ASP

Application Service Providing

SWOT analysis

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Introduction

This document describes the ASP business model, in general terms the underlying business case and a SWOT analysis of the business model.
The aim of the document is to describe ASP as a general framework for outsourcing numerous business processes and the ICT infrastructure components these processes make use of.

The ASP business model graphically:

End – to – end service providing
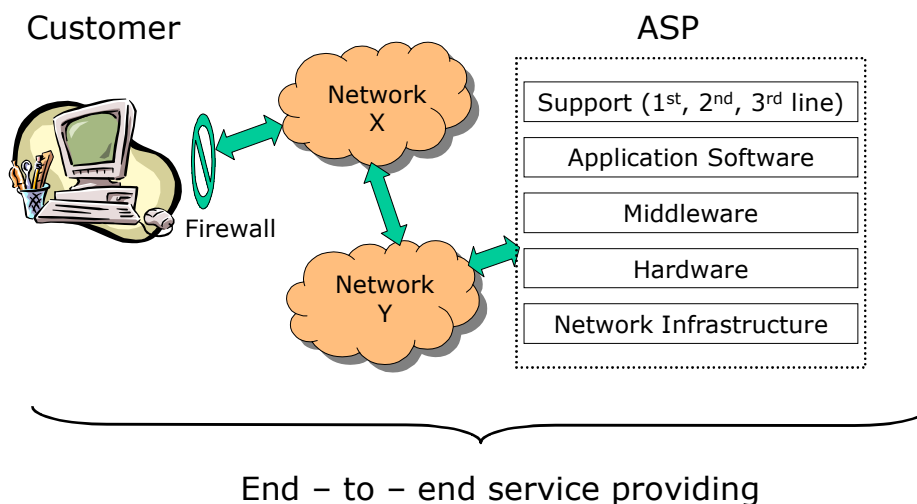
ASP; a definition

"Application Service Providing is the business model in which customers outsource (parts of) their business processes and ICT infrastructure to an Application Service Provider and buy in services that support these business processes as agreed in a Service Level Agreement".

The Application Service Provider provides end-to-end service, meaning all services from the point of presence of the ASP to the point of presence of the customer's workstation. These services typically consist of network connectivity, hardware support, software (application) support and service desk support.

Note: The ASP business model is different from the also popular term 'hosting'. The main difference is that hosting does not involve end-to-end service providing.

End-to-end service providing

End-to-end service providing means, from the perspective of the customer, that he or she no longer has to bother with the expensive and troublesome activities of managing ICT infrastructures. Customer only have to deal with defining and acquiring services that support their business. Moreover, the customer can define these services in business terms that are familiar, instead of the often technical ICT vocabulary.

Customers should define their business requirements in terms of functionality, availability, security and performance. All the rest (recovery, contingency, support, etceteras) is the responsibility of the ASP. Off course, the ASP has to convince the customer he has these processes in place.

The ASP model

The ASP Business model is based on outsourcing business processes and the underlying ICT Infrastructure to a third party Application Service Provider. Customers acquire services, consisting of the outsourced processes and Infrastructure support. The ASP and the customer sign a Service Level Agreement in which (a/o) the services, their quality requirements and costs are described.

The revenues of ASP are typically achieved by cutting on the Total Cost of Ownership (TCO) of ICT Infrastructure and internal support organization so customers can focus on their core business.

SWOT Analysis

Strengths

The main strengths of this business model lies in the fact that customers no longer have to bother with the expensive and troublesome activities of managing and maintaining complex ICT infrastructures but can focus on their core business. Also the often troublesome relations with internal ICT departments can be avoided. In terms of costs the advantages are that expensive software licenses can be shared. Companies no longer have to think about their Total Cost of Ownership, but are billed a very clear price-per-seat by the ASP. Companies can save 30% or more on their ICT expenses.

Weaknesses

The weaknesses of ASP are the dependency on the provider. For most companies who consider the ASP business model, the primary business processes are largely dependent on ICT infrastructures. Outsourcing this means entering a possibly risky dependency relationship with the provider.

Opportunities

The opportunities are both cost related (license sharing, no more costly and time consuming internal ICT management activities) and focus related (ICT management and ICT service providing is a very difficult line of business. The quality of service provided by the internal ICT department is often considered to be of poor standard. Outsourcing means the ability to focus on the primary business processes, the 'raison d'etre' of the company!). Outsourcing to an ASP gives you the chance to cut your ICT expenses and upgrade the quality of ICT related services. As a customer you can buy services for a single price per seat. Where it is sometimes impossible for larger companies to accurately define the total costs of ownership of ICT infrastructures, it is now possible to correctly and accurately define and forecast these costs.

Threats

The threats of the ASP business model consist primarily of security aspects, performance aspects, availability aspects and contingency aspects.

The security aspects consist of the fact that the ICT infrastructure is outsourced to a third party and that services are acquired via a non-internal network.

The availability issues focus on the fact that business processes need to be available. It is now primarily the responsibility of the ASP to guarantee this. With the ASP model the

customer has less influence on the availability aspects than when an internal ICT department has this responsibility[1].

Contingency aspects mean that the ASP will have to have a sound contingency plan in case of disasters. Now, most companies have the redundancy of ICT infrastructures in place by means of contingency centres.

An in-depth look at ASP

In this chapter we take a more detailed, in-depth look at the operational consequences of ASP. For this purpose five layers of the ASP architecture are identified. The consequences for the different parties involved are described per layer. Various parties can play a role in the various architectural layers.

The ASP Architecture:

Layer	Responsibilities and roles
Network	logical and physical connectivity services
Platform	hardware and software (OS, Middleware, RDBMS)
Operations	facilities management, platform operation and deployment
Applications	delivers the required business functionality
End Services	service management, consulting, systems integration, customisation and management skills

Network Layer

Network providers need "application aware" connectivity services that will enable ASP's to offer dependable, predictable performance across networks. These is a huge undertaking considering that these adjectives do not apply to today's networks, but are required for an ASP market to thrive. We believe a higher level of real-time traffic management is required for business-level ASP services than the "dumb pipes" approach of network service providers (NSP's) today. On top of these services, a set of software services must exist that provides continuous, real-time links between the network and application environment, including security and directory services. All the above mentioned is the responsibility of the ASP, except the internal customer's network part. This is the joint responsibility of the customer and the Solutions Integrator.

Platform layer

We expect IT vendors will provide products and technologies to perform functions for the growing ASP market. IT vendors will also function as "relationship broker", bringing partners together to ensure the success of their products in layered ASP offerings. All the above mentioned is the responsibility of the ASP.

Operations layer

This layer provides the management of the data centre/hosting facilities and capabilities. Providers working on this layer will be responsible for the physical facilities and the ongoing operation of the implemented platform. The enterprise disciplines of capacity, availability and performance management will need to be practiced at the highest levels of excellence by providers working in this space. This is because ASP's must retain the customer in an environment where choice is available and movement between providers, while painful, is possible. However, these disciplines will also be more complex to deliver in an ASP environment due to the mesh of partners involved, and the use of shared facilities for multiple, unrelated customers. Tasks to be performed in the Operations layer are a/o

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[1] Note: This is mainly a 'psychological' issue. In reality the availability figures probably will remain the same or even be better.

backup and recovery, contingency management, capacity management, availability management, security management. All the above mentioned is the responsibility of the ASP.

Applications layer

This layer includes the application package, customisation and ongoing management. The offering may be for a single function, single or multiple applications, stand-alone or integrated into a special environment, from independent software vendors (ISV's) or custom developed, and with varying levels of integration with the enterprise. Many software vendors will be ASP's themselves, or contract with important sub-component that may emerge as a separate layer in this area is the data element, including structure and management. How data is treated in an ASP offering will affect the portability between ASP's and application architectures.

Within the applications the ASP and the application provider play a role. The ASP is responsible for (at least) implementation management and configuration / asset management. The application provider is responsible for (at least) 2nd and 3rd line support (technical management, problem management) and change management. Functional change management on the application (Requests for Change) is the responsibility of the customer. The Solutions Integrator will handle the process of change management, while the ASP is responsible for the physical implementation of the change.

End-Solutions layer

Providers of the end services will supply expertise and personnel to the ASP's offering in the form of consulting, systems integration, customisation, business services and management skills. These services will ensure that the ASP offering is well integrated internally, but also ensures that it gets properly embedded into the user environment. For these tasks to be performed successfully, a Solutions Integrator is needed. The traditional ASPs do not offer these services. The Solutions Integrator is responsible for integration, 1st line support (incident management), change management (together with the application provider), cost management and service level management.

Service Level Agreements

The ASP business model is based on the integration of a number of technology- and solutions providers. The strength of the chain is defined by the weakest link. To manage the entire chain of providers a sound service level structure must be set up. The solution integrator (a.k.a. the System Integrator) is responsible for the SLA between the customers and the various providers.

Bottom Line

The key to ASP will be to examine not only the contracting ASP, but its partners as well. Since there will be few customers references available and few ASPs that can do everything themselves, customers must develop its own comfort level with the ASP's partners' ability to perform. Beyond the "fuzzy" comfort level suggested, customers must ensure that a written SLA is in place with the contracting ASP that makes the provider responsible for the final outcome, as delivered from a combination of all the layers. This will not only give an indication of what service levels are expected, but it will also ensure that the customer can monitor the ASP's ability to meet its needs.

The Solution Integrator is responsible for managing 'the chain' and is the only party the customer has to deal with.

The role of the Solution Integrator

As mentioned before, implementing the ASP business model in your organization implies managing a chain of various parties and products.
The customer however only needs to worry about the functionality of the outsourced service, it's performance, security and availability.
The Solution Integrator will manage this chain integration process, the service level processes (based on the requirements of the customer!), the procurement processes of services & products and the support processes and will act as program manager.
From the customer's perspective, the solution provider is the only party he has to deal with.

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