



The move to a Service-Oriented Architecture can
add agility
and *save costs*

Everywhere you look – in business and trade publications, at industry conferences, and in vendor meetings – SOA is hot. It's touted as the type of change IT must make if the enterprise is going to successfully manage and exploit constantly changing business conditions.

HP's functional view of an SOA takes into account the need to support legacy business systems, heterogeneous platforms, and new functionality in a secure, well managed and governed, flexible environment. A successful move to SOA requires well-architected and loosely coupled services supporting heterogeneous, multi-platform implementations, governance, security, management, and design for reuse. With an SOA in place, we expect that an organization will gain increased visibility into its data, added flexibility for business processes, and more control over business systems.

SOA was one of several key architectural strategies chosen in 2001 by our IT organization (HPIT) to address post merger consolidation challenges and meet cost reduction

goals. HP's approach to SOA has allowed HPIT to increase its focus on innovation and, in turn, its ability to support change. SOA was primarily applied in HP eBusiness to eliminate the reintegration problem between front-end customer facing solutions and back-end supply chain systems. SOA allowed HP to leverage legacy technology investments and make them interoperable by insulating services and their underlying technology from both consumers and the IT resources they use. SOA also enabled IT to maximize its return on IT investments by making common business functions sharable and consumable by many applications. HP has found that this approach facilitates change and minimizes its cost.

Experience with the HP financial gateway (HP's composite service that provides payment options for the company's direct business) shows how SOA successfully addressed specific business problems and resulted in cost savings and other efficiencies. In this case, we wanted to decrease the cost of screening online transactions for fraud and enable a large number of dif-

ferent groups, that contract separately with various credit card validation providers, to use the same approach to identify and prevent fraud.

HP's approach to SOA enables a solution that provides credit card authorization, payment, and settlement in more than 200 currencies. Payment is handled via leasing, purchase orders, and e-Check. The solution also provides configurable fraud checking and address validation.

Some of the benefits HP realized include:

- Reduction in both transaction fee and discount rate – Economies of scale by consolidating all processing volume through a single gateway resulted in economies of scale. In addition, we reduced discount fees by meeting transaction volume thresholds

- Standardization of financials systems and processes—By discontinuing service and support of legacy payment and accounts receivable systems we realized significant savings
- Decreased incidence of fraud – Leveraging best in class fraud detection and loss prevention tools and processes, we reduced fraud

from a worldwide average of 4% to well below the industry average of 3%. HP continues to drive this number to well under an average of 1% globally

- Increased enablement of revenue – The SOA solution supports payment technologies in additional countries

Business Benefits of eFraud Management

- Reduces charge-backs and bad debt due to fraud
- Automates manual look-ups and decision process steps
- Scales to increased volumes
- More orders can be processed in less time
- Higher peak capacities can be accommodated
- Reduces order review and processing time
- Increases operating efficiency and customer satisfaction
- Reduces IT maintenance and enhancement costs

Adoption can be a gradual process

The idea of making architectural change can be daunting, yet so is foregoing the opportunity to confront some serious business challenges.

Fortunately you can reap the benefits of SOA without experiencing massive upheaval. The transition to SOA can be gradual change – accomplished through steps that increase business agility without requiring that you move your entire enterprise to SOA in one big bang.

Achieving an SOA requires a series of measured changes that gradually transform an IT architecture, placing at its center services that are key to business success. Services that enable the processing of an ATM transaction, for example, or the updating of inventory data, can be used – and reused – for designing, building, and managing components of the distributed computing infrastructure.

A logical question is Where do I start? Some of our customers are starting to evaluate the potential SOA offers for their organizations. They want to learn more about the types of changes they would need to make and what benefits they could expect to gain. In addition, we have worked with several companies to implement an SOA and deliver benefits such as cost savings and increased agility. Others are

further along in their move to SOA and are ready to devise an enterprise-level SOA strategy. Depending on where you are on the SOA Maturity Continuum (below), HP offers services to move you to the next step.

These topics include envisioning (what value would the adoption of SOA bring to my enterprise?), assessment (what should my SOA roadmap for adoption be?) and governance and architecture (how do I design an SOA with a

prepare your infrastructure for SOA implementation.

- HP SOA Service Development helps you define, develop, and deploy SOA business and IT services across your enterprise, line-of-business, or department, as well as at the project level.
- HP SOA Software Development provides volume and scale in the development and delivery of business and IT services to help



flexible and workable architecture and essential SOA governance?), among others.

Drawing on experience with our own IT architecture, as well as engagements with a variety of customers, HP offers SOA services that provide proven methodologies and best practices that meet the requirements of companies, regardless of where they are on the SOA Maturity Continuum.

- HP SOA Envisioning helps large enterprises develop an understanding of SOA concepts and identify the benefits and potential effects of SOA on the enterprise.
- HP SOA Assessment utilizes the HP SOA Agility Assessment to help you develop a comprehensive roadmap to guide the adoption of SOA across your enterprise.
- HP SOA Governance and Architecture establishes an SOA Architecture Program Office to oversee enterprise architecture and the SOA governance model as your enterprise is transformed.
- HP SOA Enablement leverages the results of the Governance and Architecture service to

you improve productivity from your deployment teams through the use of our global software development capability.

HP SOA Management helps enterprises gain control of SOA adoption with management support that includes lifecycle management, services management, monitoring, auditing, analysis, service-level agreements, and policies.

Now is the time to consider the potential SOA offers your business. Could you benefit from a refocusing of IT spending – shifting from maintenance to innovation, so that IT is better prepared to respond to business requirements? Ever-changing regulatory, consolidation, technology, and market requirements demand an agile response that can only occur when IT and business are closely aligned and ready not only to react to change but also to take advantage of it. By blurring barriers that have limited the alignment of IT and business, SOA provides the potential for meeting business challenges with greater agility and speed.