce from the heady 100 per cent growth in 2000 to 6 per cent at most. Any ASP forecasts based on the 100 per cent run rate are likely to be significantly flawed.

— Companies' willingness to adopt the ASP model in general and for CRM applications in particular. To date companies have been slower than anticipated to buy into the ASP model and their future intentions, judged by wildly varying predictions, are by no means clear to the forecasters. Contrast, for example, Ovum's claim that 66 per cent of British and German businesses plan to use an ASP in the next 18 months with Forrester's claims that most large companies would not consider using an ASP. Contrast too CommerceNet 's study into the uptake of outsourcing in which 73 per cent of companies said that they were either currently outsourcing or were planning to outsource some of their e-commerce operations.[7] Among the earliest adopters are travel, financial services, real estate and other industries that rely on a client/agent model of customer interaction, but there is no clear trend as to which industries will ultimately adopt the ASP model. Adoption of the one-to-one ASP model for CRM is likely to lag behind overall adoption rates because of fears of security of key customer data, the perceived complexity of CRM projects, in-house staff's desire to develop marketable experience in CRM and the reluctance of organisations to outsource a core competence of the future.

. . . **may not follow publications** . . .

. . . **for several reasons**

Despite the pre-existence of the software rental market and well-worn arguments for outsourcing non-business-critical applications to a third party, actual user references remain few and far between.

At the time of writing PeopleSoft claimed five customers in the USA from its direct operation, and in excess of 100 worldwide through partnering arrangements. In Europe the market is more complex, with different adoption rates in each country.

Looking at a selection of CRM vendors, SiebelNet was launched in the first half of 2000 and claims that demand has not been significant to date. Kana ceased hosting in June 2001 having gained 150 ASP clients. Of these one-third plan to move to Kana's ASP partners, one-third to move the application back in-house and one-third are undecided. RightNow,

which operates in the same space, claims that 700 out of its 1,100 customers use it for hosting, and 80–90 per cent of all new customers.

Benefits from ASPs

The one-to-one ASP model offers entirely different benefits to the one-to-many. Figure 2 summarises these differences.

Speedy implementations

In the CRM space, we are finding that one-to-one applications can be rapidly implemented for Web, mail and phone-based contact centre solutions and Web-based personalisation solutions. The ASP already has the software solution installed and hardware, communications and security infrastructure in place. All that is needed is to transfer the client's data into the ASP's data centre, establish a Web portal for the customer to access the application and train users. The one-to-one ASP model has particular appeal to small businesses and Internet start-ups that may lack an IT infrastructure entirely and are focusing on time to market.

Time taken in training

However, it is easy to underestimate the time required to train users, particularly field sales. Peter Jackson, president and CEO of Intraware, an online software CRM vendor, uses USi to run Siebel's salesforce automation software. But although they were up and running in 90 days, the time saved in deployment evaporated once the time taken to train staff had been factored in.

In contrast, Salesforce.com claims that Dow Jones Newswires implemented its online CRM service across all customer-facing departments in the North American sales and customer support operations within a month.

In consumer-type environments, the ASP model can reduce time taken to cleanse and match customer names and addresses against external registers or data sources which, by their very nature, are continuously being updated.[8] Before the advent of ASPs, companies were either having to take fixed-interval (for example quarterly) updates of these files and match to the reference data through in-house systems or they were physically sending files to be matched against the reference data by a computer bureau.

Advantages of ASPs in external referencing

The particular advantages of the ASP in this area are that it reduces the account servicing costs of the computer services bureau, improves turn-round and reduces price, and that the reference data are now more current than they used to be when refreshes of these files were distributed on a fixed-interval basis (such as the postal address file).

For one-to-many applications, ASPs can save time by leveraging existing hardware network and security infrastructures and through bypassing the time required to recruit appropriately skilled staff.

Cost savings

Here the potential for confusion is very high! Gartner predicts that the ASP model allows enterprises to make between 20 and 40 per cent savings on application costs based on a realistic estimate of internal systems support charges — this has yet to be proven in the real world.

One-to-one	One-to-many
Speed of implementation	
* Pro: avoids project staff recruitment delay	*** Pro: IT infrastructure and application already in place and ready to run Con: user training
Cost savings	
* Depends on expertise of ASP and status of existing hardware and communications infrastructure	*** If kept very simple
Ability to scale up	
*** Increased usage may negate cost savings	*** Increased usage may negate cost savings
Reduced risk of CRM project failure	
* Risk increased by limiting choice of supplier Contractual redress irrelevant	*** Only if good match with existing practices

*Potentially minor benefit

*** Potentially significant benefit

Figure 2: Benefits from ASPs

**What are the ASPs
economies of scale?**

One potential problem is that few enterprises look at the real cost of managing CRM applications, including internal systems and database support. If you focus on the licence cost only, you may see few cost advantages from the ASP model. Licence costs account for less than 30 per cent of the total cost of a CRM system ownership; the most significant costs are for hardware and communications infrastructure configuration, integration, process re-engineering, change management and lifetime support and maintenance. Depending on how much of this has already been done or is in place, the economies of scale provided by the ASP will vary on a case-by-case basis. Cost savings from using ASPs will be greater if the enterprise has a substantial investment in leased-line connections. Many CRM applications require intense application access, an untenable position if using a time-cost-related connection like ISDN or modem dial-up.

In theory, one-to-many 'vanilla' implementations should provide maximum leverage of the ASPs fixed-cost infrastructure. But this is proving difficult to achieve in CRM. Corio, an ASP, says this runs counter to its strategy of providing tailored solutions made up of best-in-class components, but even it does not want to customise too much. 'We must give customers what they need, but in the context of an offering we can replicate,' says Corio founder and chief strategist Jonathan Lee.

Other factors affecting costs savings will be the ASP's industry expertise, as evidenced in process and configuration templates, and its expertise with relevant application adapters. At present cost savings from these factors are rare as the majority of ASPs shy away from customisation and lack the necessary expertise and resources.

Reduced risk of CRM project failure

Some ASPs such as Semio claim to reduce the risk of project failure. 'You are no longer selling software. You are selling a complete solution as a service, and you own responsibility for the quality of the results,' claims Gail Claspell of Semio, who predicts that the trend toward ASPs will be largely driven by a shortage of IT resources.

**Doubtful claims of
risk reduction**

Undoubtedly the expertise needed to deliver CRM systems is thin on the ground. For highly configured and integrated CRM applications, many organisations lack the skills in process analysis, configuration, integration, data analysis, transfer and cleansing required to leverage their investments in CRM technologies. These initiatives require a variety of expert suppliers to work closely together. However, while some ASPs will provide these short-supply skills and expertise, the downside is that the ASP delivery model for one-to-one is as yet relatively untested, and choosing to use an ASP further restricts an already limited choice of suppliers. Granted the ASP may provide a contractual redress if things go badly wrong, but in a competitive market this is likely to be too little and too late.

The author's assessment is that risk is only reduced when you can select a one-to-many provider of applications that match your existing CRM practices.

Ability to scale up

> 'More and more, there's a competitive imperative for growing companies to look and act like the larger company they want to become.'

<div align="right">Perry Dembner, Applicast</div>

ASPs, like outsourcing, offer companies the ability to scale up rapidly while maintaining reliability. However, as volumes and usage increase, pricing contracts may result in the cost advantage disappearing. There is no such thing as a free lunch!

Types of CRM applications suited to the ASP model

Which applications are suited to which model

It is probably too early to predict with certainty which CRM application areas will be most suited to the one-to-one and one-to-many ASP models. Figure 3 shows the types of CRM applications available, how they integrate together and which could be delivered through a one-to-many ASP model. Those in tinted boxes are prime candidates for the one-to-many ASP model and include mobile sales, call centres, contact centres with limited after-sales service, outbound mail and fax campaigns, customer segmentation, campaign planing and optimisation, strategic performance planning for brands and product portfolios, plus the supporting technologies such as quick counts etc for analytical CRM.

This assessment has been based on experience to date and the extent to which applications need to be configured and integrated compared to those which are able to stand alone. To date, there has been a growing use of ASPs for applications that support a large number of distributed users. Expense report management and salesforce automation are prime examples.

Who are the major ASP players in CRM?

Though potential customers may be sceptical about ASPs, all sorts of IT companies are spotting opportunities presented by the model. On the supply side, successful delivery of CRM using an ASP approach involves a combination of:

The requirements for CRM ASP

— hardware and network infrastructures and security
— CRM software
— CRM software configuration
— project management
— business process redesign
— systems integration
— data cleansing and transfer
— implementation
— end-user training
— systems maintenance and administration
— help-desk support.

In practical terms this means that the ASPs are working with major players, including those described in the following sections.
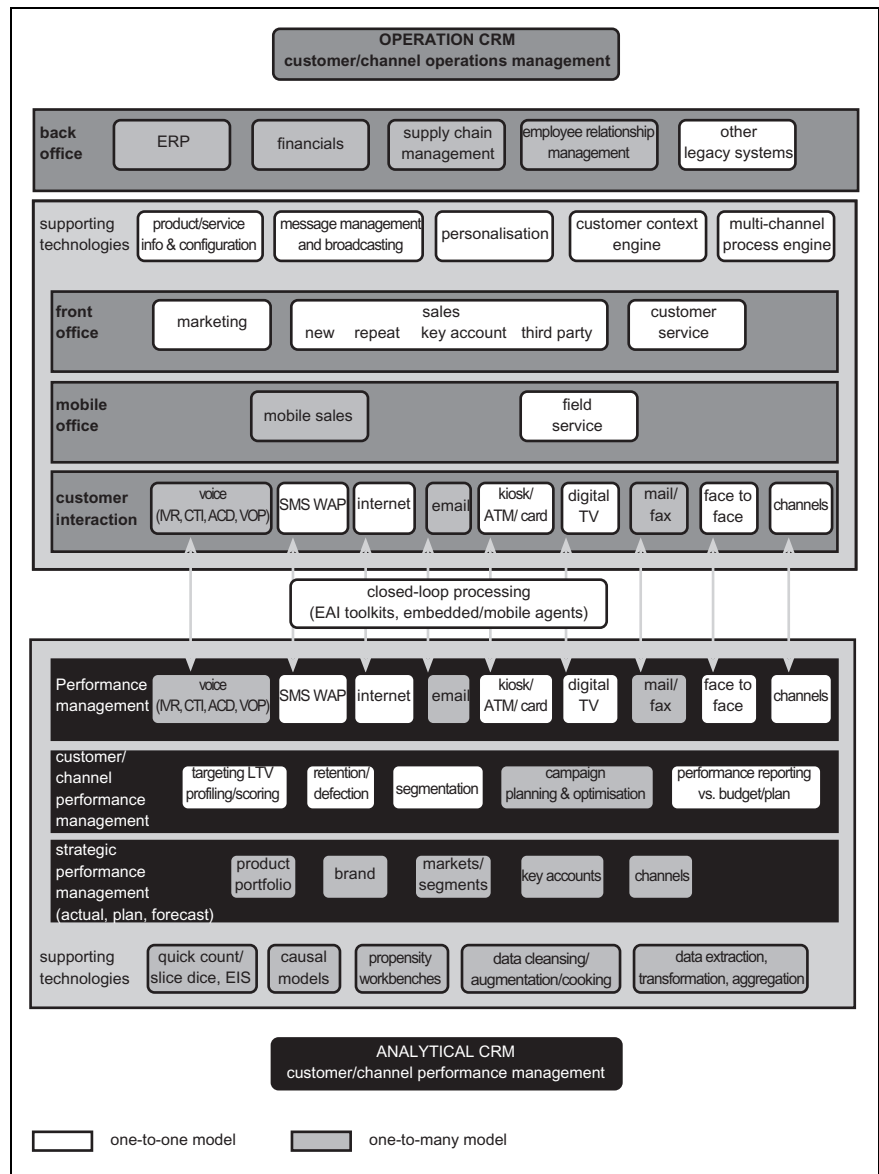
Figure 3: Types of CRM applications and ASP delivery models

Independent software vendors (ISVs)
In the CRM arena, vendors as diverse as Siebel, PeopleSoft, SAS Institute, Brio Technology, BroadVision, RightNow, Oracle and YesMail.com have embraced ASP models.

At first, software CRM vendors like Oracle thought they could go it alone, but later back-pedalled when they realised the way forward was through partnerships. The ISVs are investing in ASPs; for example, PeopleSoft has a stake in Corio.

Some of the leading players . . .

Many applications being hosted today were not designed for the ASP model. In contrast, we are seeing a new trend of applications written from the ground up for a hosted environment. These include a Web-based thin

client, remote management, multiple tenancy and shared locks for different clients.

Consultants and systems integrators

These are needed to configure and integrate one-to-one ASPs for clients. A growing number of ASPs are either partnering with consultancies or bringing consultants on board. Major systems integrators are looking to broaden their footprint by partnering to become business process outsourcers/application hosters/system integrators. Accenture is partnering with companies like eLoyalty and eConvergence to create hosted CRM applications targeting certain verticals. Call centre giant Nortel partnered with PricewaterhouseCoopers and Telstra in Australia and is expected to bring a hosted integrated call centre application to North America.

Telecoms companies

These would like to see the ASP model take off because it generates network traffic. GTE, Sprint, MCI and U.S. West are cultivating ASPs. Others such as U.S. West are making major investments in them.

Internet service providers (ISPs)

For ISPs, which already manage the hardware and network infrastructure to support remote access over the Internet, leasing applications is a natural extension of current business. Many ISPs, including America Online, SBC Communications and UUnet, have announced plans to enter the ASP market.

Major hardware vendors

Applications have to run on servers, and Compaq, Hewlett-Packard, IBM and Sun have developed ASP programmes.

Communications equipment suppliers

These are seeking to increase hardware sales. Major players, including Cisco Systems, Lucent Technologies and 3Com, have announced initiatives to support ASPs.

Choice of ASP

For those looking to use an ASP to supply unintegrated CRM software mostly out of the box, the choice will be driven by the best match to desired CRM practices, cost, speed and security.

For one-to-one CRM the choice of ASP is significantly more complex. Organisations need to take into account a variety of factors, including:

— partnerships and range of applications offered
— the longer-term viability of the ASP
— service level agreements
— security.

Partnerships and range of applications offered

Because CRM implementation can be fraught with unforeseen challenges, you have to consider the ASP's ability to move quickly and partner. As has been seen, for enterprise-level projects the ASP may rely on the software vendor for applications and a systems integrator or consultancy for strategy, configuration and integration.

The risks of point solutions from different vendors

For heavily integrated CRM systems, the range of applications the ASP offers is critical. While many ASPs claim to offer the 'best of breed' among a variety of productivity solutions, in practice this is only those applications for which they have negotiated licensing agreements. However, what happens if a company wants an application not available from its ASP? Just as with licensed technology stacks, a company renting many different solutions from one or more ASPs must find a way to make the different software programs talk to each other. Renting point solutions from different CRM vendors may become problematic in itself, dealing with multiple CRM vendors, disparate upgrade cycles and version changes.

Right now many companies are choosing ASPs on a solution-by-solution basis. Better to choose an ASP which offers:

— integrated 'best-of-breed' point solutions
— partnership with a systems integrator that has relevant vertical CRM expertise
— a complete suite, such as PeopleSoft, SAP and Oracle.

The longer-term viability of the ASP

We can anticipate rapid convergence of ASPs, with the smaller niche players particularly vulnerable to acquisition or business failure. Take a careful look at two things: the company's revenue stream and the number of live customers. Even if a company has a lot of cash it could easily burn through that very quickly. ASPs are a very capital-intensive business needing to build data centres, hire staff, build support centres and lease the hardware, software, racks and networking. The result is a significant cash outflow before money starts to come back.

The life expectancy of an ASP

Look for funding, ownership and the number of satisfied repeat live customers. Beware of ASPs that have underpriced to gain customers under management and market share.

Service level agreements

The ASP's focus on service and taking over maintenance responsibilities means that the relationship between you, your customer and your enterprise ASP is paramount.

Structuring a service level agreement

Service level agreements need to become very definitive, in terms of who owns the experience and what the escalation and resolution processes are. Service level agreements began being very technology oriented, aiming to provide the 'five nines' — 99.999 per cent up-time. In Europe, experience in outsourcing means that sophisticated service level agreements are more commonplace than in the USA. For CRM, these SLAs need to focus on the business rules surrounding the relationship

Physical security in data centres

Multilevel access controls including electronic card keys, individual PIN codes and biometric scanners

24/7/365 monitoring through on-site security teams, perimeter alarms and closed-circuit television systems throughout each facility

Redundant power, environmental systems and network connectivity

Fire, smoke and fluid detection and suppression

Fully isolated, tamper-proof customer systems

Architectural enhancements including seismic bracing

Network security measures

Perimeter defences designed to stop threats before they even enter networks, including firewalls, internal and external routers, switching hubs, packet filters, access control lists and traffic scans

Default deny policy: access not expressly permitted is prohibited, with a drop of all denied traffic; only services necessary for the operation of your site will be running

Defence in depth: multiple layers of security so that a compromise at one level does not compromise all systems

Routine network scans

Flow-control and choke-point services for enhanced security

Systems security measures

Hardened operating system with security checklist

Rules of least privilege

Limited transfer of trust

Integrity checks with automated alerts

Application security measures

Digital certification providing site security through encryption

Application-dependent client authentication

Maintenance access only through back-end virtual private network (VPN)

Staging server for customer content management

Figure 4: A checklist of physical and data security systems

between you and your customer and your customer's experience. For instance, there are key times of operation that are more important to some businesses than 24-hour up-time.

Security

Many companies perceive that shared services means a loss of security. About three years ago, DuPont outsourced much of its IT operations but kept its research computing in-house, deeming the data too confidential to let it run outside of its firewall.

Most CRM vendors have so far failed to convince potential buyers that security issues have been adequately addressed. However, some top-end ASPs offering one-to-one models, such as Aspective in the UK, and specialist Internet data centres are offering security expertise over and above that normally found in most corporates. Figure 4 shows a checklist of the security measures you should expect to see in place.

Conclusion

The ASP industry is still in its infancy, with pricing and delivery models evolving but as yet unproven, and fears about security have not been removed.

The complex model is not yet proven . . .

For more complex CRM applications, it is probably too early to argue that ASPs can provide scarce resources and expertise. Those ASPs which support the one-to-one model offer the same resources on a traditional consultant systems integrator basis too, and have not yet achieved economies of scale in these areas which can be passed on to clients. Avoiding capital investments in the hardware, software, network infrastructure and skilled employees will have balance-sheet and cash-flow attractions to some larger corporates, but these are likely to be in a minority.

. . . **but the simple model offers advantages**

However, for companies seeking to implement point CRM solutions rapidly the one-to-many ASP model offers significant advantages in terms of speed of implementation, cost savings and ability to scale up. These benefits will be most significant when the CRM applications on offer closely match existing practices.

REFERENCES

1. For marketing applications, an additional variant of the ASP model in is use today. The software is owned, maintained and supported by the ASP but is physically hosted on the client's hardware.

2. Hewson Group (2001) *European Market Size and Trends for CRM in 2001*, May.

3. For example see 'Scores on the UK Doors', May 2001, www.hewson.co.uk.

4. Ovum's predictions are significantly higher as they include both applications and services.

5. IDC defines a high-end ASP as a service firm that goes beyond hosting and maintenance of simple applications to manage complex application environments by providing services such as upfront consulting, customisation and extension of the application and ongoing technical support.

6. Forrester (1999) 'Sizing App Hosting', Forrester Research, December.

7. This was based on a sample size of 1,000 respondents which were all selected from the eCommerce arena.

8. Examples of such files are the postal address file, the electoral register, the phone book and the various credit reference databases.